



सत्यमेव जयते

CHEMICALS & PETROCHEMICALS STATISTICS AT A GLANCE: 2014

GOVERNMENT OF INDIA,
MINISTRY OF CHEMICALS & FERTILIZERS
DEPARTMENT OF CHEMICALS & PETROCHEMICALS
STATISTICS AND MONITORING DIVISION
JANPATH BHAWAN, NEW DELHI

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Government of India
Ministry of Chemicals and Fertilizers
Department of Chemicals and Petrochemicals
Statistics and Monitoring Division

Foreword

Statistics and Monitoring Division of the Department of Chemicals & Petrochemicals has endeavored to bring out its publication “Chemicals & Petrochemicals Statistics at a Glance” from 2007. This has been made possible with inputs by various Ministries and Departments of the Government of India and concerned manufacturing units in Chemical and Petrochemical sectors.

2. We express our deep sense of gratitude to all the data providers to the Ministry and record our appreciation for the efforts put in by the officials of the Statistics and Monitoring Division viz., Shri A.K.Singh, Research Officer, Shri Darshan Singh, Senior Investigator and Shri Bharat Kumar, Junior Investigator. The valuable contribution of Dr. T.K. Chakravarthy, Consultant in the Department is also acknowledged.

3. We hope the publication ‘Chemicals & Petrochemicals Statistics at a Glance: 2014’ will prove useful to all stakeholders and welcome suggestions for improvement. Keeping in view its importance for policy purposes, it has been decided to bring out this publication annually.

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Acronyms	
ACN	Acrylonitrile
AF	Acrylic Fibre (including Dry Spun)
CARG	Compound Annual Growth Rate
DMT	Dimethyl Terephthalate
EO	Ethylene Oxide
EPDM	Ethyl Propylene Dimers
EVA	Ethyl Vinyl Acetate
EX-PS	Expandable Polystyrene
FDI	Foreign Direct Investment
HDPE	High Density Polyethylene
IIP	Index of Industrial Production
KTPA	Thousand Tonnes Per Annum
LAB	Linear Alkyl Benzene
LDPE	Low Density Polyethylene
LLDPE	Linear Low Density Polyethylene
MEG	Mono Ethylene Glycol
MEK	Methyl Ethyl Ketone
MMA	Methyl Methacrylate
MT	Metric Tonne
MMSCM	Million Standard Cubic Meters
NBR	Nitrile Butadiene Rubber
NFY	Nylon Filament Yarn
NIY	Nylon Industrial Yarn
ONCB	Ortho Nitro Chloro Benzene
PAN	Phthalic Anhydride
PBR	Poly Butadiene Rubber
PBT	Polybutylene Terephthalate
PET	Polyethylene terephthalate
PIB	Polyisobutylene
PFY	Polyester Filament Yarn
PG	Propylene Glycol
PMMA	Polymethyl Methacrylate
PNCB	Para Nitro Chloro Benzene
PO	Propylene Oxide
PP	Polypropylene
PPFY	Polypropylene Filament Yarn
PPSF	Polypropylene Staple Fibre
PS	Polyestylene
PSF	Polyester Staple Fibre
PSFF	Polyester Staple Fibrefil
PTA	Purified Terephthalic Acid
PVC	Poly Vinyl Chloride
SAN	Styrene Acrylonitrile
SBR	Styrene Butadiene Rubber
VAM	Vinyl Acetate Monomer
WPI	Wholesale Price Index

Coverage, Definitions & Limitations

The product coverage, definitions and sources used in the publication are given as under:

1. Major Chemicals

The following major chemicals have been covered:

- | | | |
|---------------------------------------|---|--|
| (i) Alkali Chemicals (3) | : | Soda Ash, Caustic Soda, Liquid Chlorine. |
| (ii) Inorganic Chemicals (7) | : | Aluminium Fluoride, Calcium Carbide, Carbon Black, Potassium Chlorate, Sodium Chlorate, Titanium Dioxide, Red Phosphorous. |
| (iii) Organic Chemicals (21) | : | Acetic Acid, Acetic Anhydride, Acetone, Phenol, Methanol, Formaldehyde, Nitrobenzene, Citric Acid, Maleic Anhydride, Pentaerythritol, Aniline, Chloro Methanes, ONCB, PNCB, MEK, Acetaldehyde, Ethanolamines, Ethyl Acetate, Ortho-Nitro Toluene, isobutylbenzene, Methanol |
| (iv) Pesticides and Insecticides (57) | : | D.D.T., Malathion, Parathion(Methyl), Dimethoate, D.D.V.P., Quinalphos, Monocrotophos, Phosphamidon, Phorate, Ethion, Endosulphan, Fenvalerate, Cypermethrin, Anilophos, Acephate, Chlorpyrifos, Phosalone, Metasystox, Abate, Fenthion, Triazophos, Lindane, Temephos, Deltamethrin, Alphamethrin, Profenofos Technical, Pretilachlor Technical, Lambda Cyhalothrin, Phenthoate, Permethrin Tech, Imidacloprid Tech, Captan & Captafol, Ziram(Thio Barbamate), Carbendzim(Bavistin), Calixin, Mancozeb, Copper-Oxychloride, Hexaconazole, Metconazole, 2, 4-D, Butachlor, Ethofumesate Technical, Thiamethoxam Technical, Pendimethalin, Metribuzin, Triclopyr Acid Tech, Isoproturon, Basalin, Glyphosate, Paraquat, Diuron, Atrazin, Fluchloralin, Zinc Phosphide, Aluminium Phosphide, Methyl Bromide, Dicofof |
| (v) Dyes and Pigments (17) | : | Azo Dyes, Acid Direct Dyes(other than Azo), Basic Dyes, Disperse dyes, Fast Colour Bases, Ingrain Dyes, Oil Soluble (Solvent Dyes), Optical Whitening Agents, Organic Pigments, Pigment Emulsion, Reactive Dyes, Sulphur Dyes (Sulphur Black), Vat Dyes, Solubilised Vat dyes Food Colours, Naphthols, Other Dyes. |

2. Major Petrochemicals

The following major petrochemicals have been covered:

A. Basic major petrochemicals

- (1) Synthetic Fibres (8) : Acrylic Fibre, Polyester Staple Fibrefill, Nylon Filament Yarn, Nylon Industrial Yarn/Tyre Cord, Polyester Filament Yarn, Polyester Staple Fibre, Polypropylene Filament Yarn, Polypropylene Staple Fibre.
- (2) Polymers (9) : Low Density Polyethylene, High Density Polyethylene, Polystyrene, Polypropylene (Inc. Co-Polymer), Expandable Polystyrene, Poly Vinyl Chloride, Linear Low Density Polyethylene, PVC Compound.
- (3) Synthetic Rubber (6) : Styrene Butadiene Rubber, Poly Butadiene Rubber, Nitrile Butadiene Rubber, Ethyl Propylene Dimers, Ethyl Vinyl Acetate, Butyl Rubber.
- (4) Synthetic Detergent Intermediates (2) : Linear Alkyl Benzene, Ethylene Oxide.
- (5) Performance Plastics (5) : Abs Resin, Nylon-6, Polymethyl Methacrylate, Styrene Acrylonitrile, Nylon 6,6.

B. Intermediates

- (1) Fibre Intermediates (5) : Acrylonitrile, Caprolactum, Mono Ehylene Glycol Purified Terephthalic Acid, Dimethyl Terephthalate.
- (2) Building Blocks
 - (i) Olefins (3) : Ethylene, Propylene, Butadiene.
 - (ii) Aromatics (5) : Benzene, Toluene, Orthoxylene, Paraxylene , Mixed Xylene.

C. Other Petro-based Chemicals (32)

- : Diethylene Glycol, Diacetone Alcohol, Ethylene Dichloride, Butanol, Oxo Alcohol, 2-Ethyl Hexanol, Vinyl Chloride Monomer, Epichlohydrine, Iso Butylene, Metaxylene, Methyl Isobutyl Ketone, PBT, PET, PIB, Polycarbonate, Propylene Oxide, Propylene Glycol, Polyvinyl Acetate Resin, Unsaturated Polyster Resin, Methyl Methacrylate, Iso-Butanol, Ethyl Benzene, C4-Raffinate, Cellulose Acetate Butyrate, Cellulose Acetate Sheet, Cellulose Nitrate Sheet, Melamine Moulding Powder, Polyacetal Resin, Phthalic Anhydride, Styrene, Vinyl Actate Monomer, Isopropanol

3. Sources

The major sources of data presented in this publication are:

(i) Production & Installed capacities	Production of major chemicals and petrochemicals and their installed capacities have been aggregated based on monthly returns received directly by the Department of Chemicals & Petrochemicals from the manufacturers under large and medium scale.
(ii) Imports & Exports	Directorate General of Commercial Intelligence & Statistics, Ministry of Commerce & Industry, Kolkata.
(iii) FDI	Ministry of Commerce & Industry, Department of Industrial Policy & Promotion.
(iv) Index of Industrial Production	Ministry of Statistics & Programme Implementation, Central Statistics Office (CSO), New Delhi.
(v) Wholesale Price Index	Ministry of Commerce & Industry, New Delhi.
(vi) Chemical Industry (Broad definition)	The Chemical industry includes organic chemicals, inorganic chemicals, pharmaceuticals products, fertilizers, tanning or dyeing extracts, dyes pigments, paints and varnishes, putty and other mastics inks, essential oils, perfumery cosmetic, soap, organic surface, active agents, washing, lubricating, artificial waxes, dental waxes, polishing, albuminoidal substance, modified starches, glues, enzymes, explosive, pyrotechnic products, beverages, spirits and vinegar, matches, pyrophoric alloys, photographic or cinematographic goods, miscellaneous chemical products, petrochemicals, plastics synthetic, rubber, man-made filaments, manmade fiber.
(vii) Chemicals and Petrochemicals (Narrow definition)	The Chemicals and Petrochemical products that are monitored by the Department of Chemicals & Petrochemicals are selected major products and the list of these products are given in the tables 3 & 8 respectively. Unless contrary is mentioned, the terms 'Major Chemicals' and 'Major Petrochemicals' refer to the products or groups thereof as enumerated in the tables 3 & 8.

4. Limitations:

The data presented in this publication heavily draws on the narrow definition of chemicals and petrochemicals. The choice of adopting this narrow definition is guided by the availability of authentic detailed data with the Department of Chemicals and Petrochemicals.

5. Disclaimer :

Though due care has been taken in compiling this Publication, the possibility of errors and omissions remains. Users of the information contained in this Publication are urged to verify it independently. The Department of Chemicals and Petrochemicals will not bear any liability for any loss or injury arising out of the use of the information contained in this.

Section – I

An Overview of Chemical and Petrochemical Sectors

An Overview of Chemical and Petrochemical Sectors

The chemical industry is an integral constituent of the growing Indian Industry. It includes basic chemicals and its products, petrochemicals, fertilizers, paints, varnishes, gases, soaps, perfumes and toiletry and pharmaceuticals. It is one of the most diversified of all industrial sectors covering thousands of commercial products. This Industry occupies a pivotal position in meeting basic needs and improving quality of life. The industry is the main stay of industrial and agricultural development of the country and provides building blocks for several downstream industries, such as textiles, papers, paints, soaps, detergents, pharmaceuticals, varnish etc.

2. Chemicals can be broadly divided into the following sub-groups

i. Basic Chemicals

Chemicals such as organic and inorganic chemicals, bulk petrochemicals, other chemical intermediates, plastic resins, synthetic rubber, man-made fibers, dyes and pigments, printing inks are basic chemicals. These are also known as commodity chemicals.

ii. Specialty Chemicals

Specialty Chemicals, also known as performance chemicals, are low-volume but high-value compounds. These chemicals are derived from basic chemicals and are sold on the basis of their function. For example, paint, adhesives, electronic chemicals, water management chemicals, oilfield chemicals, flavors and fragrances, rubber processing additives, paper additives, industrial cleaners and fine chemical. Sealants, coatings, catalysts also come under this category.

iii. Agro - Chemicals

Chemicals which essentially are meant for protecting agriculture crops against insects and pests are covered under this sub-group.

3. The Chemical and petrochemical Industries occupies a pivotal position in meeting some basic human needs and in improving the quality of life. It is extremely important to the economy and is an integral part of everyday life. India has a high population base and thus, faces formidable problems in providing sufficient food, medicines and adequate shelter. The chemical industry provides the vital inputs required to augment food production and save crops from attack by a variety of pests in a safe and selective way. The marked improvements in the average life expectancy of our countrymen can be at-least partially attributed to the Chemical Industry which has provided life saving drugs and other chemicals required for managing public health care. The problem of housing can be tackled only with the assistance of the Chemicals Industry. It plays a crucial role in housing development.

4. The Chemical Industry is rooted in science and provides valuable and often indispensable inputs to a large number and variety of industries. Thus, without Chemical Industry, there would be no electronics or microelectronics, refrigerators, recording tapes, automobiles, laser discs, super magnets, processed foods and virtually all consumer products etc. Even the power industry depends on the Chemical Industry for its operations. The use of chemicals (ion exchange resins)

becomes indispensable for removing dissolved salts needs in boilers and other applications. In gold mining, cyanide solution is used for extracting gold. The crude oil refining process uses chemicals, catalysts, heat, and pressure to separate and combine the basic types of hydrocarbon molecules naturally found in crude oil into groups of similar molecules. Apart from providing a variety of drugs for alleviation of human sufferings, the chemical industry provides safe anesthetic agents and high quality artificial aids including a hip joint made from ultra low molecular weight polyethylene. Other health products include dental fills, contact lenses and dialyses also depend on the Chemicals Industry.

5. Some of the most useful materials, synthetic polymers, also known as plastics, have transformed our lives in the last few decades. The driving force for this development was provided by the need for conservation of natural resources and energy efficiency and inherent advantages of the material which created possibilities of innovative designs and cost savings. Its usefulness, adaptability and flexibility of usage have led to a shift in manufacturing from the conventional material based products to synthetic products.

6. Chemicals from petroleum may range from basic petrochemicals such as ethylene, propylene, benzene, xylenes to finished end-products like plastics, rubbers, fibers, detergents, pesticides, dyes etc. These may be classified as (a) first generation, (b) second generation, and (c) third generation petrochemicals. First generation Petrochemicals are chemicals directly available from petroleum crude oil or natural gas either by fractionation, isomerization, cracking etc. These generally represented the basic petrochemicals, which are the building blocks for various chemical syntheses. Examples of this class of chemicals are methane, ethane, propane, ethylene, propylene, toluene, xylenes etc. Second generation petrochemicals are the derivatives of the first generation petrochemicals. Example of such products are styrene (derived from benzene and ethylene), dimethyl terephthalate or terephthalic acid (derived from p-xylene), acrylonitrile (derived from propylene), ethylene glycol (derived from ethylene), vinyl chloride monomer (derived from acetylene or ethylene) etc. Second generation petrochemicals constitute the intermediate chemicals which serve as the raw materials for consumer industries like plastics, rubbers, fibres, dyes, detergents etc. Third Generation Petrochemicals are the consumer commodities derived generally from second generation petrochemicals and represent the most important commercial products such as plastics, rubbers, fibres, detergents etc. Examples are polystyrene (from vinyl chloride monomer), DDT from (chlorobenzene), azo dyes (from styrene), Polyvinyl chloride (from aniline) etc. However, some of the products may be directly synthesized from first generation petrochemicals, Polybutadiene rubber, for instance, is obtained by polymerizing butadiene. Since most of the plastics or rubbers are derived from second generation petrochemicals, polybutadiene rubber is regarded as a third generation petrochemical.¹

7. Chemical sector is predominantly based on feedstock derived from, naphtha, natural gas and salt. Steam Cracking/ Catalytic Reforming of low and high aromatic naphtha in oil refineries provide Olefins (ethylene, propylene and butadiene) and Aromatics (benzene, toluene and xylenes) and. Natural gas contains Methane (CH₄), Ethane (C₂H₆), Propane (C₃H₈) and Butane

¹ Dr. G.N.Sarkar, Advanced Petrochemicals, First Edition, Khanna Publishers, New Delhi

(C₄H₁₀). Rich natural gas, which contains C₂ and C₃ in extractable quantity, is used in producing olefins. Methane is converted into synthesis gas. Synthesis gas is a mixture of carbon monoxide & hydrogen which is used to make ammonia & methanol. Hydrocarbon feedstock, namely, Methane, aromatics and olefins form the basis of the petrochemical industries. Salt is the feed stock for the chlor-alkali chemical industry, just as naphtha and Natural Gas for the petrochemical industry. Consumption of naphtha in petrochemical sector has increased from 6048 thousand tonne in 2007-08 to 9620 thousand tonne in 2013-14. Off take of natural gas for petrochemical sector has not increased during the same period and its consumption was 1395 million standard cubic meter.

8. The downstream petrochemical products permeate our daily lives in almost every aspect. The value additions in the petrochemicals chain offer immense possibilities and cater to the need of textiles and clothing, agriculture, packaging, infrastructure, healthcare, furniture, automobiles, information technology, power, electronics and telecommunication, irrigation, drinking water, construction and a host of other articles of daily and specialized usage amidst other emerging areas.

9. Innovations in additives, alloys, blends, compounds, composites and high grade reinforcement materials such as glass, nano-clays, carbon nano-tubes and carbon fibers require attention for technology development. New developments in the field of bio and photodegradable plastics, are also taking place all over the world. The Chemical and petrochemical industries face the challenge to operate in an environmentally acceptable manner. Chemicals are globally tradable and unless chemicals produced in India are cost effective, these cannot contribute usefully to the Nation's economy. With an eye on emerging usages, Research and development efforts should focus on the need to modernize and upgrade the existing manufacturing processes, improve the quality of existing product and make it safe for environment and human health.

10. As per National Industrial Classification (NIC) 2004, Chemical & Chemical products are covered under the industry division 24. The description of product groups at 4-digit level under this division is given below:

Class	Description
2411	Manufacture of basic chemicals except fertilizers and nitrogen compounds
2412	Manufacture of fertilizers and nitrogen compounds
2413	Manufacture of plastics in primary forms and of synthetic rubber
2421	Manufacture of pesticides and other agro chemical products
2422	Manufacture of paints, varnishes and similar coatings, printing ink and mastics
2423	Manufacture of pharmaceuticals, medicinal chemicals and botanical products
2424	Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations
2429	Manufacture of other chemical product not elsewhere classified
2430	Manufacture of man-made fibers [This class includes manufacture of artificial or synthetic filament and non-filament fibers.]

The industry division 24 of NIC 2004 is equivalent of industry division 20 (manufacture of chemical & chemical products), 21(manufacture of pharmaceuticals, medicinal chemicals and botanical products) and 268 (manufacture of magnetic and optical media) of NIC 2008.

11. According to National Accounts Statistics 2014, brought out by the Central Statistics Office (CSO), chemical and chemical products sector (industry division 24 of NIC 2004) accounted for 2.51% of the GDP (at 2004-05 prices) in 2012-13, compared to 2.53% in 2011-12. The share of this sector in the GDP for manufacturing sector at 2004-05 prices was 15.95 % during 2012-13as compared to 15.55% in 2011-12. The average Indices of Industrial Production (IIP) for the Chemical and Chemical products (industry division 24: NIC 2004) for the year 2013-14 stand at 138.7, which is 8.9% higher as compared to the previous year. The size of the Indian Chemical industry (industry division 24 of NIC 2004) in terms of value of output in the year 2012-13 was 782,949 crore.

12. As per the European Chemical Industry Council (Cefic) world chemicals (excluding pharmaceuticals) sales in 2010 are valued at 2353 Euro billion. India ranks 8th in world with chemicals sales valued at 55.9 Euro billion in 2010. As per UN Comtrade Database for 2013, India ranks 13th in the world exports of chemicals (excluding pharmaceutical products) and ranks 9th in the world imports of chemicals (excluding pharmaceutical products). India's exports of chemicals (excluding pharmaceutical products) was 32.02 US\$ billion in 2013. India's share in World exports of chemicals was 2.35% as compared to 2.05 % for all HS code Commodities in 2013. India's imports of chemicals (excluding pharmaceutical products) was 46.01 US\$ billion in 2013. India's share in World imports of chemicals was 3.25% as compared to 2.79 % for all HS code Commodities in 2013.

13. The net imports of chemicals & petrochemicals (excluding pharmaceuticals products and fertilizers) has increased from Rs.5051 crore in 2006-07 to Rs. 63,430 in 2013-14. The percentage share of the net import of chemicals & petrochemicals in the total national net imports increased from 1.9% to 7.6% during the same period. Organic Chemicals (Chapter 29 HS code) accounted Rs. 29,461 crore, Plastic and Articles thereof (Chapter39 HS code) accounted Rs. 27,056 crore and Inorganic Chemicals (Chapter 28 HS code) accounted Rs. 21,233 crore in the total net imports during 2013-14. At the product level the following products accounted more than Rs. thousand crore in the total net imports

		(Rs. Crore)	
Poly Vinyl Chloride	7531	Toluene	1819
Purified Terephthalic Acid	6451	Nylon-6	1883
Styrene	6006	Polycarbonate	1774
Mono Ethylene Glycol	4591	Butyl Rubber	1726
High Density Polyethylene	4422	Vinyl Chloride Monomer	1679
Linear Low Density Polyethylene	4008	Phenol	1692
Methanol	3195	Ethyl Vinyl Acetate	1239
Styrene Butadiene Rubber	2798	Acrylonitrile	1116
Low Density Polyethylene	2191	Poly Butadiene Rubber	1093
Acetic Acid	1947	Linear Alkyl Benzene	1046

The following products accounted more than Rs. thousand crore in the total net exports:

(Rs. Crore)

Polyester Filament Yarn	6761	Other Insecticides	1794
Benzene	4347	Azo Dyes	1687
Polypropylene (Inc. Co-Polymer)	3598	Menthol	1625
Reactive Dyes	3159	Polyester Staple Fibre	1461
Pigment Emulsion	3073	Mixed Xylene	1351
Polyethylene Terephthalate	2820	Ortho-Xylene	1305
Other Pesticides	1935	Ethyl Acetate	1034

14. Commissioning of future installed Capacity²

14.1 ONGC Petro additions Limited (OPaL) is setting up a grass root mega Petrochemical project at Dahej, Gujarat in PCPIR/SEZ. The complex's main Dual Feed Cracker Unit has the capacity to produce 1.1 MTPA Ethylene, 400 KTPA Propylene and the Associated Units consists of Pyrolysis Gasoline Hydrogenation Unit, Butadiene Extraction Unit and Benzene Extraction Unit. In addition, OPaL is setting up two 360 KTPA HDPE/LLDPE swing units, and HDPE and PP units having a capacity of 340 KTPA each, downstream of the cracker. Production is expected to begin in 2015-16.

14.2 ONGC Mangalore Petrochemicals Ltd. (OMPL; Mangalore, India) is building an aromatics complex in the Mangalore special economic zone (SEZ). The complex is designed to produce 900 KTPA of Paraxylene and 300 KTPA of Benzene and is expected to become operational in the fiscal year ending March 2015. MRPL is separately building a 450 KTPA PP plant at the Mangalore SEZ, which is also expected to be on - stream in the fiscal year ending March 2015.

14.3 Brahmaputra Cracker and Polymer Limited (BCPL) is setting up Ethylene Cracker Unit (Ethylene-220 KTPA & Propylene 60 KTPA), LLDPE/HDPE Swing Unit (LLDPE/HDPE-226 KTPA) and Poly Propylene Unit (Poly Propylene 60 KTPA) at Petrochemical complex, Lepetkata (Dibrugarh). The project is expected to be commissioned by end of 2014-15 .

14.4 GAIL is currently expanding petrochemicals capacity at its Pata, Uttar Pradesh, site by adding a 0.45 MTPA LLDPE -HDPE swing plant. With this expansion, Gail would double its petrochemical capacity by the end of 2014-15. They are gearing up to spend about 2,600 crore to

² India Petrochemical Industry, Country Paper from India, Review of 2013-14 & Outlook for 2014-15 by Chemicals & Petrochemicals Manufacturer's Association, India (CPMA) for Asia Petrochemical Industry conference, Thailand, May 15-16, 2014

set up 110 KTPA poly butadiene rubber (PBR) plant in Gujarat. The project is targeted to be completed by the Q1 of FY17.

14.5 Bharat Petroleum Corporation Limited (BPCL) is expanding refining capacity at Kochi and, as part of those plans, is establishing a fluid catalytic cracker that will produce 500 KTPA of propylene to be consumed as feedstock by the proposed petrochemical complex. The petrochemical plant will produce niche petrochemicals such as acrylic acid, superabsorbent polymers (SAP), acrylates, and oxo alcohols. The BPCL petrochemical complex, when operational, would be the first plant in India to produce SAPs. The complex is expected to be on-stream in fiscal year 2017–18.

14.6 Indian Oil is building 1 MTPA acetic acid plant in a JV with British Petroleum (BP), near Indian Oil's refinery at Koyali, in Gujarat. The acetic acid facility is expected to become operational in 2017. Indian Oil is studying a number of projects based on refinery propylene at Koyali. Facilities would make products including acrylic acid, acrylic esters, and oxo alcohols. The acrylic acid plant would be designed to produce 100 KTPA, and the esters unit, producing mainly butyl acrylate, would have capacity for 160 KTPA.

14.7 RIL is significantly expanding its petrochemicals capacity with a range of projects. RIL is doubling PX capacity at Jamnagar and will become the world's second - largest producer of PX. Reliance is expected to commission a 142 KTPA SBR plant and a 40 KTPA polybutadiene rubber plant at Hazira, by the end of the current financial year. A 100 KTPA butyl rubber JV facility at Jamnagar with Sibur (Moscow) will be online in 2015. The new plant will expand RIL's total BR capacity to 120 KTPA. RIL currently runs an 80 KTPA BR plant at Baroda, which is also in the Gujarat. Reliance is building a 1.5 MTPA ethylene plant at Jamnagar that is expected to start up in the second half of 2015-16.

14.8 Aditya Birla Chemicals (India) Limited acquired Solaris Chem Tech Industries Limited in the District Uttar Kannada of Karnataka State with effect from September 2013. Commissioning of the new caustic soda plant with membrane cell technology is likely to be completed by September 2014. In this production unit the installed capacities of Caustic Soda and Liquid Chlorine are 59.4 KTPA and 24.82 KTPA respectively.

15. According to National Sample Survey Office (NSSO)'s latest survey (July 2011-June 2012 NSS 68th round), 12.3 lakh persons (0.25% of the total work force) were engaged in Chemicals and Chemical Products Sector (Industry Division 20 of NIC 2008) as per their usual status in the country. As per Central Statistics office (CSO)'s Annual Survey of Industries (Factory Sector) 2011-12, 6.74 lakh persons were engaged in this sector, which is 5.02% of the total persons engaged in all industries covered under the Factory Sector.

16. According to estimates of the CSO, during 2012-13 the registered sector contributed 92.2% and 71.8% in the Gross Value Added (at current prices) of chemicals and chemical products (Industry Division 24 of NIC 2004) and the manufacturing sector respectively. The estimates of the Value of Output (Factory Sector) of different product groups in the Chemicals and Chemical Products (Division 20-NIC 2008) during the year 2010-11 and 2011-12 are given in the table below:

Class	Description	Total Output (Rs. crore)	
		2010-11	2011-12
2011	Manufacture of basic chemicals	74506.74	99544.54
2012	Manufacture of fertilizers and nitrogen compounds	78368.78	103132.62
2013	Manufacture of plastics and synthetic rubber in primary forms	55754.94	69507.90
2021	Manufacture of pesticides and other agrochemical products	20964.52	31508.63
2022	Manufacture of paints, varnishes and similar coatings, printing ink and mastics	21812.21	34132.31
2023	Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations	43526.51	57704.93
2029	Manufacture of other chemical products n.e.c.	43271.04	48080.07
2030	Manufacture of man-made fibres	14085.60	20583.07
Total		352290.3	464194.1

Source: Annual Survey of Industries 2010-11 and 2011-12 (Factory sector), Ministry of Statistics & Programme Implementation

Section – II

Chemical Sector

Table-1: Performance of selected Major Chemicals (Group-Wise) during 2006-07 to 2013-14 at a Glance

(Figures in 000'MT)

GROUP	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	CARG (%) (13-14/06-07)
1	2	3	4	5	6	7	8	9	10
1. Alkali Chemicals									
Capacity	7072	7490	7490	7915	7890	7987	7984	8016	1.81
Production	5269	5443	5442	5705	6150	6305	6283	6265	2.50
Capacity Utilisation (%)	75	73	73	72	78	79	79	78	
Imports	409	499	511	868	630	658	995	874	11.45
Exports	179	111	148	342	347	345	145	159	-1.70
2. Inorganic Chemicals									
Capacity	749	716	716	674	814	818	818	818	1.26
Production	602	609	513	518	572	574	533	545	-1.42
Capacity Utilisation (%)	80	85	72	77		70	65	67	
Imports	129	174	189	195	196	264	278	287	12.04
Exports	101	123	98	377	383	289	121	135	4.31
3. Organic Chemicals									
Capacity	2062	2119	2143	2279	2321	2515	2441	2534	2.99
Production	1607	1621	1338	1353	1437	1490	1513	1615	0.07
Capacity Utilisation (%)	78	77	62	59	62	59	62	64	
Imports	869	1211	1639	1548	1639	2182	2487	2496	16.27
Exports	62	116	83	143	187	315	407	333	27.21
4. Pesticides (Tech.)									
Capacity	154	154	158	184	230	245	273	289	9.35
Production	117	125	130	134	143	155	154	178	6.14
Capacity Utilisation (%)	76	81	82	73	62	63	57	62	
Imports	11	6	14	13	19	22	19	22	10.99
Exports	66	75	72	87	93	103	110	131	10.28
5. Dyes & Pigments									
Capacity	152	182	202	293	324	362	372	382	14.05
Production	117	146	141	186	208	206	207	236	10.54
Capacity Utilisation (%)	77	80	70	63	64	57	56	62	
Imports	27	32	25	28	30	36	40	42	6.17
Exports	173	200	198	236	258	265	305	328	9.59
Total Major Chemicals (1 to 5)									
Capacity	10190	10661	10709	11345	11578	11926	11888	12039	2.41
Production	7713	7945	7564	7895	8509	8730	8690	8839	1.97
Capacity Utilisation (%)	76	75	71	70	73	73	73	73	
Imports	1446	1922	2378	2651	2514	3162	3820	3721	14.46
Exports	581	626	599	1187	1268	1317	1087	1087	9.37

Note: Product coverage under each group is given at page vii.

Table -2 : Production, Installed Capacity & Growth of Selected Major Chemicals (Group-wise) during 2006-07 to 2013-14

(Figures in thousand MT)												
Group	Installed Capacity			Production / Growth Rate	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
	2011-12	2012-13	2013-14									
1	2	3	4	5	6	7	8	9	10	11	12	13
Alkali Chemicals	7987	7984	8016	Production	5269	5443	5442	5705	6150	6305	6283	6265
				Growth Rate (%)	-3.8	3.3	0.0	4.8	7.8	2.5	-0.4	-0.3
Inorganic Chemicals	818	818	818	Production	602	609	513	518	572	574	533	545
				Growth Rate (%)	10.7	1.1	-15.8	1.0	10.5	0.4	-7.2	2.2
Organic Chemicals	2515	2441	2534	Production	1607	1621	1338	1353	1437	1490	1513	1615
				Growth Rate (%)	-0.4	0.9	-17.5	1.1	6.2	3.7	1.6	6.7
Pesticides	245	273	289	Production	117	125	130	134	143	155	154	178
				Growth Rate (%)	6.8	6.3	4.2	3.4	6.5	8.6	-0.6	15.3
Dyes & Pigments	362	372	382	Production	117	146	141	186	208	206	207	236
				Growth Rate (%)	24.8	24.9	-3.8	32.0	11.8	-0.6	0.3	14.0
Total Major Chemicals	11926	11888	12039	Production	7713	7945	7564	7895	8509	8730	8690	8839
				Growth Rate (%)	-1.6	3.0	-4.8	4.4	7.8	2.6	-0.5	1.7

Note: Product coverage under each group is given at page vii.

Table-3: Production,Capacity Utilization & growth of Major Chemicals (Product-wise) during 2006-07 to 2013-14**(Figures in thousand MT)**

Major Groups / Products	Installed Capacity			Production								CAGR (%) (13- 14/06-07)	Capacity Utilization in 2013-14 (col. 12/col. 4)
	2011-12	2012-13	2013-14	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
ALKALI CHEMICALS													
Soda Ash	2951.00	2951.00	2951.00	2078.06	2005.51	1989.05	2058.34	2298.76	2410.82	2437.79	2392.17	2.03	81.06
Caustic Soda	2864.25	2897.25	2928.50	1914.22	2050.69	2050.03	2158.22	2267.72	2317.64	2268.79	2276.85	2.51	77.75
Liquid Chlorine	2171.40	2135.94	2136.94	1276.71	1387.13	1402.85	1488.18	1583.08	1576.46	1576.09	1596.06	3.24	74.69
Total	7986.65	7984.19	8016.44	5268.99	5443.32	5441.92	5704.73	6149.55	6304.92	6282.67	6265.08	2.50	78.15
INORGANIC CHEMICALS													
Aluminium Fluoride	18.16	18.16	18.16	20.30	19.43	15.07	11.55	9.80	7.31	6.70	5.40	-17.24	29.72
Calcium Carbide	112.00	112.00	112.00	91.95	97.41	66.55	22.02	44.70	66.39	70.98	78.78	-2.19	70.34
Carbon Black	607.00	607.00	607.00	422.47	426.96	371.40	419.43	452.44	447.67	404.02	406.41	-0.55	66.95
Potassium Chlorate	3.00	3.00	3.00	4.13	5.36	5.79	2.60	0.61	0.34	0.59	0.68	-22.77	22.53
Titanium Dioxide	76.05	76.05	76.05	62.92	59.15	53.28	61.32	64.02	52.14	50.14	52.78	-2.48	69.40
Red Phosphorus	1.68	1.68	1.68	0.54	0.54	0.46	0.58	0.48	0.56	0.69	0.75	4.96	44.70
Total	817.89	817.89	817.89	602.31	608.86	512.55	517.51	572.05	574.41	533.13	544.79	-1.42	66.61
ORGANIC CHEMICALS													
Acetic Acid	387.38	272.58	272.58	297.48	341.81	214.04	146.44	156.48	160.73	160.56	158.44	-8.61	58.12
Acetic Anhydride	85.32	85.32	132.70	41.77	40.92	47.24	56.92	52.91	53.28	87.15	80.85	9.89	60.92
Acetone	47.82	47.82	47.82	44.22	47.19	46.83	44.25	50.54	42.80	37.05	28.58	-6.04	59.76
Phenol	77.13	77.13	77.13	71.27	74.94	75.75	71.59	79.81	65.93	59.92	46.39	-5.95	60.14

Table-3: Production,Capacity Utilization & growth of Major Chemicals (Product-wise) during 2006-07 to 2013-14**(Figures in thousand MT)**

Major Groups / Products	Installed Capacity			Production								CAGR (%) (13-14/06-07)	Capacity Utilization in 2013-14 (col. 12/col. 4)
	2011-12	2012-13	2013-14	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Methanol	496.41	496.41	496.41	396.23	351.73	237.12	330.83	374.53	359.93	254.91	307.26	-3.57	61.90
Formaldehyde	423.29	448.79	437.04	234.82	242.76	231.84	261.29	266.61	263.80	275.36	268.29	1.92	61.39
Nitrobenzene	48.00	48.00	48.00	14.73	13.11	13.93	12.34	9.95	13.97	18.31	2.35	-23.08	4.89
Maleic Anhydride	23.15	23.15	24.15	12.95	4.25	2.97	2.55	2.76	2.63	2.48	2.92	-19.19	12.07
Pentaerythritol	21.70	22.00	22.00	13.73	14.95	13.82	11.21	11.73	11.40	11.49	12.18	-1.70	55.35
Aniline	60.10	60.10	60.10	47.37	44.98	34.67	39.39	41.05	40.09	48.23	40.62	-2.17	67.59
Chloro Methanes	94.70	98.60	98.60	92.19	85.86	96.22	91.12	110.78	98.57	90.06	109.46	2.48	111.02
Isobutylbenzene	3.75	12.75	12.75	2.52	3.33	3.34	4.07	2.27	1.94	6.63	6.08	13.43	47.66
ONCB	30.00	30.00	30.00	12.82	13.81	15.71	15.44	16.69	13.74	15.41	16.82	3.95	56.06
PNCB	30.00	30.00	30.00	18.46	20.92	25.25	23.57	24.87	22.14	24.40	27.06	5.62	90.20
MEK	5.00	5.00	5.00	0.10	0.00	0.00	0.00	0.00	2.19	2.49	3.72	68.61	74.38
Acetaldehyde	183.51	183.51	183.51	171.66	203.37	117.62	59.82	32.26	65.39	76.27	79.66	-10.39	43.41
Ethanolamines	10.00	10.00	12.00	7.27	9.86	12.31	7.00	3.45	8.73	7.05	11.20	6.37	93.29
Ethyl Acetate	439.63	439.63	494.32	113.56	90.84	128.10	147.20	170.48	235.36	305.26	382.39	18.94	77.36
Menthol	31.70	33.65	33.65	7.26	11.15	13.65	14.41	15.74	15.80	19.70	18.34	14.14	54.49
Ortho Nitro Toluene	16.40	16.40	16.40	6.80	5.72	8.10	13.80	14.20	11.14	10.68	12.31	8.86	75.07
Total	2514.99	2440.84	2534.15	1607.19	1621.48	1338.50	1353.22	1437.09	1489.55	1513.42	1614.88	0.07	63.72

Table-3: Production,Capacity Utilization & growth of Major Chemicals (Product-wise) during 2006-07 to 2013-14**(Figures in thousand MT)**

Major Groups / Products	Installed Capacity			Production								CAGR (%) (13-14/06-07)	Capacity Utilization in 2013-14 (col. 12/col. 4)
	2011-12	2012-13	2013-14	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
PESTICIDES AND INSECTICIDES													
D.D.T.	6.34	6.34	6.34	4.50	3.44	3.31	3.61	3.09	3.62	3.83	2.75	-6.78	43.35
Malathion	3.80	3.80	3.80	4.30	6.30	3.38	1.67	3.05	2.55	1.71	2.04	-10.11	53.61
Dimethoate	6.37	6.37	6.37	1.01	0.89	0.57	0.98	1.17	0.73	0.81	1.36	4.43	21.40
D.D.V.P.	3.68	3.68	10.68	3.89	3.48	3.01	3.87	3.48	4.64	4.41	5.52	5.11	51.64
Quinalphos	2.20	2.80	2.80	0.82	0.52	0.84	0.99	1.01	1.00	1.35	1.74	11.30	62.18
Monocrotophos	12.84	12.84	12.24	4.91	5.12	4.57	5.74	9.93	9.59	8.25	4.27	-1.99	34.88
Phosphamidon	3.20	3.20	3.20	0.37	0.71	0.85	1.00	0.29	0.06	0.02	0.05	-25.88	1.41
Phorate	7.10	7.10	8.10	9.89	7.80	6.12	7.12	7.67	7.01	5.75	6.85	-5.11	84.57
Ethion	4.02	4.02	4.02	2.60	2.20	1.47	1.51	1.92	1.33	0.94	1.51	-7.41	37.66
Endosulphan	12.79	12.79	12.79	9.31	10.55	11.35	9.90	11.49	1.35	0.00	0.00		
Fenvalerate	2.10	2.10	2.10	0.52	0.72	0.52	0.55	0.81	0.55	0.48	0.75	5.54	35.76
Cypermethrin	12.56	13.19	14.39	6.28	6.07	5.98	8.70	7.02	10.17	7.53	9.03	5.33	62.77
Anilophos	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Acephate	11.86	11.86	16.58	11.91	12.72	12.59	14.90	16.49	17.11	15.76	14.51	2.86	87.52
Chlorpyriphos	36.34	36.10	36.10	8.30	9.04	8.93	9.31	8.72	6.05	7.52	9.54	2.01	26.43
Phosalone	0.00	0.00	0.00	0.25	0.50	0.00	0.00	0.00	0.00	0.00	0.00		
Metasystox	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

Table-3: Production,Capacity Utilization & growth of Major Chemicals (Product-wise) during 2006-07 to 2013-14**(Figures in thousand MT)**

Major Groups / Products	Installed Capacity			Production								CAGR (%) (13-14/06-07)	Capacity Utilization in 2013-14 (col. 12/col. 4)
	2011-12	2012-13	2013-14	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Fenthion	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Triazophos	2.00	1.50	1.50	2.02	2.01	2.27	1.06	1.75	0.78	0.93	0.99	-9.64	66.27
Lindane	0.33	0.33	0.33	0.25	0.08	0.00	0.00	0.00	0.00	0.00	0.00		
Temephos	0.50	0.50	0.50	0.10	0.23	0.27	0.08	0.12	0.13	0.20	0.25	14.31	50.00
Deltamethrin	0.28	0.49	0.49	0.34	0.26	0.04	0.02	0.52	0.33	0.42	0.38	1.67	78.97
Alphamethrin	0.33	0.33	0.33	0.17	0.21	0.02	0.00	0.31	0.32	0.32	0.31	8.78	95.38
Profenofos Technical	11.85	12.85	12.85	0.46	2.35	2.76	3.28	4.60	6.41	5.01	7.18	48.07	55.86
Pretilachlor Technical	1.40	1.40	1.40	1.12	1.27	1.30	1.17	1.18	1.65	1.93	2.22	10.23	158.29
Lambda Cyhalothrin	0.00	0.00	0.60	0.00	0.00	0.13	0.13	0.21	0.29	0.43	0.52		85.83
Phenthoate	0.90	0.90	0.90	0.00	0.00	0.00	0.06	0.59	0.59	0.96	1.24		138.00
Permethrin Tech	1.20	2.04	1.80	0.15	0.21	0.44	0.24	0.46	1.17	0.83	1.17	34.30	64.78
Imidacaloprid Tech	0.20	0.83	0.83	0.11	0.11	0.14	0.13	0.13	0.39	0.23	0.95	36.53	114.67
Captan & Captafol	1.80	1.80	1.80	0.19	0.00	0.00	0.00	0.72	0.92	0.56	1.12	28.62	62.11
Ziram (Thio Barbamate)	0.45	0.45	0.45	0.24	0.17	0.11	0.14	0.66	0.73	0.55	0.60	13.70	131.50
Carbendzim (Bavistin)	1.41	1.12	1.12	0.14	0.07	0.20	0.38	0.59	0.43	0.34	0.31	12.10	27.53
Calixin	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Mancozab	42.76	69.76	71.56	22.88	27.12	35.34	31.49	26.05	43.46	45.30	57.82	14.17	80.81
Hexaconazole	0.50	0.50	0.50	0.26	0.29	0.34	0.35	0.36	0.39	0.36	0.50	9.97	99.60

Table-3: Production,Capacity Utilization & growth of Major Chemicals (Product-wise) during 2006-07 to 2013-14**(Figures in thousand MT)**

Major Groups / Products	Installed Capacity			Production								CAGR (%) (13-14/06-07)	Capacity Utilization in 2013-14 (col. 12/col. 4)
	2011-12	2012-13	2013-14	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Metconazole	0.75	0.75	0.75	0.14	0.17	0.21	0.21	0.36	0.50	0.63	0.70	25.65	93.60
2, 4-D	24.20	22.00	22.00	8.36	8.90	9.57	10.64	12.60	15.03	15.44	17.90	11.49	81.37
Butachlor	0.50	0.50	0.50	0.18	0.03	0.12	0.24	0.29	0.20	0.18	0.04	-19.75	7.80
Ethofumesate Technical	1.65	1.25	1.65	0.00	0.00	0.00	0.56	0.82	1.14	1.22	0.72		43.76
Thiamethoxam Technical	3.00	3.00	3.00	0.93	1.54	1.81	1.82	1.49	1.63	2.80	3.08	18.68	102.57
Pendimethalin	2.00	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	1.03	1.71		85.35
Metribuzin	0.00	0.75	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.74		98.93
Triclopyr Acid Tech	0.36	0.30	0.30	0.01	0.11	0.09	0.23	0.30	0.10	0.21	0.18	43.91	59.67
Isoproturon	6.25	6.25	6.25	3.15	2.96	2.98	2.91	3.68	2.53	4.05	2.35	-4.13	37.52
Glyphosate	9.26	9.26	9.26	2.89	2.58	4.39	4.66	4.86	5.25	6.12	8.48	16.63	91.53
Diuron	0.05	0.05	0.05	0.00	0.08	0.01	0.13	0.23	0.31	0.14	0.07		138.00
Atrazin	0.50	0.50	0.50	0.09	0.22	0.26	0.26	0.25	0.66	0.65	1.24	44.73	247.40
Fluchloralin	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Zinc Phosphide	1.10	1.10	1.10	1.11	0.95	0.91	0.92	0.86	0.89	0.60	0.65	-7.46	58.82
Aluminium Phosphide	3.90	3.90	3.90	2.08	2.53	2.58	3.25	2.82	3.14	4.16	4.47	11.57	114.59
Dicofol	0.15	0.15	0.15	0.05	0.09	0.09	0.02	0.05	0.08	0.05	0.07	5.46	49.33
Total	244.77	272.73	288.61	117.17	124.58	129.84	134.21	142.95	155.20	154.21	177.85	6.14	61.62

Table-3: Production,Capacity Utilization & growth of Major Chemicals (Product-wise) during 2006-07 to 2013-14

(Figures in thousand MT)

Major Groups / Products	Installed Capacity			Production								CAGR (%) (13-14/06-07)	Capacity Utilization in 2013-14 (col. 12/col. 4)
	2011-12	2012-13	2013-14	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DYES AND PIGMENTS													
Azo Dyes	8.13	8.12	8.12	4.68	6.38	3.94	3.84	4.10	3.46	3.03	2.33	-9.47	28.72
Acid Direct Dyes(Other than Azo)	45.08	45.08	45.08	4.55	9.53	10.84	15.34	20.36	19.00	17.67	19.00	22.64	42.14
Disperse Dyes	55.21	55.21	55.21	20.76	21.82	23.26	25.22	28.72	29.44	28.27	29.21	5.00	52.90
Ingrain Dyes	1.61	1.61	1.61	0.57	1.20	1.09	0.93	0.69	0.98	0.58	0.51	-1.57	31.86
Oil Soluble (Solvent Dyes)	3.77	3.77	3.77	0.75	1.23	2.15	2.25	2.02	2.64	2.31	2.26	16.95	59.84
Optical Whitening Agents	22.30	37.30	37.30	7.50	9.31	9.82	12.36	15.02	14.14	18.17	23.74	17.88	63.63
Organic Pigments	56.38	51.46	61.58	36.42	46.73	35.62	38.41	43.85	39.44	35.38	46.55	3.57	75.59
Pigment Emulsion	5.53	5.53	5.53	1.82	1.90	3.41	5.04	5.89	5.22	6.48	7.34	22.01	132.56
Reactive Dyes	155.42	155.22	155.22	32.22	41.89	43.12	71.52	75.94	82.88	86.91	95.33	16.76	61.42
Sulphur Dyes (Sulphur Black)	3.00	3.00	3.00	5.72	4.24	5.64	8.69	8.58	7.02	6.58	7.57	4.07	252.17
Vat Dyes	2.98	2.98	2.98	1.49	1.60	1.46	1.70	1.94	1.69	1.38	1.60	0.99	53.59
Other dyes	2.65	2.65	2.65	0.58	0.45	0.42	0.44	0.55	0.47	0.30	0.66	1.82	24.79
Total	362.07	371.94	382.06	117.08	146.27	140.76	185.75	207.65	206.36	207.03	236.07	10.54	61.79
TOTAL MAJOR CHEMICALS (I TO V)	11926	11888	12039	7712.73	7944.51	7563.56	7895.43	8509.29	8730.43	8690.46	8838.67	1.97	73.42

Note: Some Pesticides producing units supply combined installed capacity

Table -4 : Installed Capacities of Selected Chemicals (Group-Wise) from 2006-07 to 2013-14

(Figures in 000'MT)

GROUP / PRODUCT	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
1. Alkali Chemicals	7072	7490	7490	7915	7890	7987	7984	8016
2. Inorganic Chemicals	749	716	716	674	814	818	818	818
3. Organic Chemicals	2062	2119	2143	2279	2321	2515	2441	2534
4. Pesticides (Tech.)	154	154	158	184	230	245	273	289
5. Dyes & Pigments	152	182	202	293	324	362	372	382
TOTAL MAJOR CHEMICALS	10190	10661	10709	11345	11578	11926	11888	12039

Note: Product coverage under each group is given at page vii.

Table-5 : Consumption of Selected Major Chemicals (Product-Wise) during 2006-07 to 2013-14

('000' (MT))

PRODUCT NAME	CONSUMPTION \$							
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
ALKALI CHEMICALS								
SODA ASH	2201.45	2288.23	2261.40	2357.07	2588.95	2598.56	3048.51	2882.61
CAUSTIC SODA	2033.79	2161.92	2145.98	2392.64	2262.41	2448.08	2512.06	2505.41
LIQUID CHLORINE	1263.76	1381.40	1397.64	1481.04	1581.73	1572.07	1572.45	1592.09
Total	5498.99	5831.55	5805.01	6230.75	6433.08	6618.71	7133.02	6980.11
INORGANIC CHEMICALS								
ALUMINIUM FLUORIDE	20.12	22.71	29.90	27.56	16.72	32.39	29.19	26.28
CALCIUM CARBIDE	140.93	153.41	137.16	72.65	100.22	121.62	127.09	142.75
CARBON BLACK	393.12	410.43	353.03	133.51	161.87	294.31	436.79	431.14
POTASSIUM CHLORATE	-4.29	-5.52	3.18	8.25	6.40	5.80	7.27	6.99
SODIUM CHLORATE	14.06	13.92	19.02	21.79	24.76	25.01	25.04	28.08
TITANIUM DIOXIDE	66.77	64.65	60.53	70.56	74.82	69.77	64.50	60.58
RED PHOSPHORUS	0.32	0.18	0.39	0.53	0.55	0.57	0.52	0.61
Total	631.04	659.78	603.22	334.85	385.33	549.46	690.38	696.42
ORGANIC CHEMICALS								
ACETIC ACID	407.12	463.20	486.49	523.07	614.21	704.88	800.68	816.05
ACETIC ANHYDRIDE	40.75	40.48	43.11	56.56	51.78	52.17	85.46	76.21
ACETONE	103.90	111.94	113.25	123.83	125.97	142.24	130.33	144.66
PHENOL	137.43	175.73	165.47	171.94	202.01	211.54	232.24	258.35
METHANOL	922.28	1108.81	1292.72	1107.18	1144.39	1439.15	1469.22	1536.68
FORMALDEHYDE	233.03	237.49	229.13	258.01	262.94	259.94	270.66	262.92
NITROBENZENE	14.73	13.24	13.89	12.20	9.84	13.86	18.15	2.20
CITRIC ACID	25.00	30.99	34.04	39.10	42.31	50.40	54.33	62.35
MALEIC ANHYDRIDE	22.06	27.38	35.71	30.13	40.66	37.18	39.33	39.64
PENTAERYTHRITOL	17.53	19.79	19.35	21.80	24.15	25.11	24.76	26.37
ANILINE	56.20	61.42	52.50	58.20	63.91	54.45	63.48	72.27
CHLORO METHANES	92.05	87.82	96.27	91.33	111.25	98.69	90.17	109.61
ISOBUTYLBENZENE	0.12	-3.98	-4.18	-6.70	-9.19	-11.98	-6.68	-8.05
ONCB	18.03	18.82	20.80	18.56	19.86	15.75	17.12	14.94
PNCB	16.81	20.57	24.92	25.36	25.02	21.22	22.30	25.09

Table-5 : Consumption of Selected Major Chemicals (Product-Wise) during 2006-07 to 2013-14

('000' (MT)

PRODUCT NAME	CONSUMPTION \$							
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
MEK	17.68	21.88	20.36	24.45	21.33	31.98	33.68	30.50
ACETALDEHYDE	171.67	203.26	117.44	59.89	32.23	65.21	76.08	79.72
ETHANOLAMINES	9.67	12.57	13.67	11.38	8.90	13.47	16.65	19.98
ETHYL ACETATE	102.51	58.19	104.07	115.01	75.83	113.77	137.50	192.44
MENTHOL	-0.28	0.49	6.77	2.49	7.52	6.46	7.85	3.80
ORTHO NITRO TOLUENE	5.85	5.69	8.81	13.46	13.80	10.87	9.74	11.73
Total	2414.13	2715.75	2894.56	2757.25	2888.70	3356.33	3593.05	3777.43
PESTICIDES AND INSECTICIDES								
D.D.T.	0.60	0.93	3.31	3.57	3.06	3.62	3.83	2.75
MALATHION	4.30	6.30	3.08	0.67	2.55	2.12	1.38	1.62
PARATHION (METHYL)	0.91	-0.18	0.00	0.00	0.00	0.00	0.00	0.00
DIMETHOATE	0.67	0.43	0.58	0.65	0.87	0.88	0.92	1.23
D.D.V.P.	2.62	2.23	2.01	3.05	2.59	3.54	3.86	5.24
QUINALPHOS	0.47	0.43	0.64	0.65	0.34	0.52	0.88	0.79
MONOCROTOPHOS	4.91	5.12	4.57	5.74	9.93	9.59	8.25	4.27
PHOSPHAMIDON	0.37	0.71	0.85	1.00	0.29	0.06	0.02	0.05
PHORATE	9.89	7.80	6.12	7.12	7.67	7.01	5.75	6.85
ETHION	2.60	2.20	1.47	1.51	1.92	1.33	0.94	1.51
ENDOSULPHAN	6.14	6.49	10.00	6.01	6.98	-0.26	-0.08	-0.05
FENVALERATE	0.52	0.72	0.52	0.55	0.81	0.55	0.48	0.75
CYPERMETHRIN	-6.06	-6.43	-4.51	-4.76	-3.84	-0.40	-2.73	-2.95
ANILOPHOS	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACEPHATE	11.91	12.72	12.59	14.90	16.49	17.11	15.76	14.51
CHLORPYRIPHOS	8.30	9.04	8.93	9.31	8.72	6.05	7.52	9.54
PHOSALONE	0.25	0.50	0.00	0.00	0.00	0.00	0.00	0.00
METASYSTOX	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FENTHION	-0.20	-0.01	0.00	-0.02	0.00	0.00	0.00	0.04
TRIAZOPHOS	2.02	2.01	2.27	1.06	1.75	0.78	0.93	0.99
LINDANE	0.13	0.06	0.00	0.00	0.00	0.00	0.00	0.00

Table-5 : Consumption of Selected Major Chemicals (Product-Wise) during 2006-07 to 2013-14

('000' (MT))

PRODUCT NAME	CONSUMPTION \$							
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
TEMEPHOS	0.10	0.23	0.27	0.08	0.12	0.13	0.20	0.25
DELTAMETHRIN	0.34	0.26	0.04	0.02	0.52	0.33	0.42	0.38
ALPHAMETHRIN	0.17	0.21	0.02	0.00	0.31	0.32	0.32	0.31
PROFENOFOS TECHNICAL	0.46	2.35	2.76	3.28	4.60	6.41	5.01	7.18
PRETILACHLOR TECHNICAL	1.12	1.27	1.30	1.17	1.18	1.65	1.93	2.22
LAMBDA CYHALOTHRIN	0.00	0.00	0.13	0.13	0.21	0.29	0.43	0.52
PHENTHOATE	0.00	0.00	0.00	0.06	0.59	0.59	0.96	1.24
PERMETHRIN TECH	0.15	0.21	0.44	0.24	0.46	1.17	0.83	1.17
IMIDACALOPRID TECH	0.11	0.11	0.14	0.13	0.13	0.39	0.23	0.95
OTHER PESTICIDES	-3.85	-7.38	-13.79	-12.17	-21.63	-24.94	-32.21	-46.75
OTHER INSECTICIDES	-25.84	-37.26	-24.84	-30.00	-20.67	-24.55	-24.70	-29.43
CAPTAN & CAPTAFOL	0.19	0.00	0.00	0.00	0.72	0.92	0.56	1.12
ZIRAM(THIO BARBAMATE)	0.24	0.17	0.11	0.14	0.66	0.73	0.55	0.60
CARBENDZIM (BAVISTIN)	0.14	0.07	0.20	0.38	0.59	0.43	0.34	0.31
CALIXIN	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MANCOZAB	22.88	27.12	35.34	31.49	26.05	43.46	45.30	57.82
COPPER-OXYCHLORIDE	-0.09	-0.20	-0.22	-0.32	-0.62	-0.43	-0.48	-0.37
HEXACONAZOLE	0.26	0.29	0.34	0.35	0.36	0.39	0.36	0.50
METCONAZOLE	0.14	0.17	0.21	0.21	0.36	0.50	0.63	0.70
2, 4-D	5.95	8.16	6.48	2.30	3.97	1.77	0.07	3.05
BUTACHLOR	0.18	0.03	0.12	0.24	0.29	0.20	0.18	0.04
ETHOFUMESATE TECHNICAL	0.00	0.00	0.00	0.56	0.82	1.14	1.22	0.72
THIAMETHOXAM TECHNICAL	0.93	1.54	1.81	1.82	1.49	1.63	2.80	3.08
PENDIMETHALIN	0.00	0.00	0.00	0.00	0.00	0.00	1.03	1.71
METRIBUZIN	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.74
TRICLOPYR ACID TECH	0.01	0.11	0.09	0.23	0.30	0.10	0.21	0.18
ISOPROTURON	1.99	1.95	1.34	1.10	0.36	0.29	-0.13	0.23

Table-5 : Consumption of Selected Major Chemicals (Product-Wise) during 2006-07 to 2013-14

('000' (MT)

PRODUCT NAME	CONSUMPTION \$							
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
GLYPHOSATE	2.89	2.58	4.39	4.66	4.86	5.25	6.12	8.48
DIURON	0.00	0.08	0.01	0.13	0.23	0.31	0.14	0.07
ATRAZIN	0.09	0.22	0.26	0.26	0.25	0.66	0.65	1.24
FLUCHLORALIN	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ZINC PHOSPHIDE	1.11	0.95	0.91	0.92	0.86	0.89	0.60	0.65
ALUMINIUM PHOSPHIDE	0.65	1.14	1.35	1.50	0.85	1.20	1.84	3.62
METHYL BROMIDE	0.71	0.13	0.31	0.14	0.43	0.50	0.68	0.08
DICOFOL	0.05	0.09	0.09	0.02	0.05	0.08	0.05	0.07
Total	62.21	55.65	72.00	60.06	68.77	74.29	64.08	69.81

\$ Derived Consumption as Production + Imports - Exports

Section – III

Petrochemical Sector

Table- 6: Performance of Selected Basic Major Petrochemicals (Group Wise) during 2006-07 to 2013-14 At a Glance

(Figures In thousand MT)

Group	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	CARG (%) (13- 14/06-07)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. SYNTHETIC FIBRES / YARN									
Capacity	3223	3570	3220	3266	3459	3674	3823	3784	2.32
Production	2321	2648	2469	2819	3083	3042	3056	3084	4.14
Capacity Utilisation (%)	72.0	74.2	76.7	86.3	89.1	82.8	79.9	81.5	
Imports	158	141	132	98	121	142	147	155	-0.28
Exports	322	396	350	404	576	734	776	906	15.91
2. POLYMERS									
Capacity	5187	5777	5680	6130	7406	7450	7860	8004	6.39
Production	5183	5304	5060	4791	5292	6211	6424	6784	3.92
Capacity Utilisation (%)	99.9	91.8	89.1	78.2	71.5	83.4	81.7	84.8	
Imports	750	1152	1275	2160	2500	2435	3180	3126	22.62
Exports	881	631	357	658	822	1163	1113	1187	4.35
3. SYNTHETIC RUBBER									
Capacity	148	186	113	113	113	113	109	109	-4.24
Production	95	105	96	106	95	88	86	88	-1.00
Capacity Utilisation (%)	64.3	56.5	85.0	93.6	83.7	77.9	78.5	81	
Imports	286	342	290	376	446	493	520	581	10.64
Exports	16	14	16	15	15	22	11	14	-2.09
4. SYNTHETIC DETERGENT INTERMEDIATES									
Capacity	578	611	587	621	621	656	671	671	2.17
Production	556	585	552	618	638	623	627	597	1.00
Capacity Utilisation (%)	96.3	95.7	94.0	99.5	102.8	94.9	93.4	88.9	
Imports	26	49	76	91	79	107	127	124	24.64
Exports	127	130	90	95	134	75	50	33	-17.57
5 : PERFORMANCE PLASTICS									
Capacity	166	205	206	206	227	248	248	251	6.05
Production	136	160	145	176	196	188	193	213	6.58
Capacity Utilisation (%)	81.8	78.0	70.3	85.4	86.3	75.7	77.6	84.8	
Imports	46	57	67	85	130	137	168	202	23.72
Exports	6	9	9	9	15	12	18	26	22.80
Total Basic Major Petrochemicals (1 to 5)									
Capacity	9301	10349	9806	10336	11826	12141	12711	12819	4.69
Production	8291	8801	8322	8509	9304	10151	10384	10766	3.80
Capacity Utilisation (%)	89.1	85.0	84.9	82.3	78.7	83.6	81.7	84.0	
Imports	1266	1741	1840	2810	3276	3315	4142	4187	18.64
Exports	1352	1181	823	1181	1562	2007	1969	2165	6.95

Note: Product coverage under each group is given at page viii.

Table -7 : Production, Installed Capacity & Growth of Selected Basic Major Petrochemicals (Group-wise) during 2006-07 to 2013-14

(Figures in thousand MT)

Group	Installed Capacity			Production / Growth Rate	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
	2011-12	2012-13	2013-14									
1	2	3	4	5	6	7	8	9	10	11	12	13
Synthetic Fibers	3674	3823	3784	Production	2321	2648	2469	2819	3083	3042	3056	3084
				Growth Rate (%)		14.1	-6.8	14.2	9.4	-1.3	0.5	0.9
Polymers	7450	7860	8004	Production	5183	5304	5060	4791	5292	6211	6424	6784
				Growth Rate (%)		2.3	-4.6	-5.3	10.5	17.4	3.4	5.6
Elastomers (S.Rubber)	113	109	109	Production	95	105	96	106	95	88	86	88
				Growth Rate (%)		10.7	-8.5	10.0	-10.5	-7.0	-2.8	3.4
Synth. Detergent Intermediates	656	671	671	Production	556	585	552	618	638	623	627	597
				Growth Rate (%)		5.1	-5.7	12.0	3.3	-2.4	0.7	-4.8
Performance Plastics	248	248	251	Production	136	160	145	176	196	188	193	213
				Growth Rate (%)		17.3	-9.4	21.5	11.4	-4.2	2.6	10.5
Total Basic Major Petrochemicals	12141	12711	12819	Production	8291	8801	8322	8509	9304	10151	10384	10766
				Growth Rate (%)		6.1	-5.4	2.3	9.3	9.1	2.3	3.7

Note: Product coverage under each group is given at page viii.

Table-8: Production, Capacity Utilization & Growth of Selected Major Petrochemicals (Product-Wise) during 2006-07 to 2013-14

(In thousand MT)

Major Groups / Products	Installed Capacity			Production								CARG (%) (13- 14/06-07)	Capacity Utilisation in 2013-14 (Col.12/Col. 4)
	2011-12	2012-13	2013-14	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
A : BASIC MAJOR PETROCHEMICALS													
I : SYNTHETIC FIBRES / YARN													
1. Polyester Filament Yarn (PFY) (\$)	2252	2363	2354	1265	1474	1387	1562	1789	1834	1833	1776	4.97	75.46
2. Nylon Filament Yarn (NFY) (\$\$)	20	20	20	32	28	28	30	33	30	22	24	-4.03	121.62
3. Nylon Industrial Yarn (NIY) (\$\$)	48	48	48	72	84	69	88	86	88	86	93	3.85	194.43
4. Polypropylene Filament Yarn (PPFY)(\$\$)	8	8	8	10	10	9	9	6	7	6	6	-6.84	73.81
Sub Total Yarn (1+2+3+4)	2328	2439	2430	1378	1595	1493	1689	1914	1960	1948	1900	4.69	78.18
5. Acrylic Fibre (Inc. Dry Spun) (AF)	95	107	107	107	85	78	91	76	76	75	94	-1.82	88.21
6. Polyester Staple Fibre (PSF)	1174	1174	1135	785	919	843	980	1037	953	974	1010	3.67	88.99
7. Polypropylene Staple Fibre (PPSF)	5	31	31	4	3	3	3	4	4	8	23	30.60	74.21
8. Polyester Staple Fibrefil (PSFF)	72	72	81	47	45	51	54	53	49	51	56	2.63	69.70
Total Synth. Fibre / Yarn	3674	3823	3784	2321	2648	2469	2819	3083	3042	3056	3084	4.14	81.49
II : POLYMERS													
1. Linear Low Density Polyethylene (LLDPE)	No separate Capacity			772	837	817	683	897	1033	1012	1037	4.31	
2. High Density Polyethylene (HDPE)	No separate Capacity			958	974	942	856	887	1119	1177	1195	3.20	
LLDPE/HDPE (Combined) (\$\$\$)	2735	2735	2735	1730	1811	1758	1539	1784	2152	2189	2232	3.70	81.59
3. Low Density Polyethylene (LDPE)	160	160	160	195	198	191	193	179	194	187	190	-0.36	118.76

Table-8: Production, Capacity Utilization & Growth of Selected Major Petrochemicals (Product-Wise) during 2006-07 to 2013-14**(In thousand MT)**

Major Groups / Products	Installed Capacity			Production								CARG (%) (13- 14/06-07)	Capacity Utilisation in 2013-14 (Col.12/Col. 4)
	2011-12	2012-13	2013-14	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
4. Polystyrene(PS)	462	462	462	285	274	240	270	296	288	290	270	-0.75	58.51
5. Polypropylene(PP)	2676	3116	3116	2001	1978	1771	1617	1684	2209	2421	2648	4.08	84.99
6. Poly Vinyl Chloride(PVC)	1279	1279	1423	926	998	1051	1110	1278	1296	1257	1367	5.71	96.06
7. Expandable Polystyrene (EX-PS)	138	108	108	46	44	49	63	71	72	81	77	7.77	71.62
Total Polymers	7450	7860	8004	5183	5304	5060	4791	5292	6211	6424	6784	3.92	84.76
III : SYNTHETIC RUBBER													
1. Styrene Butadiene Rubber (SBR)	14	10	10	13	17	13	19	12	9	8	7	-8.52	70.32
2. Poly Butadiene Rubber (PBR)	74	74	74	72	74	72	73	76	79	77	81	1.73	109.28
3. Nitrile Butadiene Rubber (NBR)	25	25	25	10	13	11	13	6	0	0	1	-34.61	2.06
Total Synthetic Rubber	113	109	109	95	105	96	106	95	88	86	88	-1.00	81.11
IV : SYNTHETIC DETERGENT INTERMEDIATES													
1. Linear Alkyl Benzene (LAB)	532	547	547	460	471	434	464	475	454	455	406	-1.78	74.16
2. Ethylene Oxide (EO)	124	124	124	96	114	117	154	164	169	172	191	10.25	153.95
Total Synth. Detergent Intermediates	656	671	671	556	585	552	618	638	623	627	597	1.00	88.90

Table-8: Production, Capacity Utilization & Growth of Selected Major Petrochemicals (Product-Wise) during 2006-07 to 2013-14

(In thousand MT)

Major Groups / Products	Installed Capacity			Production								CARG (%) (13- 14/06-07)	Capacity Utilisation in 2013-14 (Col.12/Col. 4)
	2011-12	2012-13	2013-14	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
V : PERFORMANCE PLASTICS													
1. ABS Resin	128	128	128	74	78	68	84	90	89	91	102	4.67	79.84
2. Nylon-6 & Nylon 66	20	20	23	18	17	16	18	21	18	19	20	1.98	88.90
3. Polymethyl Methacrylate (PMMA)	4	4	4	3	3	2	3	3	3	3	2	-1.25	62.03
4. Styrene Acrylonitrile (SAN)	96	96	96	41	61	58	72	82	77	80	88	11.29	91.26
Total Performance Plastics	248	248	251	136	160	145	176	196	188	193	213	6.58	84.75
TOTAL BASIC MAJOR PETROCHEMICALS													
(I+II+III+IV+V)	12141	12711	12819	8291	8801	8322	8509	9304	10151	10384	10766	3.80	83.98
B : INTERMEDIATES													
I : FIBRE INTERMEDIATES													
1. Acrylonitrile (ACN)	41	41	41	37	39	30	39	38	38	33	37	0.01	90.33
2. Caprolactum	120	120	120	121	86	84	123	123	118	99	85	-4.94	70.71
3. Mono Ethylene Glycol (MEG)	1040	1040	1073	872	923	783	738	746	997	1061	1069	2.95	99.65
4. Purified Terephthalic Acid (PTA)	3753	3753	3753	2379	2059	2154	2985	3191	3308	3494	3477	5.57	92.63
Total Fibre Intermediates	4954	4954	4987	3410	3107	3052	3886	4097	4461	4687	4668	4.59	93.60

Table-8: Production, Capacity Utilization & Growth of Selected Major Petrochemicals (Product-Wise) during 2006-07 to 2013-14

(In thousand MT)

Major Groups / Products	Installed Capacity			Production								CARG (%) (13-14/06-07)	Capacity Utilisation in 2013-14 (Col.12/Col.4)
	2011-12	2012-13	2013-14	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
II : BUILDING BLOCKS													
OLEFINS													
1. Ethylene	3783	3783	3783	2683	2810	2639	2515	2665	3320	3315	3346	3.20	88.46
2. Propylene	2886	3326	3368	2089	2157	1887	1859	1930	2528	2655	2897	4.78	86.00
3. Butadiene	295	295	433	223	244	214	205	242	250	235	236	0.81	54.39
Total Olefins	6964	7404	7584	4995	5211	4740	4580	4837	6097	6205	6478	3.78	85.42
AROMATICS													
1. Benzene	1282	1283	1283	886	867	880	823	945	1002	1048	1031	2.19	80.34
2. Toluene	258	258	258	147	142	139	137	128	132	108	120	-2.83	46.66
3. Mixed Xylene	891	891	898	58	210	135	176	125	207	200	248	23.13	27.57
4. Ortho-xylene	420	420	420	431	269	224	358	400	390	444	412	-0.64	98.19
5. Paraxylene	2218	2218	2218	1925	2137	2155	2223	2137	2394	2360	2264	2.34	102.06
Total Aromatics	5069	5070	5077	3447	3624	3533	3716	3736	4125	4161	4075	2.42	80.26
C : OTHER PETRO-BASED CHEMICALS													
1. Butanol	**	26	26	14	14	11	8	18	22	14	5	-12.91	21.09
2. C4-Raffinate	262	262	262	76	77	55	65	71	209	395	393	26.41	149.86
3. Di-Ethylene Glycol	72	72	76	60	68	58	69	73	99	103	107	8.55	140.33

Table-8: Production, Capacity Utilization & Growth of Selected Major Petrochemicals (Product-Wise) during 2006-07 to 2013-14**(In thousand MT)**

Major Groups / Products	Installed Capacity			Production								CARG (%) (13- 14/06-07)	Capacity Utilisation in 2013-14 (Col.12/Col. 4)
	2011-12	2012-13	2013-14	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
4. Diacetone Alcohol	9	9	9	9	9	8	9	4	5	3	0	-100.00	0.00
5. Ethylene Dichloride (By Product)	593	593	593	220	267	277	445	454	435	316	278	3.40	46.89
6. 2-Ethyl Hexanol**	25	55	55	24	27	23	16	29	49	50	20	-2.61	36.71
7. Epichlorohydrine	10	10	0	10	9	8	7	8	9	11	0	-100.00	
8. Iso-Butanol	**	3	3	4	3	3	3	3	2	2	1	-19.80	26.17
9. Isopropanol (IPA)	70	70	70	21	49	51	62	67	71	70	76	19.89	108.43
10. Methyl Methacrylate (MMA)	4	4	4	4	4	3	5	5	4	3	3	-4.48	80.73
11. Phthalic Anhydride (PAN)	309	309	362	223	244	207	232	253	250	254	264	2.43	72.86
12. Propylene Oxide (PO)	27	27	27	28	28	29	32	32	35	30	33	2.60	123.81
13. Propylene Glycol (PG)	15	15	15	16	17	16	19	17	19	15	14	-2.22	93.59
14. Polyvinyl Acetate Resin	0	0	0	10	11	10	4	2	0	0	0		
15. Vinyl Acetate Monomer (VAM)	0	0	0	24	23	24	0	0	0	0	0		
16. Vinyl Chloride Monomer (VCM) (By Product)	541	541	541	280	289	303	674	672	689	669	735	14.82	135.95
Total Other Petro-based Chemicals	1937	1996	2043	1024	1139	1086	1648	1707	1899	1937	1930	9.47	94.45
(\$) : Includes capacity of all the units producing PFY, NFY, NIY and PPFY under broadbanding as Synthetic Filament Yarn													
(\$\$) : Independent capacity of units producing only NFY, NIY and PPFY.													
As the capacities of these products are also included in Synthetic Filament yarn, capacity utilisation can not be worked out.													
(\$\$\$) : Combined capacity to produce both LLDPE and HDPE and hence capacity utilisation can not be worked out. However production is independent.													
(**) : Combined capacity of 2-EH, Butanol & Iso Butanol is given under 2 - EH)													

Table -9 : Installed Capacities of Selected Major Petrochemicals (Group Wise) from 2006-07 to 2013-14

(Figures in 000'MT)

GROUP / PRODUCT	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
A : BASIC PETROCHEMICALS								
I : SYNTHETIC FIBRES	3223	3570	3220	3266	3459	3674	3823	3784
II : POLYMERS	5187	5777	5680	6130	7406	7450	7860	8004
III : SYNTHETIC RUBBER (ELASTOMERS)	148	186	113	113	113	113	109	109
IV : SYNTH. DETERGENT INTERMEDIATE	578	611	587	621	621	656	671	671
V : PERFORMANCE PLASTICS	166	205	206	206	227	248	248	251
MAJOR PETROCHEMICALS (I TO V)	9301	10349	9806	10336	11826	12141	12711	12819
B : INTERMEDIATES								
VI : FIBRE INTERMEDIATES	4181	4368	4054	4774	4954	4954	4954	4987
VII : OLEFINS	4475	5517	5343	5659	6964	6964	7404	7584
VIII : AROMATICS	3528	4345	4166	4213	4340	5069	5070	5077
C : OTHER PETRO-BASED CHEMICALS	1729	1735	1758	1853	1911	1937	1996	2043

Table- 10: Consumption of Selected Major Petrochemicals (Product-wise) during 2006-07 to 2013-14

PRODUCT NAME	CONSUMPTION \$							
	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
I. SYNTHETIC FIBRE								
ACRYLIC FIBRE	110	89	85	95	75	70	85	96
POLYESTER STAPLE FIBREFILL	47	45	51	54	53	49	51	56
NYLON FILAMENT YARN	41	29	32	35	49	51	44	47
NYLON INDUSTRIAL YARN/TYRE CORD	81	85	70	97	94	93	94	97
POLYESTER FILAMENT YARN	1188	1341	1276	1385	1431	1353	1307	1175
POLYESTER STAPLE FIBRE	675	790	723	834	916	822	833	847
POLYPROPYLENE FILAMENT YARN	12	11	10	9	6	8	6	5
POLYPROPYLENE STAPLE FIBRE	3	3	3	3	3	4	6	9
Total	2157	2393	2250	2512	2628	2450	2427	2332
II. POLYMERS								
LOW DENSITY POLYETHYLENE	254	269	273	348	363	379	434	428
HIGH DENSITY POLYTHYLENE	834	1094	1115	1303	1268	1302	1657	1657
POLYESTYRENE	201	212	194	232	262	257	252	224
POLYPROPYLENE (INC. CO-POLYMER)	1669	1825	1901	1478	1527	1791	2091	2184
EXPANDABLE POLYESTYRENE	42	51	53	66	78	77	82	78
POLY VINYL CHLORIDE	1149	1349	1388	1738	1939	2144	2389	2574
LINEAR LOW DENSITY POLYTHYLENE	869	981	1013	1059	1467	1474	1529	1524
PVC COMPOUND	34	43	41	70	65	59	59	54
ULTRA H M W POLYETHYLENE	0	0	0	0	0	0	0	0
Total	5052	5824	5977	6293	6970	7483	8491	8723
III. SYNTHETIC RUBBER								
STYRENE BUTADIENE RUBBER	106	122	104	157	195	214	207	239
POLY BUTADIENE RUBBER	95	103	94	122	123	145	147	167
ETHYL PROPYLENE DIMERS	15	16	13	19	26	26	27	27
ETHYL VINYL ACETATE	87	115	88	77	90	83	108	114
NITRILE BUTADIENE RUBBER	23	25	17	25	22	9	26	30
BUTYL RUBBER	47	52	53	66	70	82	78	79
Total	372	433	371	466	526	559	594	655

Table- 10: Consumption of Selected Major Petrochemicals (Product-wise) during 2006-07 to 2013-14

PRODUCT NAME	CONSUMPTION \$							
	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
IV. SYNTHETIC DETERGENT INTERMEDIATES								
LINEAR ALKYL BENZENE	359	390	420	461	420	486	532	497
ETHYLENE OXIDE	97	114	117	154	163	169	171	190
Total	455	504	538	615	583	655	704	687
V. PERFOR MANCE PLASTICS								
ABS RESIN	85	90	88	114	131	134	147	165
NYLON-6	36	43	47	58	77	86	97	119
POLYMETHYL METHACRYLATE	8	5	3	4	15	10	11	12
STYRENE ACRYLONITRILE	46	68	64	74	87	82	86	93
NYLON 6,6	1	1	1	1	1	1	1	1
Total	176	207	203	252	311	312	342	389
TOTAL BASIC MAJOR PETROCHEMICALS								
(I+II+III+IV+V)	8212	9361	9339	10138	11018	11459	12557	12788
FIBRE INTERMEDIATE								
ACRYLONITRILE	121	121	109	104	110	110	113	138
CAPROLACTUM	114	109	94	122	115	110	111	108
DIMETHYL TEREPHTHALATE	38	7	4	4	4	3	2	2
MONO EHYLENE GLYCOL	966	1133	1173	1415	1482	1565	1644	1823
PURIFIED TEREPHTHALIC ACID	2521	2118	2295	3460	3934	3888	4138	4455
Total	3760	3488	3675	5105	5646	5675	6009	6525
OLEFINS								
BUTADIENE	110	116	98	95	111	133	127	117
ETHYLENE	2699	2812	2659	2550	2780	3334	3338	3371
PROPYLENE	2089	2150	1888	1835	1906	2519	2650	2897
Total	4899	5077	4644	4480	4796	5987	6115	6385
AROMATICS								
BENZENE	450	564	522	546	426	544	446	400
MIXED XYLENE	79	16	25	120	53	58	59	66
ORTHO-XYLENE	230	245	207	221	98	238	279	228
TOLUENE	275	283	282	334	312	372	410	369
PARAXYLENE	1564	1756	1899	2054	2175	2228	2345	2220
Total	2598	2863	2935	3274	3064	3440	3538	3284

Table- 10: Consumption of Selected Major Petrochemicals (Product-wise) during 2006-07 to 2013-14

PRODUCT NAME	CONSUMPTION \$							
	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
OTHER PETRO-BASED CHEMICALS								
DIETHYLENE GLYCOL	60	68	58	69	73	99	103	107
DIACETONE ALCOHOL	9	9	8	9	4	5	3	0
ETHYLENE DICHLORIDE	437	451	487	637	739	699	672	718
BUTANOL	32	37	33	42	37	50	46	48
OXO ALCOHOL	1	0	0	1	0	0	1	0
2-ETHYL HEXANOL	33	37	44	54	63	78	108	120
VINYL CHLORIDE MONOMER	401	404	424	829	1057	992	965	1039
EPICHLHYDRINE	17	20	22	24	28	28	30	23
ISO BUTYLENE	38	39	33	40	43	23	9	21
METHYL ISOBUTYL KETONE	12	14	15	17	16	19	18	18
PIB	5	1	0	0	0	1	6	4
POLYCARBONATE	46	46	41	53	102	114	120	121
PROPYLENE OXIDE	32	31	33	42	45	44	43	45
PROPYLENE GLYCOL	33	35	41	47	50	54	53	57
UNSATURATED POLYSTER RESIN	27	11	25	35	28	25	25	20
METHYL METHACRYLATE	4	4	3	5	5	4	3	3
ISO-BUTANOL	4	3	3	3	3	2	2	1
C4-RAFFINATE	76	77	55	65	71	209	395	393
ACRYLATES	2	0	0	0	0	0	0	0
MELAMINE MOULDING POWDER	2	2	2	4	5	7	8	8
POLYACETAL RESIN	12	12	11	15	18	20	26	26
PHTHALIC ANHYDRIDE	174	204	202	240	295	263	286	296
STYRENE	406	411	391	452	457	513	574	571
VINYL ACTATE MONOMER	63	74	-258	74	84	122	126	143
ISOPROPANOL	74	71	70	91	101	95	122	124
Total	1999	2063	1742	2847	3324	3468	3745	3905

\$ Derived consumption as Production + Imports - Exports

Section – IV

Foreign Trade

Table- 11: Exports and Imports of Chemicals (excluding Pharmaceutical Products and Fertilizers) during 2006-07 to 2013-14

Values in Rs. Crore

HS Code	Commodity	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	CARG (%) (13-14/06-07)
	Total National Exports of which	571779.3	655863.5	840755.1	845533.6	1136964	1465959	1634319	1884912	18.6
28	INORGANIC CHEMICALS	3629	3317	5166	4540	8564	8689	7176	8179	12.3
29	ORGANIC CHEMICALS	25949	28870	34060	35241	41709	56659	66485	73582	16.1
32	TANNING OR DYEING	4562	5327	5899	6556	7720	9336	11372	15433	19.0
38	MISCELLANEOUS CHEMICAL PRODUCTS.	5210	5969	8615	8611	9409	12485	15545	18597	19.9
39	PLASTIC AND ARTICLES THEREOF.	12405	11219	11502	13012	18150	25312	28021	34058	15.5
4002	SYNTHETIC RUBBER AND FACTICE	122	92	138	136	175	286	181	239	10.1
54	MAN-MADE FILAMENTS.	4650	5451	7060	9541	10469	12466	12112	15547	18.8
55	MAN-MADE STAPLE FIBRES.	4746	5529	5664	6719	8256	10599	10565	12535	14.9
A: Total Chemicals and Chemical Products		61274	65773	78104	84357	104452	135832	151458	178170	16.5
% share in total export		10.7	10.0	9.3	10.0	9.2	9.3	9.3	9.5	
	Total National Imports of which	840506.3	1012312	1374436	1364477	1683467	2345463	2669162	2714230	18.2
28	INORGANIC CHEMICALS	11473	11393	21492	16270	17236	27792	28770	29411	14.4
29	ORGANIC CHEMICALS	27330	32642	38853	44505	57550	69144	85439	103043	20.9
32	TANNING OR DYEING	2721	3031	3824	4328	5434	7097	8004	9256	19.1
38	MISCELLANEOUS CHEMICAL PRODUCTS.	6390	7357	10688	11579	13935	17855	20650	23093	20.1
39	PLASTIC AND ARTICLES THEREOF.	13387	16558	20385	26129	34477	40578	52283	61114	24.2
4002	SYNTHETIC RUBBER AND FACTICE	2072	2374	3021	3209	5141	7731	7562	7342	19.8
54	MAN-MADE FILAMENTS.	2010	1970	2370	2638	3024	3725	4149	4599	12.5
55	MAN-MADE STAPLE FIBRES.	942	1049	1264	1454	1935	2498	3052	3741	21.8
B: Total Chemicals and Chemical Products		66325	76374	101898	110113	138731	176419	209909	241600	20.3
% share in total import		7.9	7.5	7.4	8.1	8.2	7.5	7.9	8.9	

Chapter 28: Inorganic Chemicals; Organic or Inorganic Compounds of Precious Metals, of Rare-Earth Metals, of Radioactive Elements or of Isotopes; Chapter 29: Organic Chemicals; Chapter 32: Tanning or Dyeing Extracts; Tannins and their Derivatives; Dyes, Pigments and Other Colouring Matter; Paints and Varnishes; Putty and other Mastics; Inks; Chapter 38: Miscellaneous Chemical Products; Chapter 39: Plastics and articles thereof; 4002: Synthetic rubber and factice derived from oils, in primary forms or in plates, sheets or strip; mixtures of any product of heading No.4001 with any product of this heading, in primary forms or in plates, sheets; Chapter 54: Man-made Filaments and Chapter 55: Man-made staple fibres

Table- 12: Net Imports of Chemicals (excluding Pharmaceutical Products and Fertilizers) during 2006-07 to 2013-14

		Values in Rs. Crore							
HS Code	Commodity	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
	Total National Net Imports	268,727	356,448	533,680	518,943	546,503	879,504	1,034,843	829,318
28	INORGANIC CHEMICALS	7,845	8,076	16,327	11,730	8,672	19,102	21,594	21,233
29	ORGANIC CHEMICALS	1,380	3,773	4,793	9,264	15,841	12,486	18,954	29,461
32	TANNING OR DYEING	-1,842	-2,297	-2,075	-2,228	-2,286	-2,240	-3,368	-6,178
38	MISCELLANEOUS CHEMICAL PRODUCTS.	1,181	1,389	2,073	2,968	4,526	5,370	5,104	4,496
39	PLASTIC AND ARTICLES THEREOF.	981	5,339	8,884	13,117	16,327	15,266	24,262	27,056
4002	SYNTHETIC RUBBER AND FACTICE	1,950	2,282	2,883	3,073	4,966	7,445	7,381	7,103
54	MAN-MADE FILAMENTS.	-2,640	-3,481	-4,690	-6,903	-7,445	-8,741	-7,964	-10,947
55	MAN-MADE STAPLE FIBRES.	-3,804	-4,480	-4,399	-5,265	-6,322	-8,101	-7,513	-8,794
Net Imports of total Chemicals and Chemical Products		5,051	10,601	23,794	25,756	34,279	40,587	58,451	63,430
% share in total national net imports		1.9	3.0	4.5	5.0	6.3	4.6	5.6	7.6

Chapter 28: Inorganic Chemicals; Organic or Inorganic Compounds of Precious Metals, of Rare-Earth Metals, of Radioactive Elements or of Isotopes; Chapter 29: Organic Chemicals; Chapter 32: Tanning or Dyeing Extracts; Tannins and their Derivatives; Dyes, Pigments and Other Colouring Matter; Paints and Varnishes; Putty and other Mastics; Inks; Chapter 38: Miscellaneous Chemical Products; Chapter 39: Plastics and articles thereof; 4002: Synthetic rubber and factice derived from oils, in primary forms or in plates, sheets or strip; mixtures of any product of heading No.4001 with any product of this heading, in primary forms or in plates, sheets; Chapter 54: Man-made Filaments and Chapter 55: Man-made staple fibres

Table-13: Exports of Major Chemicals (Group Wise) during 2006-07 to 2013-14**(QTY. IN MT ; VALUE IN RS. LAKH)**

GROUP	2006-2007		2007-2008		2008-2009		2009-10		2010-11		2011-12		2012-13		2013-14	
	QTY.	VALUE	QTY.	VALUE	QTY.	VALUE	QTY.	VALUE	QTY.	VALUE	QTY.	VALUE	QTY.	VALUE	QTY.	VALUE
ALKALI CHEMICALS	179359	15453	111266	13233	148176	25966	341816	36679	346968	44553	344596	51653	144954	33599	159081	35758
INORGANIC CHEMICALS	100754	40347	122943	47881	98240	51434	377471	99800	382629	128126	288690	154497	120982	89996	135348	104483
ORGANIC CHEMICALS	61848	85437	116393	112517	82862	87116	143494	99492	187390	164132	315492	264248	406944	373539	333479	342209
PESTICIDES & INSECTICIDES	65796	211059	75022	228389	71732	299485	87341	294644	93311	315585	102505	439851	109541	583011	130535	687272
DYES & PIGMENTS	172930	344284	200424	391800	198250	431779	236478	475573	257858	558103	265435	643434	305038	797004	328338	1128315
EXPORTS OF MAJOR CHEMICALS	580687	696580	626048	793820	599260	895780	1186600	1006188	1268156	1210499	1316718	1553683	1087459	1877149	1086781	2298037

Note: 1. Product coverage under each group is given at page vi.

2. The data from 2008-09 to 2012-13 is based on ITC HS 2007 and the data for 2013-14 is based on ITC HS 2012

Table-14: Imports of Major Chemicals (Group Wise) during 2006-07 to 2013-14

(QTY. IN MT : VALUE IN RS. LAKH)

GROUP	2006-2007		2007-2008		2008-2009		2009-10		2010-11		2011-12		2012-13		2013-14	
	QTY.	VALUE	QTY.	VALUE	QTY.	VALUE	QTY.	VALUE	QTY.	VALUE	QTY.	VALUE	QTY.	VALUE	QTY.	VALUE
ALKALI CHEMICALS	409364	44426	499490	54386	511268	68431	867836	100179	630499	70565	658385	95789	995300	172682	874112	152976
INORGANIC CHEMICALS	129480	51260	173866	69179	188914	96780	194813	93106	195909	102856	263745	173700	278237	195438	286984	202822
ORGANIC CHEMICALS	868789	232129	1210665	299897	1638930	348150	1547520	328542	1638994	418374	2182271	627474	2486575	757437	2496031	957269
PESTICIDES & INSECTICIDES	10837	29757	6065	17551	13892	85472	13149	119672	19083	148717	21590	167346	19412	184007	22489	210393
DYES & PIGMENTS	27394	59972	32344	63646	24738	72502	28023	89729	29938	101807	36494	119038	40437	156015	41662	180256
IMPORTS OF MAJOR CHEMICALS	1445864	417544	1922430	504659	2377742	671335	2651341	731228	2514423	842319	3162485	1183347	3819961	1465579	3721278	1703716

Note: 1. Product coverage under each group is given at page vi.

2. The data from 2008-09 to 2012-13 is based on ITCHS 2007 and the data for 2013-14 is based on ITCHS 2012

Table-15: Net Imports of Major Chemicals (Group Wise) during 2006-07 to 2013-14

(QTY. IN MT ; VALUE IN RS. LAKH)

GROUP	2006-2007		2007-2008		2008-2009		2009-10		2010-11		2011-12		2012-13		2013-14	
	QTY.	VALUE	QTY.	VALUE	QTY.	VALUE	QTY.	VALUE	QTY.	VALUE	QTY.	VALUE	QTY.	VALUE	QTY.	VALUE
ALKALI CHEMICALS	230005	28973	388224	41153	363092	42465	526020	63500	283531	26012	313789	44136	850346	139083	715031	117218
INORGANIC CHEMICALS	28726	10913	50923	21298	90674	45346	-182658	-6694	-186720	-25270	-24945	19203	157255	105442	151636	98339
ORGANIC CHEMICALS	806941	146692	1094272	187380	1556068	261034	1404026	229050	1451604	254242	1866779	363226	2079631	383898	2162552	615060
PESTICIDES & INSECTICIDES	-54959	-181302	-68957	-210838	-57840	-214013	-74192	-174972	-74228	-166868	-80915	-272505	-90129	-399004	-108046	-476879
DYES & PIGMENTS	-145536	-284312	-168080	-328154	-173512	-359277	-208455	-385844	-227920	-456296	-228941	-524396	-264601	-640989	-286676	-948059
NET IMPORTS OF MAJOR CHEMICALS	865177	-279036	1296382	-289161	1778482	-224445	1464741	-274960	1246267	-368180	1845767	-370336	2732502	-411570	2634497	-594321

Note: 1. Product coverage under each group is given at page vi.

2. The data from 2008-09 to 2012-13 is based on ITCHS 2007 and the data for 2013-14 is based on ITCHS 2012

Table -16: Exports of Major Chemicals (Product-wise) during 2006-07 to 2013-14

[QTY IN MT & VALUE IN RS. Lakh]

PRODUCT	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
ALKALI CHEMICALS																
SODA ASH	136991	10472	73193	7310	86204	10956	257219	20931	199765	18281	257622	31586	82144	12766	79009	12506
CAUSTIC SODA	29409	4131	32337	5483	56498	14356	76995	14342	143791	25699	82208	18977	59118	20166	76071	22568
LIQUID CHLORINE	12959	850	5736	440	5474	654	7602	1406	3412	573	4766	1090	3692	667	4001	684
Total	179359	15453	111266	13233	148176	25966	341816	36679	346968	44553	344596	51653	144954	33599	159081	35758
INORGANIC CHEMICALS																
ALUMINIUM FLUORIDE	9146	4525	10013	5351	8417	7192	8127	4771	7068	3363	3362	2181	3755	2410	3658	2571
CALCIUM CARBIDE	43	12	4	4	250	87	971	346	961	348	1267	592	1758	853	268	148
CARBON BLACK	68280	23394	88174	30870	79603	35851	359840	87287	365478	114404	277698	142242	110697	79285	121212	86893
POTASSIUM CHLORATE	8420	971	10893	1296	2629	1186	1811	763	1307	393	844	487	791	567	724	451
SODIUM CHLORATE	1194	123	480	66	159	34	375	35	7	22	127	51	40	5	7	10
TITANIUM DIOXIDE	13311	10723	12798	9718	6835	6161	5942	5794	7491	8797	5009	7811	3470	5278	9068	12853
RED PHOSPHORUS	360	599	581	576	347	923	405	804	317	799	383	1133	471	1598	411	1557
Total	100754	40347	122943	47881	98240	51434	377471	99800	382629	128126	288690	154497	120982	89996	135348	104483
ORGNIC CHEMICALS																
ACETIC ACID	14819	6019	15040	5509	12589	5054	13022	4590	8368	2662	25887	8687	6617	2995	7185	3089
ACETIC ANHYDRIDE	1294	679	857	425	4168	2314	1256	760	1902	880	2652	1373	3734	1855	6430	3470
ACETONE	139	283	270	219	1950	1088	501	277	2805	1250	1200	958	2660	1828	674	634

Table -16: Exports of Major Chemicals (Product-wise) during 2006-07 to 2013-14

[QTY IN MT & VALUE IN RS. Lakh]

PRODUCT	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
PHENOL	2596	2757	2078	2203	3195	3753	2720	3269	1293	2321	1146	2147	436	1028	2142	3230
METHANOL	1233	728	31743	13726	3264	846	45902	6426	43560	8787	120419	20481	184669	34456	80519	22195
FORMALDEHYDE	2217	407	5710	672	3256	380	3995	542	4275	533	4474	722	5041	961	6303	2011
NITROBENZENE	104	80	35	39	126	144	144	99	110	83	128	126	165	141	146	131
CITRIC ACID	377	188	210	109	338	235	1365	767	1795	1272	2745	1935	2411	1817	1788	1601
MALEIC ANHYDRIDE	2952	1780	622	383	274	232	115	80	66	57	38	32	23	27	27	36
PENTAERYTHRITOL	2469	1921	1776	1615	1325	1540	1195	1631	1539	2026	1353	1966	1385	2144	1460	2277
ANILINE	4404	2716	2296	1538	964	1191	249	291	1161	899	953	744	193	344	94	143
CHLORO METHANES	629	465	42	65	46	51	116	75	36	53	126	121	42	49	1	5
ISOBUTYL-BENZENE	2414	1974	7314	5408	7516	6853	10801	9548	11459	9769	13920	14712	13314	17938	14156	21087
ONCB	484	381	40	40	267	225	636	357	428	243	323	168	378	319	2555	2428
PNCB	1754	1191	1806	790	1880	1270	1075	533	1413	677	1272	693	2096	1442	2370	1763
MEK	178	165	207	217	304	466	111	139	56	184	428	501	408	390	462	2382
ACETALDEHYDE	95	115	128	251	244	149	19	20	84	352	241	908	239	1005	37	118
ETHANOLAMINES	271	243	1353	1232	1975	2017	585	1130	1149	1578	1752	3063	832	3173	1235	4665
ETHYL ACETATE	14773	6777	33054	13712	30753	13955	47114	20398	96996	46806	126601	64994	169166	88388	190187	103855
MENTHOL	7557	56116	10783	63970	6982	44793	11997	48341	8274	83459	9507	139774	12181	212575	14988	166411
ORTHO NITRO TOLUENE	1089	452	1029	394	1446	560	576	219	621	241	327	143	954	664	720	678

Table -16: Exports of Major Chemicals (Product-wise) during 2006-07 to 2013-14

[QTY IN MT & VALUE IN RS. Lakh]

PRODUCT	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
Total	61848	85437	116393	112517	82862	87116	143494	99492	187390	164132	315492	264248	406944	373539	333479	342209
PESTICIDES & INSECTICIDES																
D.D.T.	3891	4303	2532	2809	0	0	42	133	32	95	0	0	0	0	0	0
MALATHION	0	0	0	0	296	772	1040	1337	555	676	425	483	328	611	415	819
PARATHION (METHYL)	568	637	803	885	0	0	0	0	0	0	0	0	0	0	0	0
DIMETHOATE	334	2370	468	640	334	721	458	1181	359	614	4	9	69	182	184	679
D.D.V.P.	1276	1699	1254	1454	1021	2329	837	1233	929	1288	1129	2024	543	1179	347	884
QUINALPHOS	353	669	98	191	202	614	344	924	673	2108	483	1490	463	1657	950	3360
ENDOSULPHAN	3175	5849	4104	7421	1348	2969	3916	9565	4701	9353	1612	3483	80	260	45	59
FENVALERATE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYPERMETHRIN	12339	44722	12649	47179	10528	54444	13483	50852	10871	40665	10570	52655	10268	55107	11982	58546
FENTHION	318	645	5	9	0	0	23	16	0	0	0	0	0	0	0	0
LINDANE	122	204	17	102	0	0	0	0	0	0	0	0	0	0	0	0
OTHER PESTICIDES*	5408	13497	8357	20493	14320	40916	12974	49719	22283	84569	27283	83613	33468	136414	49002	207199
OTHER INSECTICIDES**	32874	126439	41178	140147	37110	183543	41630	159975	37925	150093	42940	259829	41853	335623	48992	373807
COPPER- OXYCHLORIDE	88	148	200	305	242	537	316	612	625	1403	434	1179	478	1231	417	1155
2, 4-D	2408	2618	739	766	3095	4348	8401	8818	8835	11013	13262	20823	15365	27427	14851	27924
ISOPROTURON	1157	2191	1009	1675	1642	3542	1811	3762	3351	6864	2239	6588	4181	13189	2114	7804
ALUMINIUM PHOSPHIDE	1428	4913	1575	4206	1592	4738	1906	6088	2158	6816	1969	7271	2341	9758	853	3703

Table -16: Exports of Major Chemicals (Product-wise) during 2006-07 to 2013-14

[QTY IN MT & VALUE IN RS. Lakh]

PRODUCT	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
METHYL BROMIDE	57	155	34	107	2	12	160	429	14	28	155	404	104	373	383	1333
Total	65796	211059	75022	228389	71732	299485	87341	294644	93311	315585	102505	439851	109541	583011	130535	687272
DYES & PIGMENTS																
AZO DYES	25583	44970	32437	54333	32784	63046	41323	71777	49700	88623	48638	89802	54228	111415	57392	172261
ACID DIRECT DYES(OTHER THAN	7663	14534	7047	14927	3890	9720	5144	10666	4220	8870	3264	7815	3629	9770	5637	21363
BASIC DYES	5935	11610	4875	7236	4355	6892	5062	7378	6141	9512	5655	9732	6957	14815	7148	19082
DISPERSE DYES	3605	7264	4201	9001	4735	12218	5064	11716	5700	15642	6452	18596	7017	19417	9236	33037
FAST COLOUR BASES	1852	3732	1904	4427	2116	6242	2629	6391	2683	6939	2815	7442	3106	9349	2619	10191
OIL SOLUBLE (SOLVENT DYES)	2326	7584	2024	6617	2245	8340	3106	10112	4045	13960	5158	17215	4665	17828	4965	23322
OPTICAL WHITENING AGENTS	12671	15897	15509	15452	15171	21115	19045	22637	23625	25112	20346	22941	23049	29156	23401	36934
ORGANIC PIGMENTS	1117	2447	366	990	265	769	559	999	296	648	330	1383	60	386	13	76
PIGMENT EMULSION	42457	107119	49644	128666	49707	149583	56678	160071	67539	212430	65704	253341	69919	295002	71435	353368
REACTIVE DYES	52508	79982	64637	102448	65385	103675	77024	119712	69031	113510	77313	137604	98440	200414	110029	340368
SULPHUR DYES (SULPHUR BLACK)	681	1293	391	970	597	1031	934	944	1514	1277	747	838	889	1153	1141	1575
VAT DYES	1910	16055	1837	12839	1536	12160	1906	13292	2073	16295	2229	18768	1954	16816	1955	24387
SOLUBILISED VAT DYES	68	703	302	1041	346	1322	337	897	481	1309	51	399	47	370	31	491
FOOD COLOURS	8130	18901	8435	18497	10103	24506	11355	26703	13211	29415	19012	42563	21786	51772	22891	65423
NAPTHOLS	1222	2910	1119	2718	667	2130	827	2466	608	1369	869	1634	1242	2754	887	2597
OTHER DYES	5202	9283	5696	11638	4348	9030	5485	9812	6991	13192	6852	13361	8050	16587	9558	23840
Total	172930	344284	200424	391800	198250	431779	236478	475573	257858	558103	265435	643434	305038	797004	328338	1128315

* ITC HS Code38089010 and 38089910; ** ITC HS Code 38081099 and 38089199

Table-17: Import of Major Chemicals (Product-Wise) during 2006-07 to 2013-14

PRODUCT	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
ALKALI CHEMICALS																
SODA ASH	260386	21394	355915	32594	358555	41202	555956	56283	489956	49573	445363	52829	692866	96965	569452	79839
CAUSTIC SODA	148977	23027	143568	21761	152446	27136	311417	43762	138481	20764	212642	42811	302385	75577	304633	73030
LIQUID CHLORINE	1	5	7	31	267	93	463	134	2062	228	380	149	49	140	27	107
Total	409364	44426	499490	54386	511268	68431	867836	100179	630499	70565	658385	95789	995300	172682	874112	152976
INORGANIC CHEMICALS																
ALUMINIUM FLUORIDE	8960	3917	13286	6126	23248	14241	24140	10624	13989	6597	28448	20188	26244	19086	24542	17383
CALCIUM CARBIDE	49026	11354	56000	14649	70860	25260	51598	16657	56479	19046	56500	21507	57865	24734	64239	26743
CARBON BLACK	38930	17636	71638	29212	61237	35998	73920	38260	74905	45674	124338	85053	143461	105503	145939	112823
POTASSIUM CHLORATE	0	1	22	15	22	8	7464	3693	7095	3171	6300	2991	7468	4217	7040	4357
SODIUM CHLORATE	15255	3042	14399	3471	19175	6513	22162	6635	24762	6655	25135	8251	25076	9375	28083	11570
TITANIUM DIOXIDE	17164	15135	18303	15407	14092	13794	15176	16563	18295	20938	22636	34902	17825	31788	16875	29196
RED PHOSPHORUS	145	175	218	299	280	966	353	674	384	775	388	808	298	735	266	750
Total	129480	51260	173866	69179	188914	96780	194813	93106	195909	102856	263745	173700	278237	195438	286984	202822
ORGNIC CHEMICALS																
ACETIC ACID	124464	32678	136422	36149	285037	69914	389650	82134	466097	96233	570040	152012	646738	171462	664797	197806
ACETIC ANHYDRIDE	280	136	421	183	37	19	895	498	771	401	1533	856	2042	1049	1792	985
ACETONE	59826	21005	65026	26380	68364	27260	80081	31181	78236	32100	100637	54505	95939	54615	116758	81421
PHENOL	68754	40552	102871	66153	92918	46763	103071	51907	123490	93671	146762	111194	172758	139980	214098	172427

Table-17: Import of Major Chemicals (Product-Wise) during 2006-07 to 2013-14

PRODUCT	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
METHANOL	527287	95787	788816	112426	1058866	125780	822248	89941	813422	103539	1199635	198749	1398982	260025	1E+06	341704
FORMALDEHYDE	430	113	439	159	545	186	713	218	605	221	614	395	342	217	933	318
NITROBENZENE	104	99	164	72	84	39	1	2	0	0	22	36	0	0	0	4
CITRIC ACID	25372	7720	31197	10043	34374	14281	40467	14750	44102	18562	53142	25921	56743	27338	64139	31711
MALEIC ANHYDRIDE	12055	6468	23751	12791	33009	18134	27693	14919	37973	24772	34584	25470	36864	35099	36751	39695
PENTA-ERYTHRITOL	6273	4132	6617	4937	6855	5354	11786	6659	13961	8764	15059	12162	14650	13819	15650	16423
ANILINE	13231	8012	18736	10953	18798	12312	19067	9902	24012	14563	15310	10544	15441	14410	31742	34853
CHLORO METHANES	489	692	1999	735	100	159	325	364	502	435	249	268	153	356	143	296
ISOBUTYL-BENZENE	16	15	0	0	2	10	36	26	0	0	0	0	0	0	26	19
ONCB	5694	2887	5050	3568	5358	4008	3760	2180	3598	1697	2336	1092	2089	1313	672	589
PNCB	100	30	1455	386	1551	658	2868	1027	1564	776	347	187	0	0	398	295
MEK	17759	7586	22091	10332	20668	13121	24556	11352	21384	15286	30220	24334	31597	25151	27239	23188
ACETALDEHYDE	104	381	20	147	62	420	94	815	61	576	67	240	49	230	97	436
ETHANOLAMINES	2672	2055	4064	3540	3334	5144	4961	3701	6595	5132	6488	5706	10435	8562	10023	10652
ETHYL ACETATE	3724	1581	404	343	6721	3371	14929	6555	2344	1202	5008	2732	1405	1102	240	466
MENTHOL	17	134	120	226	97	401	80	329	52	369	159	1051	329	2702	457	3889
ORTHO NITRO TOLUENE	138	66	1002	374	2150	816	239	82	225	75	59	20	19	7	138	92

Table-17: Import of Major Chemicals (Product-Wise) during 2006-07 to 2013-14

PRODUCT	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
Total	868789	232129	1210665	299897	1638930	348150	1547520	328542	1638994	418374	2182271	627474	2486575	757437	2E+06	957269
PESTICIDES & INSECTICIDES																
D.D.T.	0	0	23	29	0	0	0	0	0	0	0	0	0	0	0	0
MALATHION	0	0	0	0	0	0	40	58	52	50	0	0	0	0	0	
PARATHION (METHYL)	1473	1217	623	539	0	0	0	0	0	0	0	0	0	0	0	0
DIMETHOATE	0	0	12	16	344	650	133	225	58	109	152	299	182	422	46	106
D.D.V.P.	0	0	0	0	20	31	20	28	45	66	24	46	0	0	70	99
ENDOSULPHAN	0	0	47	61	0	0	24	46	192	592	0	0	0	0	0	0
CYPERMETHRIN	0	0	147	428	31	527	29	455	17	282	0	4	8	20	4	11
FENTHION	0	3	0	0	0	2	0	0	0	0	0	0	0	0	35	173
OTHER PESTICIDES	1557	3754	975	2463	528	1726	804	2127	651	1495	2340	7815	1263	6928	2255	13747
OTHER INSECTICIDES	7038	23819	3915	13293	12269	78658	11628	114036	17257	142478	18388	156952	17157	173226	19563	194422
COPPER- OXYCHLORIDE	0	0	0	2	22	53	0	0	1	7	0	2	0	1	48	122
2, 4-D	0	0	0	0	4	12	62	72	204	486	0	0	0	78	0	0
ISOPROTURON	0	0	0	0	0	0	0	0	23	64	0	0	0	0	0	0
ALUMINIUM PHOSPHIDE	0	0	183	511	362	3285	153	2102	187	2183	31	561	23	741	8	61
METHYL BROMIDE	769	964	163	238	312	528	296	581	448	955	655	1667	779	2591	460	1652

Table-17: Import of Major Chemicals (Product-Wise) during 2006-07 to 2013-14

PRODUCT	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
Total	10837	29757	6065	17551	13892	85472	13149	119672	19083	148717	21590	167346	19412	184007	22489	210393
DYES & PIGMENTS																
AZO DYES	615	1332	465	1343	583	2101	506	1829	536	2055	769	2556	527	2844	669	3559
ACID DIRECT DYES(OTHER THAN AZO)	648	773	791	925	501	1101	660	958	643	1205	746	1454	678	1643	729	2136
BASIC DYES	990	1815	1064	1779	814	1799	1560	4228	1275	3970	1401	4807	1189	6195	1075	6569
DISPERSE DYES	7421	11000	7215	10076	7205	12543	8013	14823	8378	17490	10534	22582	11118	28720	8788	33194
FAST COLOUR BASES	170	413	219	422	249	591	383	978	367	867	292	801	374	1308	499	2653
OIL SOLUBLE (SOLVENT DYES)	304	960	323	869	494	2657	608	3567	801	4615	1240	6292	1239	7434	1131	7329
WHITENING AGENTS	475	2405	497	2441	378	2264	469	2692	499	3073	392	2755	489	4302	675	4708
ORGANIC PIGMENT	919	2222	428	922	670	968	418	619	111	537	186	817	124	561	178	694
PIGMENT EMULSION	3235	12969	4075	15695	4808	23398	4930	27269	6659	33094	8376	40159	6955	43711	7069	46089
REACTIVE DYES	2313	10379	2267	9473	2081	9235	2181	12069	2118	12646	2151	11667	2935	19312	3352	24425
SULPHUR DYES (SULPHUR BLACK)	5103	2231	7957	3214	2240	1471	2574	2018	1900	1680	2167	1888	2189	3318	1781	2498
VAT DYES	2834	6396	4765	9521	2788	8125	3599	11609	4430	13255	6379	16986	10201	27519	13801	36889
SOLUBILISED VAT DYES	149	518	93	481	90	448	26	220	54	266	193	698	107	483	91	418
FOOD COLOURS	910	3928	493	3278	351	1917	387	2481	623	1825	290	1768	367	2778	391	2978
NAPTHOLS	1081	1857	1076	1948	993	2159	1275	2721	1200	3492	916	2147	1040	3178	1142	4190
OTHER DYES	227	774	616	1259	493	1725	434	1648	344	1737	462	1661	905	2709	291	1927
Total	27394	59972	32344	63646	24738	72502	28023	89729	29938	101807	36494	119038	40437	156015	41662	180256

Table:-18 Net Imports of Major chemicals (Product-wise) 2006-07 to 2013-14

[QTY IN MT & VALUE IN RS. Lakh]

PRODUCT	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
ALKALI CHEMICALS																
SODA ASH	123395	10922	282722	25284	272351	30246	298737	35352	290191	31292	187741	21243	610722	84199	490443	67333
CAUSTIC SODA	119568	18896	111231	16278	95948	12780	234422	29420	-5310	-4935	130434	23834	243267	55411	228562	50462
LIQUID CHLORINE	-12958	-845	-5729	-409	-5207	-561	-7139	-1272	-1350	-345	-4386	-941	-3643	-527	-3974	-577
Total	230005	28973	388224	41153	363092	42465	526020	63500	283531	26012	313789	44136	850346	139083	715031	117218
INORGANIC CHEMICALS																
ALUMINIUM FLUORIDE	-186	-608	3273	775	14831	7049	16013	5853	6921	3234	25086	18007	22489	16676	20884	14812
CALCIUM CARBIDE	48983	11342	55996	14645	70610	25173	50627	16311	55518	18698	55233	20915	56107	23881	63971	26595
CARBON BLACK	-29350	-5758	-16536	-1658	-18366	147	-285920	-49027	-290573	-68730	-153360	-57189	32764	26218	24727	25930
POTASSIUM CHLORATE	-8420	-970	-10871	-1281	-2607	-1178	5653	2930	5788	2778	5456	2504	6677	3650	6316	3906
SODIUM CHLORATE	14061	2919	13919	3405	19016	6479	21787	6600	24755	6633	25008	8200	25036	9370	28076	11560
TITANIUM DIOXIDE	3853	4412	5505	5689	7257	7633	9234	10769	10804	12141	17627	27091	14355	26510	7807	16343
RED PHOSPHORUS	-215	-424	-363	-277	-67	43	-52	-130	67	-24	5	-325	-173	-863	-145	-807
Total	28726	10913	50923	21298	90674	45346	-182658	-6694	-186720	-25270	-24945	19203	157255	105442	151636	98339
ORGNIC CHEMICALS																
ACETIC ACID	109645	26659	121382	30640	272448	64860	376628	77544	457729	93571	544153	143325	640121	168467	657612	194717
ACETIC ANHYDRIDE	-1014	-543	-436	-242	-4131	-2295	-361	-262	-1131	-479	-1119	-517	-1692	-806	-4638	-2485
ACETONE	59687	20722	64756	26161	66414	26172	79580	30904	75431	30850	99437	53547	93279	52787	116084	80787

Table:-18 Net Imports of Major chemicals (Product-wise) 2006-07 to 2013-14

[QTY IN MT & VALUE IN RS. Lakh]

PRODUCT	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
PHENOL	66158	37795	100793	63950	89723	43010	100351	48638	122197	91350	145616	109047	172322	138952	211956	169197
METHANOL	526054	95059	757073	98700	1055602	124934	776346	83515	769862	94752	1079216	178268	1214313	225569	1229419	319509
FORMALDEHYDE	-1787	-294	-5271	-513	-2711	-194	-3282	-324	-3670	-312	-3860	-327	-4699	-744	-5370	-1693
NITROBENZENE	0	19	129	33	-42	-105	-143	-97	-110	-83	-106	-90	-165	-141	-146	-127
CITRIC ACID	24995	7532	30987	9934	34036	14046	39102	13983	42307	17290	50397	23986	54332	25521	62351	30110
MALEIC ANHYDRIDE	9103	4688	23129	12408	32735	17902	27578	14839	37907	24715	34546	25438	36841	35072	36724	39659
PENTA-ERYTHRITOL	3804	2211	4841	3322	5530	3814	10591	5028	12422	6738	13706	10196	13265	11675	14190	14146
ANILINE	8827	5296	16440	9415	17834	11121	18818	9611	22851	13664	14357	9800	15248	14066	31648	34710
CHLORO METHANES	-140	227	1957	670	54	108	209	289	466	382	123	147	111	307	142	291
ISOBUTYL-BENZENE	-2398	-1959	-7314	-5408	-7514	-6843	-10765	-9522	-11459	-9769	-13920	-14712	-13314	-17938	-14130	-21068
ONCB	5210	2506	5010	3528	5091	3783	3124	1823	3170	1454	2013	924	1711	994	-1883	-1839
PNCB	-1654	-1161	-351	-404	-329	-612	1793	494	151	99	-925	-506	-2096	-1442	-1972	-1468
MEK	17581	7421	21884	10115	20364	12655	24445	11213	21328	15102	29792	23833	31189	24761	26777	20806
ACETALDEHYDE	9	266	-108	-104	-182	271	75	795	-23	224	-174	-668	-190	-775	60	318
ETHANOLAMINES	2401	1812	2711	2308	1359	3127	4376	2571	5446	3554	4736	2643	9603	5389	8788	5987
ETHYL ACETATE	-11049	-5196	-32650	-13369	-24032	-10584	-32185	-13843	-94652	-45604	-121593	-62262	-167761	-87286	-189947	-103389
MENTHOL	-7540	-55982	-10663	-63744	-6885	-44392	-11917	-48012	-8222	-83090	-9348	-138723	-11852	-209873	-14531	-162522
ORTHO NITRO TOLUENE	-951	-386	-27	-20	704	256	-337	-137	-396	-166	-268	-123	-935	-657	-582	-586

Table:-18 Net Imports of Major chemicals (Product-wise) 2006-07 to 2013-14

[QTY IN MT & VALUE IN RS. Lakh]

PRODUCT	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
Total	806941	146692	1094272	187380	1556068	261034	1404026	229050	1451604	254242	1866779	363226	2079631	383898	2162552	615060
PESTICIDES & INSECTICIDES																
D.D.T.	-3891	-4303	-2509	-2780	0	0	-42	-133	-32	-95	0	0	0	0	0	0
MALATHION	0	0	0	0	-296	-772	-1000	-1279	-503	-626	-425	-483	-328	-611	-415	-819
PARATHION (METHYL)	905	580	-180	-346	0	0	0	0	0	0	0	0	0	0	0	0
DIMETHOATE	-334	-2370	-456	-624	10	-71	-325	-956	-301	-505	148	290	113	240	-138	-573
D.D.V.P.	-1276	-1699	-1254	-1454	-1001	-2298	-817	-1205	-884	-1222	-1105	-1978	-543	-1179	-277	-785
ENDOSULPHAN	-3175	-5849	-4057	-7360	-1348	-2969	-3892	-9519	-4509	-8761	-1612	-3483	-80	-260	-45	-59
CYPERMETHRIN	-12339	-44722	-12502	-46751	-10497	-53917	-13454	-50397	-10854	-40383	-10570	-52651	-10260	-55087	-11978	-58535
FENTHION	-318	-642	-5	-9	0	2	-23	-16	0	0	0	0	0	0	35	173
OTHER PESTICIDES	-3851	-9743	-7382	-18030	-13792	-39190	-12170	-47592	-21632	-83074	-24943	-75798	-32205	-129486	-46747	-193452
OTHER INSECTICIDES	-25836	-102620	-37263	-126854	-24841	-104885	-30002	-45939	-20668	-7615	-24552	-102877	-24696	-162397	-29429	-179385
COPPER- OXYCHLORIDE	-88	-148	-200	-303	-220	-484	-316	-612	-624	-1396	-434	-1177	-478	-1230	-369	-1033
2, 4-D	-2408	-2618	-739	-766	-3091	-4336	-8339	-8746	-8631	-10527	-13262	-20823	-15365	-27349	-14851	-27924
ISOPROTURON	-1157	-2191	-1009	-1675	-1642	-3542	-1811	-3762	-3328	-6800	-2239	-6588	-4181	-13189	-2114	-7804
ALUMINIUM PHOSPHIDE	-1428	-4913	-1392	-3695	-1230	-1453	-1753	-3986	-1971	-4633	-1938	-6710	-2318	-9017	-845	-3642
METHYL BROMIDE	712	809	129	131	310	516	136	152	434	927	500	1263	675	2218	77	319
Total	-54959	-181302	-68957	-210838	-57840	-214013	-74192	-174972	-74228	-166868	-80915	-272505	-90129	-399004	-108046	-476879

Table:-18 Net Imports of Major chemicals (Product-wise) 2006-07 to 2013-14

[QTY IN MT & VALUE IN RS. Lakh]

PRODUCT	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
DYES & PIGMENTS																
AZO DYES	-24968	-43638	-31972	-52990	-32201	-60945	-40817	-69948	-49164	-86568	-47869	-87246	-53701	-108571	-56723	-168702
ACID DIRECT DYES(OTHER THAN AZO)	-7015	-13761	-6256	-14002	-3389	-8619	-4484	-9708	-3577	-7665	-2518	-6361	-2951	-8127	-4908	-19227
BASIC DYES	-4945	-9795	-3811	-5457	-3541	-5093	-3502	-3150	-4866	-5542	-4254	-4925	-5768	-8620	-6073	-12513
DISPERSE DYES	3816	3736	3014	1075	2470	325	2949	3107	2678	1848	4082	3986	4101	9303	-448	157
FAST COLOUR BASES	-1682	-3319	-1685	-4005	-1867	-5651	-2246	-5413	-2316	-6072	-2523	-6641	-2732	-8041	-2120	-7538
OIL SOLUBLE (SOLVENT DYES)	-2022	-6624	-1701	-5748	-1751	-5683	-2498	-6545	-3244	-9345	-3918	-10923	-3426	-10394	-3834	-15993
WHITENING AGENTS	-12196	-13492	-15012	-13011	-14793	-18851	-18576	-19945	-23126	-22039	-19954	-20186	-22560	-24854	-22726	-32226
ORGANIC PIGMENTS	-198	-225	62	-68	405	199	-141	-380	-185	-111	-144	-566	64	175	165	618
PIGMENT EMULSION	-39222	-94150	-45569	-112971	-44899	-126185	-51748	-132802	-60880	-179336	-57328	-213182	-62964	-251291	-64366	-307279
REACTIVE DYES	-50195	-69603	-62370	-92975	-63304	-94440	-74843	-107643	-66913	-100864	-75162	-125937	-95505	-181102	-106677	-315943
SULPHUR DYES (SULPHUR BLACK)	4422	938	7566	2244	1643	440	1640	1074	386	403	1420	1050	1300	2165	640	923
VAT DYES	924	-9659	2928	-3318	1252	-4035	1693	-1683	2357	-3040	4150	-1782	8247	10703	11846	12502
SOLUBILISED VAT DYES	81	-185	-209	-560	-256	-874	-311	-677	-427	-1043	142	299	60	113	60	-73
FOOD COLOURS	-7220	-14973	-7942	-15219	-9752	-22589	-10968	-24222	-12588	-27590	-18722	-40795	-21419	-48994	-22500	-62445
NAPTHOLS	-141	-1053	-43	-770	326	29	448	255	592	2123	47	513	-202	424	255	1593
OTHER DYES	-4975	-8509	-5080	-10379	-3855	-7305	-5051	-8164	-6647	-11455	-6390	-11700	-7145	-13878	-9267	-21913
Total	-145536	-284312	-168080	-328154	-173512	-359277	-208455	-385844	-227920	-456296	-228941	-524396	-264601	-640989	-286676	-948059

Table-19 Top Five Export Destinations of Selected Chemicals during 2013-14

PRODUCT	COUNTRY	QUANTITY (MT)	VALUE (RS.Lakh)
SODA ASH	BANGLADESH	46960	7431
	INDONESIA	13418	1622
	SRI LANKA	6012	1008
	NEPAL	4065	942
	SAUDI ARABIA	3538	515
	Total	73993	11518
CAUSTIC SODA	TANZANIA R	15334	4296
	KENYA	10437	3063
	NEPAL	7587	2186
	SRI LANKA	7568	2240
	UGANDA	7032	1997
	Total	47958	13781
LIQUID CHLORINE	U ARAB EMT	2117	241
	SRI LANKA	841	150
	KENYA	451	149
	MAURITIUS	169	16
	NEPAL	95	20
	Total	3674	575
ALUMINIUM FLUORIDE	U ARAB EMT	3120	2097
	JAPAN	275	294
	BRAZIL	140	86
	U S A	120	88
	KUWAIT	3	3
	Total	3658	2569
CALCIUM CARBIDE	U ARAB EMT	168	84
	BANGLADESH	63	38
	OMAN	24	12
	JORDAN	13	11
	NEPAL	1	2
	Total	268	148
CARBON BLACK	SRI LANKA	23734	17904
	VIETNAM SO	16851	10937
	KOREA RP	10810	8074
	TURKEY	10686	7185
	JAPAN	10087	7621
	Total	72169	51720
POTASSIUM CHLORATE	PHILIPPINE	290	213
	EGYPT A RP	160	123
	BANGLADESH	140	8
	U S A	71	53
	NEPAL	40	33
	Total	701	429

Table-19 Top Five Export Destinations of Selected Chemicals during 2013-14

PRODUCT	COUNTRY	QUANTITY (MT)	VALUE (RS.Lakh)
SODIUM CHLORATE	NEW ZEALAND	2	1
	AUSTRALIA	2	0
	SOUTH AFRICA	1	0
	THAILAND	1	4
	NEPAL	0	1
	Total	7	6
TITANIUM DIOXIDE	U S A	3128	4160
	ITALY	2060	3014
	IRAN	984	1602
	JAPAN	516	712
	TURKEY	443	643
	Total	7131	10130
RED PHOSPHORUS	U S A	80	241
	INDONESIA	65	248
	BRAZIL	45	165
	HUNGARY	30	111
	SOUTH AFRICA	28	111
	Total	248	877
ACETIC ACID	BANGLADESH	2418	1026
	U ARAB EMT	852	378
	SAUDI ARABIA	570	248
	EGYPT A RP	484	202
	OMAN	372	195
	Total	4697	2050
ACETIC ANHYDRIDE	BELGIUM	5718	2999
	BANGLADESH	341	218
	EGYPT A RP	128	99
	THAILAND	110	67
	ECUADOR	64	49
	Total	6361	3432
ACETONE	IRAN	296	251
	KENYA	162	150
	SRI LANKA	100	80
	TANZANIA R	39	43
	BAHARAIN I	19	14
	Total	617	539
PHENOL	IRAN	1374	1414
	U ARAB EMT	332	303
	NETHERLAND	201	547
	PAKISTAN IR	80	188
	FRANCE	40	425
	Total	2028	2877

Table-19 Top Five Export Destinations of Selected Chemicals during 2013-14

PRODUCT	COUNTRY	QUANTITY (MT)	VALUE (RS.Lakh)
METHANOL	INDONESIA	40575	10576
	THAILAND	15405	4255
	U ARAB EMT	11825	3241
	PHILIPPINE	7573	2180
	SRI LANKA	3027	943
	Total	78404	21195
FORMALDEHYDE	NEPAL	4224	786
	U ARAB EMT	1546	880
	KENYA	125	35
	MYANMAR	102	27
	SRI LANKA	70	29
	Total	6067	1757
NITROBENZENE	PAKISTAN IR	130	113
	THAILAND	10	11
	U S A	3	4
	ITALY	2	2
	NEPAL	1	1
	Total	146	131
CITRIC ACID	U S A	1189	1044
	BELGIUM	176	121
	BANGLADESH	73	70
	SPAIN	50	41
	SRI LANKA	41	53
	Total	1530	1330
MALEIC ANHYDRIDE	GERMANY	20	27
	NEPAL	3	5
	SRI LANKA	3	3
	KENYA	0	0
	PAKISTAN IR	0	0
	Total	26	35
PENTAERYTHRITOL	U S A	526	1064
	NETHERLAND	275	300
	BELGIUM	180	288
	SPAIN	180	193
	COLOMBIA	162	181
	Total	1323	2026
ANILINE	PAKISTAN IR	49	71
	THAILAND	35	55
	IRAN	5	8
	TURKEY	2	3
	TANZANIA R	2	4
	Total	93	142

Table-19 Top Five Export Destinations of Selected Chemicals during 2013-14

PRODUCT	COUNTRY	QUANTITY (MT)	VALUE (RS.Lakh)
CHLORO METHANES	NEPAL	1	1
	CONGO D. R	1	0
	BANGLADESH	0	1
	HONG KONG	0	2
	U K	0	0
	Total	1	5
ISOBUTYLBENZENE	CHINA P RP	7654	11437
	U S A	6500	9646
	SWITZERLAND	2	4
	Total	14156	21087
ONCB	BRAZIL	1242	1202
	GERMANY	961	877
	AUSTRIA	150	140
	SWITZERLAND	92	112
	CHINA P RP	60	58
	Total	2505	2389
PNCB	GERMANY	1825	1342
	JAPAN	210	135
	TAIWAN	148	139
	NETHERLAND	147	107
	U K	25	19
	Total	2355	1742
MEK	PAKISTAN IR	243	39
	SWITZERLAND	125	1940
	IRAN	53	61
	BELGIUM	21	310
	CHINA P RP	17	27
	Total	459	2376
ACETALDEHYDE	SPAIN	15	77
	SAUDI ARABIA	10	32
	CONGO D. R	4	2
	ZAMBIA	2	1
	MYANMAR	1	1
	Total	32	112
ETHANOLAMINES	U S A	458	1928
	U K	115	393
	U ARAB EMT	108	136
	ISRAEL	82	140
	BANGLADESH	76	140
	Total	838	2738
ETHYL ACETATE	BELGIUM	40741	21632
	TURKEY	26101	13502

Table-19 Top Five Export Destinations of Selected Chemicals during 2013-14

PRODUCT	COUNTRY	QUANTITY (MT)	VALUE (RS.Lakh)
	NETHERLAND	22991	11935
	ITALY	19211	9489
	KOREA RP	13166	6855
	Total	122210	63412
MENTHOL	CHINA P RP	11325	119128
	U S A	806	9833
	SINGAPORE	768	8612
	NETHERLAND	391	5726
	INDONESIA	263	4127
	Total	13554	147427
ORTHO NITRO TOLUENE	JAPAN	560	501
	GERMANY	160	177
	Total	720	678
MALATHION	MEXICO	219	424
	SAUDI ARABIA	88	173
	PHILIPPINE	55	105
	SUDAN	17	50
	TRINIDAD	12	24
	Total	391	776
DIMETHOATE	UGANDA	181	677
	NEPAL	2	1
	MALDIVES	1	1
	Total	184	679
D.D.V.P.	ARGENTINA	94	160
	KENYA	39	133
	BRAZIL	38	92
	UGANDA	36	124
	JAPAN	36	69
	Total	244	579
QUINALPHOS	VIETNAM SO	884	3163
	BANGLADESH	39	115
	CHINA P RP	15	41
	TANZANIA R	8	26
	ZAMBIA	2	8
	Total	948	3352
ENDOSULPHAN	PAKISTAN IR	45	59
	Total	45	59
CYPERMETHRIN	NIGERIA	1206	2048
	BRAZIL	1168	7320
	THAILAND	933	5367
	INDONESIA	667	2596
	MEXICO	663	4292
	Total	4638	21622

Table-19 Top Five Export Destinations of Selected Chemicals during 2013-14

PRODUCT	COUNTRY	QUANTITY (MT)	VALUE (RS.Lakh)
OTHER PESTICIDES	BRAZIL	7164	37416
	U S A	5910	29935
	NIGERIA	3322	7576
	CHINA P RP	2246	9876
	NEPAL	1996	3542
	Total	20638	88345
OTHER INSECTICIDES	BRAZIL	18526	101253
	U S A	5971	83109
	BANGLADESH	1961	13477
	INDONESIA	1825	13153
	ISRAEL	1696	6009
	Total	29980	217001
COPPER-OXYCHLORIDE	EGYPT A RP	133	359
	IRAN	54	149
	VIETNAM SO	48	140
	TURKEY	44	130
	LEBANON	26	91
	Total	305	870
2, 4-D	BRAZIL	3960	7504
	THAILAND	3346	6158
	U S A	3154	6159
	ARGENTINA	966	1877
	AUSTRALIA	782	1646
	Total	12207	23344
ALUMINIUM PHOSPHIDE	MEXICO	146	704
	U S A	111	410
	GERMANY	67	212
	BANGLADESH	66	217
	NETHERLAND	61	229
	Total	451	1770
METHYL BROMIDE	LIBYA	144	476
	INDONESIA	96	329
	EGYPT A RP	55	201
	VIETNAM SO	43	154
	MALAYSIA	36	131
	Total	374	1291
AZO DYES	ITALY	10453	39096
	GERMANY	4815	11947
	SPAIN	4235	14150
	SINGAPORE	3949	7844
	BRAZIL	3342	9971
	Total	26794	83008

Table-19 Top Five Export Destinations of Selected Chemicals during 2013-14

PRODUCT	COUNTRY	QUANTITY (MT)	VALUE (RS.Lakh)
ACID DIRECT DYES(OTHER THAN AZO)	ITALY	1087	4113
	TURKEY	534	1745
	SPAIN	497	1817
	TAIWAN	393	1402
	PAKISTAN IR	366	841
	Total	2877	9918
BASIC DYES	PAKISTAN IR	679	1401
	U S A	666	1651
	ITALY	525	1186
	INDONESIA	509	912
	SPAIN	450	800
	Total	2829	5951
DISPERSE DYES	PAKISTAN I	1808	5031
	HONDURAS	951	3135
	INDONESIA	942	3855
	TAIWAN	758	2237
	U S A	516	2124
	Total	4975	16383
FAST COLOUR BASES	GERMANY	466	1581
	CHINA P RP	377	1868
	INDONESIA	293	821
	NETHERLAND	254	1358
	U K	252	821
	Total	1641	6449
OIL SOLUBLE (SOLVENT DYES)	U S A	739	4642
	NETHERLAND	736	1968
	BRAZIL	593	1803
	ITALY	495	2084
	GERMANY	399	2607
	Total	2964	13105
OPTICAL WHITENING AGENTS	FINLAND	5203	2679
	GERMANY	3216	6002
	U S A	2459	4616
	AUSTRALIA	1935	1619
	BRAZIL	1438	3340
	Total	14252	18257
ORGANIC PIGMENT COLOURS	SOUTH AFRICA	5	12
	SAUDI ARABIA	2	15
	THAILAND	2	29
	BANGLADESH	1	6
	UNSPECIFIEDD	1	8
	Total	12	70

Table-19 Top Five Export Destinations of Selected Chemicals during 2013-14

PRODUCT	COUNTRY	QUANTITY (MT)	VALUE (RS.Lakh)
PIGMENT EMULSION	U S A	9754	49056
	NETHERLAND	5069	27479
	JAPAN	4974	22620
	GERMANY	3456	22007
	BELGIUM	3326	17683
	Total	26578	138845
REACTIVE DYES	TURKEY	24769	75602
	BANGLADESH	16694	35897
	PAKISTAN I	7257	19016
	BRAZIL	5990	17959
	INDONESIA	5969	18611
	Total	60680	167085
SULPHUR DYES (SULPHUR BLACK)	BANGLADESH	420	486
	GERMANY	220	194
	U S A	210	341
	KOREA RP	51	75
	TURKEY	32	61
	Total	933	1156
VAT DYES	NIGERIA	235	1222
	BANGLADESH	211	2577
	MAURITANIA	166	1640
	GERMANY	144	2608
	U ARAB EMT	112	460
	Total	867	8506
SOLUBILISED VAT DYES	INDONESIA	20	246
	PAKISTAN IR	2	17
	U S A	2	48
	KENYA	1	11
	BANGLADESH	1	10
	Total	26	332
FOOD COLOURS	U S A	2194	10016
	RUSSIA	1511	2226
	BRAZIL	1461	4866
	INDONESIA	1129	3856
	MEXICO	825	2782
	Total	7119	23745
NAPTHOLS	CHINA P RP	150	416
	CANADA	95	79
	NETHERLAND	94	319
	JAPAN	89	491
	U ARAB EMT	76	112
	Total	504	1416

Table-19 Top Five Export Destinations of Selected Chemicals during 2013-14

PRODUCT	COUNTRY	QUANTITY (MT)	VALUE (RS.Lakh)
OTHER DYES	U S A	1104	2948
	SPAIN	996	2334
	ITALY	738	1994
	TAIWAN	724	1388
	GERMANY	486	897
	Total	4047	9561

Table- 20: Top Five Sources (countries) of Import of Selected Chemicals to India during 2013-14

PRODUCT	COUNTRY	QUANTITY (MT)	VALUE (RS.Lakh)
SODA ASH	KENYA	162392	22098
	BULGARIA	109785	16447
	CHINA P RP	100084	13255
	TURKEY	62355	8442
	ROMANIA	56820	8206
	Total	491436	68447
CAUSTIC SODA	IRAN	78662	17237
	CHINA P RP	55665	14263
	SAUDI ARAB	51767	10933
	KOREA RP	43179	11290
	JAPAN	35625	8763
	Total	264898	62486
LIQUID CHLORINE	CHINA P RP	13	19
	FRANCE	9	21
	KOREA RP	5	67
	Total	27	107
ALUMINIUM FLUORIDE	CHINA P RP	23422	16636
	INDONESIA	1100	733
	CANADA	20	14
	Total	24542	17383
CALCIUM CARBIDE	BHUTAN	20561	8777
	CHINA P RP	33836	13560
	SOUTH AFRI	9220	4156
	ARGENTINA	622	249
	GERMANY	0	0
	Total	64239	26743
CARBON BLACK	CHINA P RP	101266	63511
	KOREA RP	22773	19336
	U S A	5174	10344
	INDONESIA	2386	2157
	NETHERLAND	2192	2951
	Total	133792	98299
POTASSIUM CHLORATE	CHINA P RP	7036	4352
	GERMANY	3	5
	U S A	1	0
	U K	0	0
	Total	7040	4357
SODIUM CHLORATE	CHINA P RP	11191	4363
	FINLAND	5784	2565
	SWEDEN	5470	2330
	CANADA	2974	1242
	FRANCE	2270	890
	Total	7040	4357
TITANIUM DIOXIDE	CHINA P RP	4968	7061
	KOREA RP	2898	5009
	GERMANY	2385	5698

Table- 20: Top Five Sources (countries) of Import of Selected Chemicals to India during 2013-14

PRODUCT	COUNTRY	QUANTITY (MT)	VALUE (RS.Lakh)
	UKRAINE	1600	2039
	CZECH REPU	1318	1998
	Total	13169	21806
RED PHOSPHORUS	CHINA P RP	266	750
	Total	266	750
ACETIC ACID	TAIWAN	179180	52581
	MALAYSIA	146842	43997
	SINGAPORE	141949	42098
	IRAN	53537	14994
	SAUDI ARAB	47543	13873
	Total	569051	167542
ACETIC ANHYDRIDE	U S A	1792	985
	Total	1792	985
ACETONE	TAIWAN	70527	48877
	SAUDI ARAB	15260	10484
	SINGAPORE	11705	8181
	KOREA RP	10182	7366
	SOUTH AFRI	4251	2993
	Total	111926	77900
PHENOL	TAIWAN	50875	33518
	KOREA RP	45701	40793
	U S A	32171	27866
	SINGAPORE	22688	16576
	THAILAND	21534	18940
	Total	172969	137692
METHANOL	IRAN	891838	228364
	SAUDI ARAB	330106	90442
	OMAN	45699	12685
	U ARAB EMT	29415	6203
	BRUNEI	10750	2923
	Total	1307808	340618
	SAUDI ARAB	860	274
	SINGAPORE	56	27
	GERMANY	13	15
	AUSTRALIA	4	2
	U S A	0	0
	Total	933	318
NITROBENZENE	CHINA P RP	0	4
	Total	0	4
CITRIC ACID	CHINA P RP	63765	31272
	CANADA	126	87
	GERMANY	106	146
	SWITZERLAND	50	29
	AUSTRIA	30	43
	Total	0	4

Table- 20: Top Five Sources (countries) of Import of Selected Chemicals to India during 2013-14

PRODUCT	COUNTRY	QUANTITY (MT)	VALUE (RS.Lakh)
MALEIC ANHYDRIDE	TAIWAN	15649	16482
	MALAYSIA	12495	13881
	CHINA P RP	3525	3668
	INDONESIA	2266	2533
	JAPAN	1342	1499
	Total	0	4
PENTAERYTHRITOL	SAUDI ARAB	8560	8912
	CHINA P RP	2150	2279
	RUSSIA	2057	2113
	SWEDEN	1408	1515
	TAIWAN	1149	1044
	Total	15324	15863
ANILINE	U S A	17821	19075
	U K	7320	8146
	CHINA P RP	5029	5745
	PORTUGAL	1351	1630
	KOREA RP	220	258
	Total	31742	34853
CHLORO METHANES	CHINA P RP	64	117
	U K	42	13
	U S A	37	165
	Total	143	296
ISOBUTYLBENZENE	TAIWAN	26	19
	Total	26	19
ONCB	CHINA P RP	295	282
	TAIWAN	153	131
	GERMANY	120	85
	CZECH REPU	104	92
	Total	672	589
PNCB	CHINA P RP	398	295
	Total	398	295
MEK	TAIWAN	16266	13920
	SOUTH AFRI	7467	6367
	JAPAN	2252	1775
	CHINA P RP	1162	944
	U S A	55	113
	Total	27201	23119
ACETALDEHYDE	U K	42	66
	SWITZERLAND	22	71
	JAPAN	20	154
	GERMANY	9	126
	U S A	3	18
	SPAIN	0	0
	Total	97	435
ETHANOLAMINES	SAUDI ARAB	3959	3514
	THAILAND	1927	1758

Table- 20: Top Five Sources (countries) of Import of Selected Chemicals to India during 2013-14

PRODUCT	COUNTRY	QUANTITY (MT)	VALUE (RS.Lakh)
	TAIWAN	1142	1073
	GERMANY	977	942
	MALAYSIA	866	793
	Total	8871	8080
ETHYL ACETATE	CHINA P RP	133	302
	KOREA RP	91	103
	JAPAN	11	39
	SOUTH AFRI	3	4
	U S A	1	6
	Total	240	454
MENTHOL	GERMANY	305	2731
	U S A	110	726
	JAPAN	41	402
	FRANCE	1	15
	CHINA P RP	1	10
	Total	457	3884
ORTHO NITRO TOLUENE	GERMANY	138	92
	Total	138	92
DIMETHOATE	CHINA P RP	46	106
	DENMARK	0	0
	Total	46	106
D.D.V.P.	CHINA P RP	70	99
	Total	70	99
CYPERMETHRIN	U ARAB EMT	4	8
	FRANCE	0	3
	Total	4	11
FENTHION	GERMANY	35	173
	Total	35	173
OTHER PESTICIDES	CHINA P RP	1997	12953
	RUSSIA	155	554
	U S A	67	145
	GERMANY	24	63
	MALAYSIA	11	26
	Total	2255	13742
OTHER INSECTICIDES	CHINA P RP	10812	69206
	SINGAPORE	2659	9935
	U S A	2494	59483
	GERMANY	750	15196
	TAIWAN	563	1431
	Total	17279	155252
COPPER- OXYCHLORIDE	EGYPT A RP	48	122
	Total	48	122
ALUMINIUM PHOSPHIDE	FRANCE	6	57
	CHINA P RP	1	3
	AUSTRALIA	0	0
	SPAIN	0	0

Table- 20: Top Five Sources (countries) of Import of Selected Chemicals to India during 2013-14

PRODUCT	COUNTRY	QUANTITY (MT)	VALUE (RS.Lakh)
	Total	8	61
METHYL BROMIDE	BELGIUM	400	1442
	CHINA P RP	24	64
	SWITZERLAND	19	81
	HONG KONG	17	65
	Total	460	1652
AZO DYES	CHINA P RP	484	1691
	GERMANY	43	215
	SPAIN	43	919
	ITALY	38	233
	THAILAND	36	246
	Total	644	3304
ACID DIRECT DYES(OTHER THAN AZO)	CHINA P RP	574	1248
	ITALY	46	195
	KOREA RP	22	85
	THAILAND	20	169
	MALAYSIA	18	34
	Total	680	1731
BASIC DYES	CHINA P RP	1016	6300
	SPAIN	29	86
	GERMANY	15	92
	CANADA	6	43
	ITALY	3	18
	Total	1069	6540
DISPERSE DYES	CHINA P RP	6178	24487
	INDONESIA	1967	5516
	TAIWAN	193	883
	GERMANY	133	535
	U S A	88	372
	Total	8558	31793
FAST COLOUR BASES	CHINA P RP	480	1801
	HUNGARY	7	253
	U S A	7	310
	NETHERLAND	1	43
	AUSTRALIA	1	147
	Total	496	2553
OIL SOLUBLE (SOLVENT DYES)	CHINA P RP	650	4992
	KOREA RP	372	1170
	TAIWAN	57	452
	JAPAN	22	302
	MALAYSIA	11	49
	Total	1112	6966
OPTICAL WHITENING AGENTS	SWITZERLAND	311	2766
	CHINA P RP	307	1655
	FRANCE	15	91
	KOREA RP	14	19

Table- 20: Top Five Sources (countries) of Import of Selected Chemicals to India during 2013-14

PRODUCT	COUNTRY	QUANTITY (MT)	VALUE (RS.Lakh)
	THAILAND	12	28
	Total	659	4560
ORGANIC PIGMENT COLOURS	CHINA P RP	96	146
	U S A	34	192
	ITALY	32	155
	SPAIN	7	96
	GERMANY	2	35
	Total	172	624
PIGMENT EMULSION	CHINA P RP	3306	16860
	KOREA RP	723	3363
	GERMANY	655	10495
	ITALY	329	1131
	U S A	312	2217
	Total	5325	34066
REACTIVE DYES	THAILAND	1237	9188
	CHINA P RP	1088	9380
	KOREA RP	504	2598
	GERMANY	140	1425
	ISRAEL	96	179
	Total	3064	22771
SULPHUR DYES (SULPHUR BLACK)	CHINA P RP	1507	2057
	SPAIN	262	391
	THAILAND	6	11
	JAPAN	4	13
	BANGLADESH	1	1
	Total	1780	2473
VAT DYES	CHINA P RP	7274	24660
	SINGAPORE	4232	6808
	GERMANY	2240	5051
	U S A	26	156
	AUSTRALIA	8	16
	Total	13781	36692
SOLUBILISED VAT DYES	CHINA P RP	84	338
	ITALY	6	67
	JAPAN	1	12
	U ARAB EMT	0	0
	GERMANY	0	0
	Total	91	418
	Total	98	497
FOOD COLOURS	SPAIN	99	260
	CHINA P RP	49	321
	U K	36	528
	U S A	32	291
	KOREA RP	30	128
	Total	247	1529
NAPTHOLS	CHINA P RP	1133	4079

Table- 20: Top Five Sources (countries) of Import of Selected Chemicals to India during 2013-14

PRODUCT	COUNTRY	QUANTITY (MT)	VALUE (RS.Lakh)
	GERMANY	4	14
	U K	2	35
	ITALY	1	16
	JAPAN	1	33
	Total	1141	4178
OTHER DYES	U S A	108	1128
	GERMANY	58	151
	CHINA P RP	40	136
	MEXICO	20	76
	U K	18	211
	Total	245	1702

Table -21: Exports of Major Petrochemicals (Group-wise) during 2006-07 to 2013-14

GROUP	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
SYNTHETIC FIBRES	322442	229206	395967	265869	350295	252969	404281	283129	576219	492991	733938	717078	775729	777335	906309	1010937
FIBRE INTERMEDIATES	115956	56621	50503	27032	85323	32896	18105	13838	50626	37046	100735	78701	80823	61926	67873	53980
POLYMERS	880698	496360	631491	353626	357445	227052	657572	360065	822208	500436	1163483	815325	1112662	853586	1186893	1076387
SYNTHETIC RUBBER (ELASTOMERS)	15696	11877	14108	9558	15985	13129	15479	11986	14786	14883	22128	25460	11489	15082	13537	20700
SYNTHETIC DETERGENT INTERMEDIATES	127478	66490	129867	70877	90453	74968	94623	61415	133709	93904	74864	87518	50478	50928	32971	35845
PERFORMANCE PLASTICS	6061	6198	9480	7389	8607	7732	9115	9077	14888	16514	12297	16532	18473	25828	25523	38548
OLEFINS	113077	59703	152851	66634	119965	81935	134471	77807	158503	131755	130472	181191	123827	138968	119411	88308
AROMATICS	1252690	591614	1394158	609926	1117732	474224	1104618	511971	1351789	612929	1445312	985016	1590660	1188161	1789251	1365167
OTHER PETRO-BASED CHEMICALS	383466	220312	378622	209221	706900	210626	337681	188029	519450	341580	463404	363114	445395	367747	519613	453156

Note: 1. Product coverage under each group is given at page vii.

2. The data from 2008-09 to 2012-13 is based on ITCHS 2007 and the data for 2013-14 is based on ITCHS 2012

Table -22: Imports of Major Petrochemicals (Group-wise) during 2006-07 to 2013-14

GROUP	[QTY in MT & VAL in Rs. Lakh]															
	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
SYNTHETIC FIBRES	157996	133536	140779	108541	131575	111563	97860	97625	120870	144087	142496	181735	146950	211748	154902	232438
FIBRE INTERMEDIATES	438779	207239	427254	226838	708552	301849	1236826	484547	1598939	777720	1315056	800960	1402774	878497	1925258	1304669
POLYMERS	749830	399641	1152264	604585	1274604	731229	2159886	1188440	2500130	1495239	2435473	1598868	3179593	2254904	3125507	2531450
SYNTHETIC RUBBER (ELASTOMERS)	285988	225193	341630	272896	290430	343409	375884	352710	446242	540793	492633	794847	519670	797499	580510	793254
SYNTHETIC DETERGENT INTERMEDIATES	26494	12732	49051	23543	76357	47343	91334	56129	78859	60774	106852	96832	127493	131685	123826	139467
PERFORMANCE PLASTICS	45595	52186	57105	63346	67300	79422	85273	97455	129621	161762	137056	211030	167897	259963	202282	333599
OLEFINS	16570	10604	18712	8732	23726	10880	34608	16822	117791	53667	19855	13371	34187	29316	26109	21482
AROMATICS	351092	167585	633018	282280	520259	232590	661910	290174	679025	325942	760164	504683	967941	764603	998399	850360
OTHER PETRO-BASED CHEMICALS	1131951	559328	1085598	549898	1148283	581237	1281963	638735	1741961	963606	1689422	1084538	1963555	1355900	2151200	1675301

Note: 1. Product coverage under each group is given at page vii.

2. The data from 2008-09 to 2012-13 is based on ITCHS 2007 and the data for 2013-14 is based on ITCHS 2012

Table -23: Net Imports of Major Petrochemicals (Group-wise) during 2006-07 to 2013-14

GROUP	[QTY in MT & VAL in Rs. Lakh]															
	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
SYNTHETIC FIBRES	-164446	-95670	-255188	-157328	-218720	-141406	-306421	-185504	-455349	-348904	-591442	-535343	-628779	-565587	-751407	-778499
FIBRE INTERMEDIATES	322823	150618	376751	199806	623229	268953	1218721	470709	1548313	740674	1214321	722259	1321951	816571	1857385	1250689
POLYMERS	-130868	-96719	520773	250959	917159	504177	1502314	828375	1677922	994803	1271990	783543	2066931	1401318	1938614	1455063
SYNTHETIC RUBBER (ELASTOMERS)	270292	213316	327522	263338	274445	330280	360405	340724	431456	525910	470505	769387	508181	782417	566973	772554
SYNTHETIC DETERGENT INTERMEDIATES	-100984	-53758	-80816	-47334	-14096	-27625	-3289	-5286	-54850	-33130	31988	9314	77015	80757	90855	103622
PERFORMANCE PLASTICS	39534	45988	47625	55957	58693	71690	76158	88378	114733	145248	124759	194498	149424	234135	176759	295051
OLEFINS	-96507	-49099	-134139	-57902	-96239	-71055	-99863	-60985	-40712	-78088	-110617	-167820	-89640	-109652	-93302	-66826
AROMATICS	-901598	-424029	-761140	-327646	-597473	-241634	-442708	-221797	-672764	-286987	-685148	-480333	-622719	-423558	-790852	-514807
OTHER PETRO-BASED CHEMICALS	748485	339016	706976	340677	441383	370611	944282	450706	1222511	622026	1226018	721424	1518160	988153	1631587	1222145

Note: 1. Product coverage under each group is given at page vii.

2. The data from 2008-09 to 2012-13 is based on ITCIS 2007 and the data for 2013-14 is based on ITCIS 2012

Table -24: Exports of Major Petrochemicals (Product-wise) 2006-07 to 2013-14

PRODUCT	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
SYNTHETIC FIBRES																
ACRYLIC FIBRE	9199	10483	5566	6463	6439	9027	10579	12600	24522	44634	26383	37398	19258	26183	31562	47385
NYLON FILAMENT YARN	1929	3719	2803	4721	2644	4936	2102	4733	2110	4925	1923	5412	1865	5728	2023	7402
NYLON INDUSTRIAL YARN/TYRE CORD	4825	7394	5736	8480	1570	1855	2208	2783	3976	5739	3733	6979	3756	6810	2896	5696
POLYESTER FILAMENT YARN	180565	137578	234018	164962	201807	157533	227292	171651	391220	330277	524093	510458	576224	588908	647732	743769
POLYESTER STAPLE FIBRE	124156	68391	145825	79363	136370	78080	160828	89940	152487	105285	176000	154451	170318	144355	205341	187652
POLYPROPYLENE FILAMENT YARN	1203	1103	1079	1095	571	688	767	1009	1259	1476	1235	1582	2008	2694	1863	2813
POLYPROPYLENE STAPLE FIBRE	565	538	940	785	894	850	505	413	645	655	571	798	2300	2657	14892	16220
TOTAL	322442	229206	395967	265869	350295	252969	404281	283129	576219	492991	733938	717078	775729	777335	906309	1010937
FIBRE INTERMEDIATES																
ACRYLONITRILE	1	6	76	450	2877	1184	1	3	1	2	5598	6048	2103	2747	2	5
CAPROLACTUM	13822	13317	2787	2930	7773	5986	12404	11892	13777	21658	13448	20052	3343	4853	514	902
DIMETHYL TEREPHTHALATE	737	348	299	129	0	0	1	1	5	15	3	11	0	0	1	2
MONO EHYLENE GLYCOL	69177	30432	44306	22393	34570	11194	5577	1710	35959	15116	66483	45720	71796	52515	67032	53008
PURIFIED TEREPHTHALIC ACID	32219	12518	3035	1130	40103	14532	122	232	884	255	15203	6870	3581	1811	324	63
TOTAL	115956	56621	50503	27032	85323	32896	18105	13838	50626	37046	100735	78701	80823	61926	67873	53980

Table -24: Exports of Major Petrochemicals (Product-wise) 2006-07 to 2013-14

PRODUCT	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
POLYMERS																
LOW DENSITY POLYETHYLENE	7188	3899	10937	6885	7536	4466	5739	3363	11919	9167	12670	10470	16892	15296	18231	20262
HIGH DENSITY POLYTHYLENE	263044	146631	134646	75109	101525	58931	21488	12626	133485	81358	239546	159380	159341	123866	113044	103318
POLYESTYRENE	104044	62715	83663	51784	60678	39922	56109	35285	62670	43175	60982	48710	74137	68035	84054	90378
POLYPROPYLENE (INC. CO-POLYMER)	462003	256693	364968	197406	154992	101826	564444	302365	582285	347506	816005	571653	828236	616817	943294	832795
EXPANDABLE POLYESTYRENE	6330	3789	2120	1304	937	540	2719	1455	178	127	377	280	3830	3689	3646	4413
POLY VINYL CHLORIDE	1113	778	4724	2300	1419	850	798	555	10850	5185	3632	2990	1267	1462	1260	2676
DENSITY POLYTHYLENE	32194	19125	26033	16356	26434	18067	2502	2323	14809	10428	23007	16734	21821	18582	13090	12998
PVC COMPOUND	4782	2730	4400	2482	3924	2450	3773	2093	6012	3490	7264	5108	7138	5839	10274	9547
TOTAL	880698	496360	631491	353626	357445	227052	657572	360065	822208	500436	1163483	815325	1112662	853586	1186893	1076387
SYNTHETIC RUBBER (ELASTOMERS)																
STYRENE BUTADIENE RUBBER	8128	5513	8151	4635	7431	5180	7309	4552	7388	5985	7516	9142	7646	8461	7420	7964
POLY BUTADIENE RUBBER	951	751	57	61	1279	511	911	870	1874	1772	185	408	1173	1947	285	416
ETHYL PROPYLENE DIMERS	1977	1877	1817	1533	2339	2198	2074	2262	2577	3258	3063	4830	1182	1916	3266	7012
ETHYL VINYL ACETATE	3434	2460	2574	1963	1350	1320	662	644	1072	986	374	453	804	848	1014	1236
NITRILE BUTADIENE RUBBER	829	739	1376	1238	3180	3637	3430	3088	1404	2286	10778	10059	431	1297	446	1557
BUTYL RUBBER	377	537	133	128	406	283	1093	570	471	596	212	568	253	613	1106	2515
TOTAL	15696	11877	14108	9558	15985	13129	15479	11986	14786	14883	22128	25460	11489	15082	13537	20700

Table -24: Exports of Major Petrochemicals (Product-wise) 2006-07 to 2013-14

PRODUCT	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
SYNTHETIC DETERGENT INTERMEDIATES																
LINEAR ALKYL BENZENE	127449	66452	129549	70361	90199	74552	93920	60415	133368	93397	74555	86732	50068	50134	32493	34657
ETHYLENE OXIDE	29	38	318	516	254	416	703	1000	341	507	309	786	410	794	478	1188
TOTAL	127478	66490	129867	70877	90453	74968	94623	61415	133709	93904	74864	87518	50478	50928	32971	35845
PERFORMANCE PLASTICS																
ABS RESIN	1687	1384	1307	988	1539	959	60	40	5272	4925	807	915	666	780	303	424
NYLON-6	3355	4082	3750	3709	2621	3456	3656	4705	4108	5937	5912	9804	9915	16353	15193	25738
POLYMETHYL METHACRYLATE	984	714	4404	2679	4439	3311	5391	4323	5497	5631	5545	5747	7849	8626	9752	12137
STYRENE ACRYLONITRILE	35	18	19	13	8	6	8	9	11	21	33	66	43	69	275	249
TOTAL	6061	6198	9480	7389	8607	7732	9115	9077	14888	16514	12297	16532	18473	25828	25523	38548
OLEFINS																
BUTADIENE	112839	59471	132948	59324	119951	81927	110897	66190	134087	121198	121393	176675	117626	135098	119410	88301
ETHYLENE	189	153	12897	4615	11	3	14	35	44	31	7	6	1	4	1	7
PROPYLENE	49	79	7006	2695	3	5	23560	11582	24372	10526	9072	4510	6200	3866	0	0
TOTAL	113077	59703	152851	66634	119965	81935	134471	77807	158503	131755	130472	181191	123827	138968	119411	88308
AROMATICS																
BENZENE	441894	184827	323755	134665	409757	148391	399836	173123	567717	225586	501894	279998	652963	445735	635749	437813
MIXED XYLENE	31029	11064	194298	71181	110056	47770	59158	20126	72334	29652	148512	87950	141564	104472	187239	139394

Table -24: Exports of Major Petrochemicals (Product-wise) 2006-07 to 2013-14

PRODUCT	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
ORTHO-XYLENE	234841	108858	133635	55609	104360	46791	181348	78509	341918	160600	187083	121039	210822	163337	229010	172190
TOLUENE	1006	476	1961	788	2026	1171	1993	834	4119	2209	5465	3535	5412	4167	14798	11449
PARAXYLENE	543920	286389	740509	347683	491533	230101	462283	239379	365701	194882	602358	492494	579899	470450	722455	604321
TOTAL	1252690	591614	1394158	609926	1117732	474224	1104618	511971	1351789	612929	1445312	985016	1590660	1188161	1789251	1365167
OTHER PETRO-BASED CHEMICALS																
ETHYLENE DICHLORIDE	18	11	681	1107	531	1109	17	5	0	0	0	3	3200	554	9	5
BUTANOL	1941	1457	1700	1615	2640	2443	3358	2402	5454	4463	3591	4458	4762	5986	2186	3583
OXO ALCOHOL	127	286	510	470	448	663	396	925	339	1415	383	740	812	983	1200	1161
2-ETHYL HEXANOL	0	5	3	124	8	20	110	410	20	530	78	808	47	1001	321	654
VINYL CHLORIDE MONOMER	201	120	2	15	24	14	0	0	26	39	0	0	0	0	1	8
EPICHLORHYDRINE	52	55	3	3	8	8	10	9	8	13	19	24	13	10	4	7
ISO BUTYLENE	20	24	43	38	31	6	100	48	1	1	0	1	0	0	1815	1382
METAXYLENE	16	26	40	17	10862	2255	37	22	109406	71083	92344	61389	41061	32749	4	13
METHYL ISOBUTYL KETONE	119	237	476	260	82	72	3	11	107	91	539	519	5	71	24	53
PIB	1336	831	4262	2389	5215	3502	5169	3168	6167	4020	6623	5529	4285	4739	5896	7554
POLYCARBONATE	2147	2874	1997	2833	963	1860	1433	3556	3368	6650	2355	3671	2509	4332	3050	6195
PROPYLENE OXIDE	20	33	280	379	66	62	0	0	0	4	0	0	0	0	0	0
PROPYLENE GLYCOL	392	286	729	481	894	737	1151	758	1178	971	908	879	2593	1953	818	986
PET	302030	172218	262502	141746	279168	153360	284200	152464	346071	220251	290894	229867	324307	256947	443104	372103
POLYVINYL ACETATE RESIN	2332	1207	3840	1785	4442	2528	3583	1923	6877	4415	10077	8188	14064	11563	15509	13643
UNSATURATED POLYESTER RESIN	5410	3720	12202	8665	14197	11367	9919	6653	9131	7849	9455	9479	10709	12477	10766	14571

Table -24: Exports of Major Petrochemicals (Product-wise) 2006-07 to 2013-14

PRODUCT	[QTY in MT & VAL in Rs. Lakh]															
	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
ETHYL BENZENE	55	58	297	369	551	725	16	24	0	0	3	1	4	4	0	0
CELLULOSE ACETATE BUTYRATE	47	45	2173	1116	17	28	5	39	25	31	10	15	53	78	93	163
CELLULOSE ACETATE SHEET	1769	1111	74	57	137	195	18	42	147	164	17	36	159	166	63	152
CELLULOSE NITRATE SHEET	96	88	45	28	48	81	6	6	112	96	8	14	46	19	3	14
MELAMINE MOULDING POWDER	1006	710	834	571	765	627	377	304	1079	743	1051	914	1160	940	2136	1380
POLYACETAL RESIN	66	58	162	127	311	376	527	517	1252	933	710	703	279	403	367	601
PHTHALIC ANHYDRIDE	62649	33567	71272	37480	41744	20662	19581	9513	18480	10012	24993	17036	12812	11478	23182	20259
STYRENE	210	197	2619	1505	4294	2914	801	520	1810	1207	7521	4847	17327	16323	1732	2058
VINYL ACTATE MONOMER	537	404	3093	1813	332230	630	2413	977	1062	500	2227	1240	1342	822	4036	2592
ISOPROPANOL	870	684	8783	4228	7224	4382	4451	3733	7330	6099	9598	12753	3846	4149	3294	4019
TOTAL	383466	220312	378622	209221	706900	210626	337681	188029	519450	341580	463404	363114	445395	367747	519613	453156

Table - 25 : Imports of Major Petrochemicals (Product-wise) 2006-07 to 2013-14

PRODUCT	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
SYNTHETIC FIBRES																
ACRYLIC FIBRE	11958	12210	9427	9611	14015	15659	14568	16723	23611	33365	20200	27538	29359	42077	32990	53051
NYLON FILAMENT YARN	10144	15650	3974	5674	6023	8712	6624	10886	18138	31224	22907	45227	24067	52783	24295	54650
NYLON INDUSTRIAL YARN/TYRE CORD	14402	21060	7659	11903	2763	3957	10789	14581	12269	18388	9068	16629	11912	21275	7051	13853
POLYESTER FILAMENT YARN	103761	72018	100820	67880	90458	69956	50095	43944	33692	36053	43409	52693	50013	64792	46738	67684
POLYESTER STAPLE FIBRE	14213	9266	16119	10654	16483	11412	14417	10040	31549	23070	44677	36811	29670	27653	42635	41577
POLYPROPYLENE FILAMENT YARN	3197	2977	2500	2516	1711	1704	1214	1283	1489	1827	1899	2396	1598	2673	792	1056
POLYPROPYLENE STAPLE FIBRE	321	355	280	303	122	163	153	168	122	160	336	441	331	495	401	567
TOTAL	157996	133536	140779	108541	131575	111563	97860	97625	120870	144087	142496	181735	146950	211748	154902	232438
FIBRE INTERMEDIATES																
ACRYLONITRILE	83816	59227	81832	61838	81568	57315	64693	42104	72618	73592	77357	77714	81964	83719	100862	111632
CAPROLACTUM	7060	7104	24903	24396	16981	19745	11292	8933	6334	8158	5381	9121	15917	21673	23494	34307
DIMETHYL TEREPHTHALATE	11076	5082	4060	1855	4088	2760	4171	1906	4428	2554	2815	2021	2104	1592	1786	1466
MONO EHYLENE GLYCOL	162603	65133	254734	117025	424427	145042	682182	225455	771189	318756	634589	356418	654831	374593	820724	512134
PURIFIED TEREPHTHALIC ACID	174224	70693	61725	21724	181488	76987	474488	206149	744370	374660	594914	355686	647958	396920	978392	645130

Table - 25 : Imports of Major Petrochemicals (Product-wise) 2006-07 to 2013-14

PRODUCT	[QTY in MT & VAL in Rs. Lakh]															
	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
TOTAL	438779	207239	427254	226838	708552	301849	1236826	484547	1598939	777720	1315056	800960	1402774	878497	1925258	1304669
POLYMERS																
LOW DENSITY POLYETHYLENE	65905	42045	82025	46454	88875	55719	161628	98082	196418	129714	197507	143289	264483	204752	256198	239343
HIGH DENSITY POLYTHYLENE	138792	83131	255190	150540	274868	176619	468120	279273	514445	306105	422712	298381	639062	464130	574967	545521
POLYESTYRENE	20570	11847	21046	12218	14699	11796	18221	17790	29461	26062	29218	30824	35949	45289	37775	49396
POLYPROPYLENE (INC. CO-POLYMER)	129812	76283	211695	122776	285074	162450	425307	256504	425286	285760	398100	317819	497691	427654	479209	472979
EXPANDABLE POLYESTYRENE	2912	2093	8947	6097	4703	3585	5369	3595	7454	5257	5722	4740	4560	4436	3978	4682
POLY VINYL CHLORIDE	223531	87969	355702	143614	338650	152028	629102	270822	671309	329720	851336	443759	1133124	647857	1208529	755732
LINEAR LOW DENSITY POLYTHYLENE	129746	80067	170471	102261	223250	146465	378338	228495	584888	374061	464211	316607	538849	414080	500139	413830
PVC COMPOUND	38562	16206	47188	20625	44485	22567	73801	33879	70869	38560	66667	43449	65875	46706	64712	49967
TOTAL	749830	399641	1152264	604585	1274604	731229	2159886	1188440	2500130	1495239	2435473	1598868	3179593	2254904	3125507	2531450
SYNTHETIC RUBBER (ELASTOMERS)																
STYRENE BUTADIENE RUBBER	100510	69604	112794	80051	98297	96105	144393	103912	190300	186607	212549	329092	206663	292471	239544	287779
POLY BUTADIENE RUBBER	23863	19292	28245	21872	23312	27877	50385	39186	49000	62256	65935	111555	71052	115107	86200	109762
ETHYL PROPYLENE DIMERS	13406	14063	17539	17048	15837	18996	21187	23819	28391	37231	29231	54698	28373	60006	30347	50127
ETHYL VINYL ACETATE	87213	50857	117775	71162	89773	76757	77807	67380	90773	87925	83186	92285	108324	109280	114764	125169
NITRILE BUTADIENE RUBBER	14095	13161	13270	12428	9924	14113	14916	14811	16887	23822	19615	34667	26733	47496	29773	45268

Table - 25 : Imports of Major Petrochemicals (Product-wise) 2006-07 to 2013-14

PRODUCT	[QTY in MT & VAL in Rs. Lakh]															
	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
BUTYL RUBBER	46901	58216	52007	70335	53287	109561	67196	103602	70891	142952	82117	172550	78525	173139	79882	175149
TOTAL	285988	225193	341630	272896	290430	343409	375884	352710	446242	540793	492633	794847	519670	797499	580510	793254
SYNTHETIC DETERGENT INTERMEDIATES																
LINEAR ALKYL BENZENE	26325	12503	48753	23255	76115	46829	91248	55862	78759	60557	106813	96564	127440	131486	123805	139218
ETHYLENE OXIDE	169	229	298	288	242	514	86	267	100	217	39	268	53	199	21	249
TOTAL	26494	12732	49051	23543	76357	47343	91334	56129	78859	60774	106852	96832	127493	131685	123826	139467
PERFORMANCE PLASTICS																
ABS RESIN	12383	10858	13365	11550	21073	19409	30368	26744	46224	50870	45470	53929	56897	72383	63020	86113
NYLON-6	23061	32751	31035	41317	34919	50607	44865	60807	60739	93809	74662	135583	88264	159031	114365	214028
POLYMETHYL METHACRYLATE	5836	5558	6510	6161	5247	6029	7141	7816	17748	12576	12444	17024	16488	21487	18924	25935
STYRENE ACRYLONITRILE	4315	3019	6195	4318	6061	3377	2899	2088	4910	4507	4480	4494	6248	7062	5973	7523
TOTAL	45595	52186	57105	63346	67300	79422	85273	97455	129621	161762	137056	211030	167897	259963	202282	333599
OLEFINS																
BUTADIENE	249	244	4512	1522	3776	1443	15	39	3077	1761	5035	4539	9187	10430	1071	820
ETHYLENE	16243	10203	14079	6982	19881	9163	34549	16505	114550	51549	14667	8223	23784	17219	24791	19461
PROPYLENE	78	157	121	228	69	274	44	278	164	357	153	609	1216	1667	247	1201

Table - 25 : Imports of Major Petrochemicals (Product-wise) 2006-07 to 2013-14

PRODUCT	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
TOTAL	16570	10604	18712	8732	23726	10880	34608	16822	117791	53667	19855	13371	34187	29316	26109	21482
AROMATICS																
BENZENE	6053	2749	20342	9675	51859	15208	123011	46067	48410	22786	43465	23677	50660	32106	5250	3146
MIXED XYLENE	17	50	0	1	1	1	2802	1149	11	21	24	75	169	197	5567	4339
ORTHO-XYLENE	33667	16172	109947	49924	87240	44327	44246	19829	39866	20455	35499	23839	45134	37444	44879	41678
TOLUENE	129118	53632	142896	53918	145719	57228	198906	78644	187442	77449	245391	139206	307145	215447	263759	193333
PARAXYLENE	182237	94982	359833	168762	235440	115826	292945	144485	403296	205231	435785	317886	564833	479409	678944	607864
TOTAL	351092	167585	633018	282280	520259	232590	661910	290174	679025	325942	760164	504683	967941	764603	998399	850360
OTHER PETRO-BASED CHEMICALS																
ETHYLENE DICHLORIDE	216594	39029	184235	31418	210965	30979	191648	35963	284997	65400	263401	46737	359009	53578	439537	98004
BUTANOL	19399	10732	25237	15080	24623	15158	37647	18804	25381	17294	31564	23498	36290	27372	44683	37454
OXO ALCOHOL	996	1085	697	794	669	967	1193	1438	528	1036	842	1842	1329	2102	1698	3182
2-ETHYL HEXANOL	8882	6674	10629	5680	21205	11748	38597	21344	34155	27996	29184	27396	58418	54709	100495	88209
VINYL CHLORIDE MONOMER	121811	41052	114988	40148	120303	43350	154636	62300	385101	163983	302327	147439	296171	145623	303042	167918
EPICHLHYDRINE	6821	7100	11452	9555	13693	10764	16927	10787	19786	19868	19068	19743	19109	18276	22986	22594
ISO BUTYLENE	37540	21387	39350	25490	32713	29472	40105	22883	42939	32730	23351	20485	9260	7938	23254	21809
METAXYLENE	3317	1728	7273	4707	5263	4448	468	304	1541	981	9564	5960	4371	3851	3029	3223
METHYL ISOBUTYL KETONE	11797	7326	14620	8597	14919	10690	16698	10474	16399	12388	19209	17173	17668	20184	18318	21987

Table - 25 : Imports of Major Petrochemicals (Product-wise) 2006-07 to 2013-14

PRODUCT	[QTY in MT & VAL in Rs. Lakh]															
	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
PIB	6190	3948	5490	3771	5113	5323	5238	4294	6091	4825	7536	7281	10754	11817	9456	13554
POLYCARBONATE	48251	62086	47846	54450	41638	52817	54315	62610	105264	140607	116029	162876	122742	175907	123434	183633
PROPYLENE OXIDE	3833	3158	3304	2442	4432	3530	10006	7393	12561	10340	9392	9595	13141	13052	11676	13076
PROPYLENE GLYCOL	16491	10625	18716	11352	26070	18275	29374	17958	35120	24035	35736	29641	40036	34340	43547	40750
PET	65012	31780	30082	15036	62150	32009	25064	13376	60290	37519	35978	27152	79743	60854	106283	90135
POLYVINYL ACETATE RESIN	3090	3013	3089	2889	2147	2639	3481	3969	3623	4983	4254	6302	4388	7094	4246	8824
UNSATURATED POLYESTER RESIN	32757	23574	23423	19819	38920	28801	44833	30742	36633	36032	34237	39319	36013	43468	31157	40025
ETHYL BENZENE	79	70	20	15	63	51	76	53	54	47	75	82	407	360	172	228
CELLULOSE ACETATE BUTYRATE	11	28	7	17	17	52	4	16	110	203	228	450	8	151	0	1
CELLULOSE ACETATE SHEET	313	74	409	115	342	103	375	129	318	123	459	216	692	312	980	569
CELLULOSE NITRATE SHEET	38	273	93	312	22	88	75	137	99	217	81	236	178	248	502	843
MELAMINE MOULDING POWDER	2525	2162	2811	2434	2803	2910	3896	3902	6019	5928	8006	8500	8668	9858	10200	12593
POLYACETAL RESIN	12483	7653	12326	7629	10909	8118	15437	11934	19191	14005	21082	17748	25933	23667	26266	25421
PHTHALIC ANHYDRIDE	14133	7192	31203	16312	37465	19365	28098	13684	61241	31601	38894	25948	44321	36815	54934	48521
STYRENE	405715	223199	413840	230561	395725	207567	453007	236847	458595	252983	520758	348850	591646	492433	572654	602695
VINYL ACTATE MONOMER	40103	17908	53895	26570	50377	25881	76658	30906	85369	34884	124726	67921	127536	69804	147364	87273
ISOPROPANOL	53770	26472	30563	14705	25737	16132	34107	16488	40556	23598	33441	22148	55724	42087	51287	42780
TOTAL	1131951	559328	1085598	549898	1148283	581237	1281963	638735	1741961	963606	1689422	1084538	1963555	1355900	2151200	1675301

Table -26: Net Imports of Major Petrochemicals (Product-wise) 2006-07 to 2013-14

PRODUCT	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
SYNTHETIC FIBRES																
ACRYLIC FIBRE	2759	1727	3861	3148	7576	6632	3989	4123	-911	-11269	-6183	-9860	10101	15894	1428	5666
NYLON FILAMENT YARN	8215	11931	1171	953	3379	3776	4522	6153	16028	26299	20984	39815	22202	47055	22272	47248
NYLON INDUSTRIAL YARN/TYRE CORD	9577	13666	1923	3423	1193	2102	8581	11798	8293	12649	5335	9650	8156	14465	4155	8157
POLYESTER FILAMENT YARN	-76804	-65560	-133198	-97082	-111349	-87577	-177197	-127707	-357528	-294224	-480684	-457765	-526211	-524116	-600994	-676085
POLYESTER STAPLE FIBRE	-109943	-59125	-129706	-68709	-119887	-66668	-146411	-79900	-120938	-82215	-131323	-117640	-140648	-116702	-162706	-146075
POLYPROPYLENE FILAMENT YARN	1994	1874	1421	1421	1140	1016	447	274	230	351	664	814	-410	-21	-1071	-1757
POLYPROPYLENE STAPLE FIBRE	-244	-183	-660	-482	-772	-687	-352	-245	-523	-495	-235	-357	-1969	-2162	-14491	-15653
TOTAL	-164446	-95670	-255188	-157328	-218720	-141406	-306421	-185504	-455349	-348904	-591442	-535343	-628779	-565587	-751407	-778499
FIBRE INTERMEDIATES																
ACRYLONITRILE	83815	59221	81756	61388	78691	56131	64692	42101	72617	73590	71759	71666	79861	80972	100860	111627
CAPROLACTUM	-6762	-6213	22116	21466	9208	13759	-1112	-2959	-7443	-13500	-8067	-10931	12574	16820	22980	33405
DIMETHYL TEREPHTHALATE	10339	4734	3761	1726	4088	2760	4170	1905	4423	2539	2812	2010	2104	1592	1785	1464
MONO EHYLENE GLYCOL	93426	34701	210428	94632	389857	133848	676605	223745	735230	303640	568106	310698	583035	322078	753692	459126
PURIFIED TEREPHTHALIC ACID	142005	58175	58690	20594	141385	62455	474366	205917	743486	374405	579711	348816	644377	395109	978068	645067
TOTAL	322823	150618	376751	199806	623229	268953	1218721	470709	1548313	740674	1214321	722259	1321951	816571	1857385	1250689

Table -26: Net Imports of Major Petrochemicals (Product-wise) 2006-07 to 2013-14

PRODUCT	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
POLYMERS																
LOW DENSITY POLYETHYLENE	58717	38146	71088	39569	81339	51253	155889	94719	184499	120547	184837	132819	247591	189456	237967	219081
HIGH DENSITY POLYTHYLENE	-124252	-63500	120544	75431	173343	117688	446632	266647	380960	224747	183166	139001	479721	340264	461923	442203
POLYESTYRENE	-83474	-50868	-62617	-39566	-45979	-28126	-37888	-17495	-33209	-17113	-31764	-17886	-38188	-22746	-46279	-40982
POLYPROPYLENE (INC. CO-POLYMER)	-332191	-180410	-153273	-74630	130082	60624	-139137	-45861	-156999	-61746	-417905	-253834	-330545	-189163	-464085	-359816
EXPANDABLE POLYESTYRENE	-3418	-1696	6827	4793	3766	3045	2650	2140	7276	5130	5345	4460	730	747	332	269
POLY VINYL CHLORIDE	222418	87191	350978	141314	337231	151178	628304	270267	660459	324535	847704	440769	1131857	646395	1207269	753056
LINEAR LOW DENSITY POLYTHYLENE	97552	60942	144438	85905	196816	128398	375836	226172	570079	363633	441204	299873	517028	395498	487049	400832
PVC COMPOUND	33780	13476	42788	18143	40561	20117	70028	31786	64857	35070	59403	38341	58737	40867	54438	40420
TOTAL	-130868	-96719	520773	250959	917159	504177	1502314	828375	1677922	994803	1271990	783543	2066931	1401318	1938614	1455063
SYNTHETIC RUBBER (ELASTOMERS)																
STYRENE BUTADIENE RUBBER	92382	64091	104643	75416	90866	90925	137084	99360	182912	180622	205033	319950	199017	284010	232124	279815
POLY BUTADIENE RUBBER	22912	18541	28188	21811	22033	27366	49474	38316	47126	60484	65750	111147	69879	113160	85915	109346
ETHYL PROPYLENE DIMERS	11429	12186	15722	15515	13498	16798	19113	21557	25814	33973	26168	49868	27191	58090	27081	43115
ETHYL VINYL ACETATE	83779	48397	115201	69199	88423	75437	77145	66736	89701	86939	82812	91832	107520	108432	113750	123933
NITRILE BUTADIENE RUBBER	13266	12422	11894	11190	6744	10476	11486	11723	15483	21536	8837	24608	26302	46199	29327	43711

Table -26: Net Imports of Major Petrochemicals (Product-wise) 2006-07 to 2013-14

PRODUCT	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
BUTYL RUBBER	46524	57679	51874	70207	52881	109278	66103	103032	70420	142356	81905	171982	78272	172526	78776	172634
TOTAL	270292	213316	327522	263338	274445	330280	360405	340724	431456	525910	470505	769387	508181	782417	566973	772554
SYNTHETIC DETERGENT INTERMEDIATES																
LINEAR ALKYL BENZENE	-101124	-53949	-80796	-47106	-14084	-27723	-2672	-4553	-54609	-32840	32258	9832	77372	81352	91312	104561
ETHYLENE OXIDE	140	191	-20	-228	-12	98	-617	-733	-241	-290	-270	-518	-357	-595	-457	-939
TOTAL	-100984	-53758	-80816	-47334	-14096	-27625	-3289	-5286	-54850	-33130	31988	9314	77015	80757	90855	103622
PERFORMANCE PLASTICS																
ABS RESIN	10696	9474	12058	10562	19534	18450	30308	26704	40952	45945	44663	53014	56231	71603	62717	85689
NYLON-6	19706	28669	27285	37608	32298	47151	41209	56102	56631	87872	68750	125779	78349	142678	99172	188290
POLYMETHYL METHACRYLATE	4852	4844	2106	3482	808	2718	1750	3493	12251	6945	6899	11277	8639	12861	9172	13798
STYRENE ACRYLONITRILE	4280	3001	6176	4305	6053	3371	2891	2079	4899	4486	4447	4428	6205	6993	5698	7274
TOTAL	39534	45988	47625	55957	58693	71690	76158	88378	114733	145248	124759	194498	149424	234135	176759	295051
OLEFINS																
BUTADIENE	-112590	-59227	-128436	-57802	-116175	-80484	-110882	-66151	-131010	-119437	-116358	-172136	-108439	-124668	-118339	-87481
ETHYLENE	16054	10050	1182	2367	19870	9160	34535	16470	114506	51518	14660	8217	23783	17215	24790	19454
PROPYLENE	29	78	-6885	-2467	66	269	-23516	-11304	-24208	-10169	-8919	-3901	-4984	-2199	247	1201

Table -26: Net Imports of Major Petrochemicals (Product-wise) 2006-07 to 2013-14

PRODUCT	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
TOTAL	-96507	-49099	-134139	-57902	-96239	-71055	-99863	-60985	-40712	-78088	-110617	-167820	-89640	-109652	-93302	-66826
AROMATICS																
BENZENE	-435841	-182078	-303413	-124990	-357898	-133183	-276825	-127056	-519307	-202800	-458429	-256321	-602303	-413629	-630499	-434667
MIXED XYLENE	-31012	-11014	-194298	-71180	-110055	-47769	-56356	-18977	-72323	-29631	-148488	-87875	-141395	-104275	-181672	-135055
ORTHO-XYLENE	-201174	-92686	-23688	-5685	-17120	-2464	-137102	-58680	-302052	-140145	-151584	-97200	-165688	-125893	-184131	-130512
TOLUENE	128112	53156	140935	53130	143693	56057	196913	77810	183323	75240	239926	135671	301733	211280	248961	181884
PARAXYLENE	-361683	-191407	-380676	-178921	-256093	-114275	-169338	-94894	37595	10349	-166573	-174608	-15066	8959	-43511	3543
TOTAL	-901598	-424029	-761140	-327646	-597473	-241634	-442708	-221797	-672764	-286987	-685148	-480333	-622719	-423558	-790852	-514807
OTHER PETRO-BASED CHEMICALS																
ETHYLENE DICHLORIDE	216576	39018	183554	30311	210434	29870	191631	35958	284997	65400	263401	46734	355809	53024	439528	97999
BUTANOL	17458	9275	23537	13465	21983	12715	34289	16402	19927	12831	27973	19040	31528	21386	42497	33871
OXO ALCOHOL	869	799	187	324	221	304	797	513	189	-379	459	1102	517	1119	498	2021
2-ETHYL HEXANOL	8882	6669	10626	5556	21197	11728	38487	20934	34135	27466	29106	26588	58371	53708	100174	87555
VINYL CHLORIDE MONOMER	121610	40932	114986	40133	120279	43336	154636	62300	385075	163944	302327	147439	296171	145623	303041	167910
EPICHLHYDRINE	6769	7045	11449	9552	13685	10756	16917	10778	19778	19855	19049	19719	19096	18266	22982	22587
ISO BUTYLENE	37520	21363	39307	25452	32682	29466	40005	22835	42938	32729	23351	20484	9260	7938	21439	20427
METAXYLENE	3301	1702	7233	4690	-5599	2193	431	282	-107865	-70102	-82780	-55429	-36690	-28898	3025	3210

Table -26: Net Imports of Major Petrochemicals (Product-wise) 2006-07 to 2013-14

PRODUCT	[QTY in MT & VAL in Rs. Lakh]															
	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
METHYL ISOBUTYL KETONE	11678	7089	14144	8337	14837	10618	16695	10463	16292	12297	18670	16654	17663	20113	18294	21934
PIB	4854	3117	1228	1382	-102	1821	69	1126	-76	805	913	1752	6469	7078	3560	6000
POLYCARBONATE	46104	59212	45849	51617	40675	50957	52882	59054	101896	133957	113674	159205	120233	171575	120384	177438
PROPYLENE OXIDE	3813	3125	3024	2063	4366	3468	10006	7393	12561	10336	9392	9595	13141	13052	11676	13076
PROPYLENE GLYCOL	16099	10339	17987	10871	25176	17538	28223	17200	33942	23064	34828	28762	37443	32387	42729	39764
PET	-237018	-140438	-232420	-126710	-217018	-121351	-259136	-139088	-285781	-182732	-254916	-202715	-244564	-196093	-336821	-281968
POLYVINYL ACETATE RESIN	758	1806	-751	1104	-2295	111	-102	2046	-3254	568	-5823	-1886	-9676	-4469	-11263	-4819
UNSATURATED POLYESTER RESIN	27347	19854	11221	11154	24723	17434	34914	24089	27502	28183	24782	29840	25304	30991	20391	25454
ETHYL BENZENE	24	12	-277	-354	-488	-674	60	29	54	47	72	81	403	356	172	228
CELLULOSE ACETATE BUTYRATE	-36	-17	-2166	-1099	0	24	-1	-23	85	172	218	435	-45	73	-93	-162
CELLULOSE ACETATE SHEET	-1456	-1037	335	58	205	-92	357	87	171	-41	442	180	533	146	917	417
CELLULOSE NITRATE SHEET	-58	185	48	284	-26	7	69	131	-13	121	73	222	132	229	499	829
MELAMINE MOULDING POWDER	1519	1452	1977	1863	2038	2283	3519	3598	4940	5185	6955	7586	7508	8918	8064	11213
POLYACETAL RESIN	12417	7595	12164	7502	10598	7742	14910	11417	17939	13072	20372	17045	25654	23264	25899	24820
PHTHALIC ANHYDRIDE	-48516	-26375	-40069	-21168	-4279	-1297	8517	4171	42761	21589	13901	8912	31509	25337	31752	28262
STYRENE	405505	223002	411221	229056	391431	204653	452206	236327	456785	251776	513237	344003	574319	476110	570922	600637
VINYL ACTATE MONOMER	39566	17504	50802	24757	-281853	25251	74245	29929	84307	34384	122499	66681	126194	68982	143328	84681
ISOPROPANOL	52900	25788	21780	10477	18513	11750	29656	12755	33226	17499	23843	9395	51878	37938	47993	38761
TOTAL	748485	339016	706976	340677	441383	370611	944282	450706	1222511	622026	1226018	721424	1518160	988153	1631587	1222145

Table-27 Top Five Export Destinations of Selected Petrochemicals during 2013-14

PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakh)
ACRYLIC FIBRE	IRAN	8112	12747
	CHINA P RP	5201	7263
	KENYA	5098	4383
	ETHIOPIA	3120	3491
	BANGLADESH	1294	1890
	Product Total	22824	29775
NYLON FILAMENT YARN	U S A	239	1101
	SPAIN	225	709
	SRI LANKA	201	740
	MOROCCO	132	466
	BRAZIL	126	489
	Product Total	924	3506
NYLON INDUSTRIAL YARN/TYRE CORD	THAILAND	1183	2527
	U ARAB EMT	1121	2179
	U S A	154	250
	NEPAL	140	167
	BANGLADESH	102	143
	Product Total	2701	5267
POLYESTER FILAMENT YARN	TURKEY	168902	194352
	BRAZIL	149435	158875
	EGYPT A RP	44764	43741
	BANGLADESH	21870	29034
	KOREA RP	18805	20270
	Product Total	403776	446273
POLYESTER STAPLE FIBRE	U S A	32005	30548
	GERMANY	18300	18080
	BANGLADESH	17657	15190
	BELGIUM	15935	13995
	NEPAL	15821	16014
	Product Total	99718	93826
POLYPROPYLENE FILAMENT YARN	U ARAB EMT	214	304
	BANGLADESH	201	277
	U S A	190	288
	ETHIOPIA	160	246
	KENYA	107	152
	Product Total	872	1267
POLYPROPYLENE STAPLE FIBRE	U S A	13394	14362
	NEPAL	907	1074
	AUSTRALIA	339	450
	U ARAB EMT	127	181
	BRAZIL	106	130
	Product Total	14873	16197
ACRYLONITRILE	NEPAL	2	3
	CHINA P RP	0	1
	Product Total	2	5

Table-27 Top Five Export Destinations of Selected Petrochemicals during 2013-14

PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakh)
CAPROLACTUM	IRAN	514	900
	U S A	0	2
	Product Total	514	902
DIMETHYL TEREPHTHALATE	KAZAKHSTAN	1	2
	Product Total	1	2
MONO EHYLENE GLYCOL	U S A	20284	16379
	QATAR	9100	7129
	MEXICO	7172	6014
	U K	5764	4607
	ARGENTINA	5236	4224
	Product Total	47556	38353
PURIFIED TEREPHTHALIC ACID	CHINA P RP	291	53
	TURKEY	32	9
	SRI LANKA	1	1
	NEPAL	0	0
	IRAQ	0	0
	Product Total	324	63
LOW DENSITY POLYETHYLENE	TURKEY	3632	4295
	IRAN	1789	2160
	EGYPT A RP	1550	1697
	NEPAL	1246	744
	PORTUGAL	877	1061
	Product Total	9094	9957
HIGH DENSITY POLYTHYLENE	CHINA P RP	43825	39476
	PAKISTAN IR	21053	18438
	NEPAL	6770	4954
	VIETNAM SO	6413	5749
	TURKEY	4397	3838
	Product Total	82459	72455
POLYESTYRENE	EGYPT A RP	20341	22407
	ITALY	8581	10101
	TURKEY	4682	5285
	U ARAB EMT	4013	3928
	NIGERIA	3796	3498
	Product Total	41413	45218
POLYPROPYLENE (INC. CO-POLYMER)	CHINA P RP	278968	247588
	TURKEY	81611	73217
	PAKISTAN IR	75183	67703
	VIETNAM SO	70533	62901
	UNSPECIFIE	54024	43305
	Product Total	560319	494715
EXPANDABLE POLYESTYRENE	INDONESIA	1252	1549
	HONG KONG	444	539
	IRAN	324	416
	U ARAB EMT	204	250

Table-27 Top Five Export Destinations of Selected Petrochemicals during 2013-14

PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakh)
	PAKISTAN IR	162	205
	Product Total	2386	2958
POLY VINYL CHLORIDE	TURKEY	353	1416
	U S A	249	536
	NEPAL	202	185
	SOUTH AFRI	105	122
	GERMANY	58	41
	Product Total	967	2300
LINEAR LOW DENSITY POLYTHYLENE	NEPAL	4130	3739
	PAKISTAN IR	1976	1861
	BANGLADESH	1632	1479
	UGANDA	680	721
	RUSSIA	653	651
	Product Total	9071	8451
PVC COMPOUND	ETHIOPIA	1957	1937
	TANZANIA R	1431	1133
	SRI LANKA	1386	1438
	THAILAND	1070	722
	NIGERIA	989	792
	Product Total	6832	6021
STYRENE BUTADIENE RUBBER	THAILAND	898	972
	CHINA P RP	723	635
	U ARAB EMT	702	535
	LATVIA	669	663
	BANGLADESH	578	836
	Product Total	3570	3641
POLY BUTADIENE RUBBER	SRI LANKA	110	134
	PAKISTAN IR	79	103
	BELGIUM	34	39
	BANGLADESH	31	8
	IRAN	18	28
	Product Total	272	312
ETHYL PROPYLENE DIMERS	U S A	1360	1589
	TURKEY	1002	3920
	U ARAB EMT	428	673
	SOUTH AFRI	219	330
	U K	54	104
	Product Total	3063	6617
ETHYL VINYL ACETATE	IRAN	558	659
	SAUDI ARAB	127	103
	THAILAND	109	139
	BANGLADESH	81	76
	COLOMBIA	26	32
	Product Total	900	1009

Table-27 Top Five Export Destinations of Selected Petrochemicals during 2013-14

PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakh)
NITRILE BUTADIENE RUBBER	U S A	174	541
	JAPAN	82	420
	GERMANY	36	69
	INDONESIA	33	153
	MALAYSIA	30	62
	Product Total	354	1245
BUTYL RUBBER	BANGLADESH	751	1758
	CHINA P RP	164	351
	SRI LANKA	139	340
	PAKISTAN IR	24	34
	CAMEROON	20	9
	Product Total	1098	2493
LINEAR ALKYL BENZENE	PAKISTAN IR	9772	10500
	TANZANIA R	5209	5615
	OMAN	4820	4993
	INDONESIA	3300	3631
	U ARAB EMT	3127	3259
	Product Total	26228	27998
ETHYLENE OXIDE	SPAIN	266	809
	MALAYSIA	154	205
	THAILAND	17	52
	VIETNAM SO	14	60
	PAKISTAN IR	14	28
	Product Total	463	1154
ABS RESIN	CHINA P RP	91	138
	TURKEY	75	54
	MYANMAR	58	96
	RUSSIA	20	20
	MALAYSIA	15	4
	Product Total	259	312
NYLON-6	JAPAN	2788	4475
	HONG KONG	2336	3750
	KOREA RP	1538	1944
	U S A	898	1540
	CHINA P RP	895	1666
	Product Total	8455	13375
POLYMETHYL METHACRYLATE	NIGERIA	2306	1862
	NEPAL	716	674
	TANZANIA R	549	438
	KUWAIT	515	398
	MAURITIUS	505	393
	Product Total	4591	3765
STYRENE ACRYLONITRILE	TANZANIA R	100	72
	EGYPT A RP	58	39
	SOUTH AFRI	40	31

Table-27 Top Five Export Destinations of Selected Petrochemicals during 2013-14

PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakh)
	PHILIPPINE	20	16
	MOZAMBIQUE	18	21
	Product Total	236	179
BUTADIENE	MALAYSIA	32025	24687
	KOREA RP	30404	20573
	THAILAND	16275	14166
	CHINA P RP	14830	9834
	TAIWAN	11740	9002
	Product Total	105274	78262
ETHYLENE	BANGLADESH	1	6
	ALGERIA	0	0
	GERMANY	0	1
	Product Total	1	7
PROPYLENE	CZECH REPU	0	0
	Product Total	0	0
BENZENE	U S A	193638	102906
	SAUDI ARAB	162270	124545
	BELGIUM	75601	55895
	SPAIN	66900	49932
	SINGAPORE	44100	33479
	Product Total	542509	366756
MIXED XYLENE	U ARAB EMT	114790	85448
	KOREA RP	51535	37386
	KOREA DP R	20905	16552
	TANZANIA R	7	5
	NEPAL	1	2
	Product Total	187238	139393
ORTHO-XYLENE	CHINA P RP	196300	145389
	INDONESIA	16800	13599
	PAKISTAN IR	15750	13023
	MALAYSIA	142	152
	BANGLADESH	5	9
	Product Total	228997	172172
TOLUENE	SINGAPORE	5713	4561
	U ARAB EMT	5653	4065
	KENYA	1074	871
	PAKISTAN IR	1016	719
	SRI LANKA	454	360
	Product Total	13911	10577
PARAXYLENE	MALAYSIA	352780	273306
	INDONESIA	217875	206128
	PAKISTAN IR	96600	81989
	CHINA P RP	19950	17614
	SRI LANKA	15000	10901

Table-27 Top Five Export Destinations of Selected Petrochemicals during 2013-14

PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakh)
	Product Total	702205	589939
ETHYLENE DICHLORIDE	THAILAND	9	5
	NEPAL	0	0
	BANGLADESH	0	0
	U S A	0	0
	Product Total	9	5
BUTANOL	SINGAPORE	1037	935
	U S A	454	923
	BELGIUM	232	646
	KOREA RP	152	402
	CHINA P RP	114	323
	Product Total	1989	3228
OXO ALCOHOL	U S A	341	326
	NETHERLAND	245	238
	CHINA P RP	234	106
	BRAZIL	121	204
	TURKEY	84	94
	Product Total	1024	968
2-ETHYL HEXANOL	U ARAB EMT	140	131
	NEPAL	103	98
	BANGLADESH	49	47
	BRAZIL	23	33
	SAUDI ARAB	5	91
	Product Total	320	401
VINYL CHLORIDE MONOMER	NEPAL	1	8
	Product Total	1	8
EPICHLHYDRINE	BANGLADESH	4	7
	Product Total	4	7
ISO BUTYLENE	BANGLADESH	0	1
	INDONESIA	1040	791
	THAILAND	775	589
	Product Total	1815	1382
METAXYLENE	BELGIUM	2	7
	PAKISTAN IR	2	5
	NEPAL	0	0
	SAUDI ARAB	0	0
	Product Total	4	13
METHYL ISOBUTYL KETONE	NEPAL	14	7
	GERMANY	6	38
	BANGLADESH	4	7
	TANZANIA R	0	0
	KENYA	0	0
	Product Total	24	52
PIB	SINGAPORE	2791	3255

Table-27 Top Five Export Destinations of Selected Petrochemicals during 2013-14

PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakh)
	INDONESIA	1597	2018
	SAUDI ARAB	317	542
	U ARAB EMT	193	280
	SRI LANKA	157	190
	Product Total	5054	6285
POLYCARBONATE	ITALY	1431	3002
	NETHERLAND	460	972
	HONG KONG	317	694
	ARGENTINA	192	256
	GERMANY	179	334
	Product Total	2579	5258
PROPYLENE OXIDE	U ARAB EMT	0	0
	Product Total	0	0
PROPYLENE GLYCOL	U ARAB EMT	302	290
	TANZANIA R	118	131
	SINGAPORE	94	88
	ETHIOPIA	77	109
	SRI LANKA	51	59
	Product Total	642	678
PET	U S A	50217	42198
	ITALY	42789	36145
	U ARAB EMT	37910	32854
	BANGLADESH	26297	21916
	TURKEY	19039	15816
	Product Total	176252	148929
POLYVINYL ACETATE RESIN	U S A	4094	5070
	NIGERIA	1678	835
	EGYPT A RP	901	532
	BELGIUM	854	987
	SRI LANKA	809	533
	Product Total	8336	7958
UNSATURATED POLYSTER RESIN	SPAIN	2037	2373
	CHINA P RP	857	836
	SINGAPORE	846	1277
	NIGERIA	663	630
	AUSTRALIA	605	795
	Product Total	5008	5911
CELLULOSE ACETATE BUTYRATE	SOUTH AFRI	30	43
	JORDAN	26	49
	IRAN	22	29
	HONG KONG	10	28
	ALGERIA	3	4
	Product Total	91	153
CELLULOSE ACETATE SHEET	THAILAND	41	125
	ITALY	20	21

Table-27 Top Five Export Destinations of Selected Petrochemicals during 2013-14

PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakh)
	NEPAL	2	4
	GERMANY	0	0
	U S A	0	2
	Product Total	63	152
CELLULOSE NITRATE SHEET	U S A	2	5
	NEPAL	1	5
	SRI LANKA	1	4
	FRANCE	0	0
	Product Total	3	14
MELAMINE MOULDING POWDER	NEPAL	1333	234
	CHINA P RP	192	264
	TURKEY	126	184
	MEXICO	107	197
	PAKISTAN IR	101	75
	Product Total	1859	954
POLYACETAL RESIN	BANGLADESH	83	114
	IRAN	43	55
	SOUTH AFRI	36	36
	HONG KONG	36	46
	CHINA P RP	21	56
	Product Total	219	308
PHTHALIC ANHYDRIDE	SAUDI ARAB	14705	12722
	U ARAB EMT	3991	3439
	EGYPT A RP	1302	1160
	KENYA	777	709
	U S A	668	587
	Product Total	21443	18618
STYRENE	U ARAB EMT	606	800
	SAUDI ARAB	460	435
	NETHERLAND	250	272
	UNSPECIFIE	100	118
	SINGAPORE	100	97
	Product Total	1516	1722
VINYL ACTATE MONOMER	EGYPT A RP	979	634
	BANGLADESH	876	581
	U ARAB EMT	799	409
	IRAN	648	411
	SRI LANKA	204	140
	Product Total	3506	2176
ISOPROPANOL	EGYPT A RP	554	517
	IRAN	471	452
	U ARAB EMT	420	392
	BELGIUM	371	1126
	SAUDI ARAB	295	264
	Product Total	2111	2751

Table-28 :Top Five Sources (countries) of Import of Selected Petrochemicals to India during 2013-14

PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakh)
ACRYLIC FIBRE	THAILAND	11274	16488
	GERMANY	10267	15619
	EGYPT A RP	5056	7996
	JAPAN	2713	6057
	BELARUS	2185	3726
	Product Total	31495	49886
NYLON FILAMENT YARN	TAIWAN	6798	14406
	VIETNAM SO	5704	12787
	MALAYSIA	4401	8865
	CHINA P RP	2591	6129
	INDONESIA	965	2645
	Product Total	20458	44832
NYLON INDUSTRIAL YARN/TYRE CORD	Product Total	7051	13853
	CHINA P RP	4666	9048
	TAIWAN	1111	2257
	BELARUS	486	1039
	INDONESIA	407	734
	Product Total	13721	26931
POLYESTER FILAMENT YARN	CHINA P RP	16571	23847
	MALAYSIA	7965	8936
	KOREA RP	7450	10682
	INDONESIA	5171	6678
	TAIWAN	3191	5096
	Product Total	40348	55238
POLYESTER STAPLE FIBRE	CHINA P RP	29880	26540
	KOREA RP	4028	4759
	TAIWAN	2774	3318
	THAILAND	2215	2104
	MALAYSIA	2156	2138
	Product Total	41052	38859
POLYPROPYLENE FILAMENT YARN	SAUDI ARAB	311	71
	CHINA P RP	234	422
	TURKEY	113	172
	BELGIUM	83	162
	U ARAB EMT	15	25
	Product Total	756	853
POLYPROPYLENE STAPLE FIBRE	CHINA P RP	313	388
	AUSTRIA	44	77
	KOREA RP	30	54
	U S A	10	31
	SRI LANKA	3	10
	Product Total	399	560
ACRYLONITRILE	U S A	39981	44778
	BRAZIL	10298	10669

Table-28 :Top Five Sources (countries) of Import of Selected Petrochemicals to India during 2013-14

PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakh)
	BELARUS	8140	9321
	BELGIUM	8033	8967
	U K	6812	7740
	Product Total	73264	81475
CAPROLACTUM	RUSSIA	8929	13624
	NETHERLAND	7200	10292
	POLAND	5774	8172
	BELGIUM	1009	1331
	U S A	500	720
	Product Total	23412	34139
DIMETHYL TEREPHTHALATE	KOREA RP	972	799
	JAPAN	620	511
	TURKEY	174	139
	U S A	20	16
	Product Total	1786	1466
MONO EHYLENE GLYCOL	SAUDI ARAB	408264	254748
	KUWAIT	265672	163713
	SINGAPORE	86749	57369
	IRAN	53265	32399
	U ARAB EMT	3353	1814
	Product Total	817304	510043
PURIFIED TEREPHTHALIC ACID	KOREA RP	627500	409669
	THAILAND	193827	129520
	CHINA P RP	67655	45471
	INDONESIA	28086	19303
	TAIWAN	19444	13390
	Product Total	936512	617354
LOW DENSITY POLYETHYLENE	SAUDI ARAB	70644	64989
	QATAR	46735	43355
	U S A	20026	16635
	KOREA RP	18176	19520
	GERMANY	15356	16926
	Product Total	170936	161426
HIGH DENSITY POLYTHYLENE	SAUDI ARAB	159271	138461
	QATAR	115830	104536
	SINGAPORE	65884	69777
	U ARAB EMT	48453	44716
	THAILAND	42554	44914
	Product Total	431992	402404
POLYESTYRENE	SINGAPORE	10994	13106
	KOREA RP	9627	13387
	TAIWAN	5813	7460
	MALAYSIA	2683	3454
	U S A	2444	3872

Table-28 :Top Five Sources (countries) of Import of Selected Petrochemicals to India during 2013-14

PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakh)
	Product Total	31560	41279
POLYPROPYLENE (INC. CO-POLYMER)	SAUDI ARAB	153068	137951
	SINGAPORE	72448	74303
	U ARAB EMT	63295	56316
	KOREA RP	58036	59712
	KUWAIT	32154	29870
	Product Total	379002	358153
EXPANDABLE POLYESTYRENE	CHINA P RP	1719	1929
	TAIWAN	1437	1707
	SINGAPORE	362	426
	MALAYSIA	220	254
	GERMANY	96	124
	Product Total	3834	4440
POLY VINYL CHLORIDE	TAIWAN	446885	235773
	KOREA RP	260603	164636
	CHINA P RP	194130	119819
	GERMANY	45056	27116
	THAILAND	42621	27854
	Product Total	989295	575199
LINEAR LOW DENSITY POLYTHYLENE	SAUDI ARAB	200543	136732
	QATAR	75232	67863
	SINGAPORE	52947	52500
	U ARAB EMT	37905	33566
	THAILAND	19580	18526
	Product Total	386206	309187
PVC COMPOUND	KOREA RP	19839	13233
	TAIWAN	9057	5985
	GERMANY	7117	5272
	CHINA P RP	5443	4880
	IRAN	3025	1919
	Product Total	44481	31289
STYRENE BUTADIENE RUBBER	KOREA RP	123670	147739
	POLAND	33686	38347
	THAILAND	14095	16166
	INDONESIA	12050	13543
	RUSSIA	8898	10326
	Product Total	192400	226121
POLY BUTADIENE RUBBER	KOREA RP	45606	57908
	RUSSIA	14897	19279
	ITALY	6357	7623
	CZECH REPU	4893	5745
	U S A	3936	5043
	Product Total	75690	95598

Table-28 :Top Five Sources (countries) of Import of Selected Petrochemicals to India during 2013-14

PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakh)
ETHYL PROPYLENE DIMERS	JAPAN	7553	13139
	U S A	7541	11664
	NETHERLAND	6799	11579
	KOREA RP	4899	7988
	GERMANY	1714	2434
	Product Total	28505	46804
ETHYL VINYL ACETATE	KOREA RP	50427	55081
	THAILAND	24073	24256
	U S A	9862	10138
	TAIWAN	8221	8180
	BELGIUM	5807	6385
	Product Total	98389	104040
NITRILE BUTADIENE RUBBER	KOREA RP	13385	18112
	FRANCE	5355	8679
	JAPAN	3669	7972
	RUSSIA	2157	2725
	TAIWAN	1228	2010
	Product Total	25794	39497
BUTYL RUBBER	RUSSIA	35614	73720
	U K	9794	26453
	CHINA P RP	7666	14917
	U S A	7178	17297
	FRANCE	6315	15497
	Product Total	66566	147884
LINEAR ALKYL BENZENE	QATAR	47362	52385
	SAUDI ARAB	45031	51494
	IRAN	22768	24922
	KOREA RP	3585	4513
	U ARAB EMT	2809	2943
	Product Total	121555	136256
ETHYLENE OXIDE	U S A	17	232
	JAPAN	2	10
	TURKEY	1	3
	SINGAPORE	1	3
	BELGIUM	0	0
	Product Total	21	249
ABS RESIN	KOREA RP	51532	69103
	MALAYSIA	5193	7190
	THAILAND	1728	2738
	TAIWAN	1539	1889
	SINGAPORE	1045	1603
	Product Total	61038	82523
NYLON-6	TAIWAN	32133	54328

Table-28 :Top Five Sources (countries) of Import of Selected Petrochemicals to India during 2013-14

PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakh)
	U S A	27882	47596
	RUSSIA	14425	22477
	GERMANY	12807	24025
	CHINA P RP	5592	16279
	Product Total	92839	164705
POLYMETHYL METHACRYLATE	KOREA RP	7993	11246
	SINGAPORE	5092	5869
	THAILAND	1327	1207
	GERMANY	927	1493
	MALAYSIA	787	1333
	Product Total	16126	21148
STYRENE ACRYLONITRILE	KOREA RP	3209	3906
	THAILAND	1886	2247
	GERMANY	400	607
	TAIWAN	138	181
	U S A	119	188
	Product Total	5752	7128
BUTADIENE	SAUDI ARAB	1050	661
	GERMANY	18	145
	CHINA P RP	3	11
	U S A	0	1
	U K	0	0
	Product Total	1071	820
ETHYLENE	SAUDI ARAB	18431	14647
	THAILAND	6280	4646
	U S A	23	63
	MALAYSIA	19	20
	JAPAN	16	17
	Product Total	24769	19394
PROPYLENE	CHINA P RP	233	1137
	GERMANY	6	27
	BELGIUM	4	21
	ITALY	4	14
	U S A	0	2
	Product Total	247	1201
BENZENE	IRAN	5250	3143
	SPAIN	0	2
	GERMANY	0	1
	VENEZUELA	0	0
	U S A	0	0
	Product Total	5250	3146
MIXED XYLENE	SINGAPORE	3891	2905
	KOREA RP	1556	1093
	CHINA P RP	113	327

Table-28 :Top Five Sources (countries) of Import of Selected Petrochemicals to India during 2013-14

PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakh)
	U ARAB EMT	5	5
	U S A	1	6
	Product Total	5566	4336
ORTHO-XYLENE	SINGAPORE	23776	20896
	ISRAEL	9317	9539
	PORTUGAL	6523	5845
	ITALY	1586	1386
	NETHERLAND	1160	989
	Product Total	42362	38655
TOLUENE	SINGAPORE	122792	90794
	KOREA RP	57748	41882
	THAILAND	29776	22640
	GERMANY	17418	12504
	NETHERLAND	9007	6281
	Product Total	236741	174101
PARAXYLENE	OMAN	243937	218645
	KUWAIT	185999	166436
	SINGAPORE	169041	152358
	MALAYSIA	79963	70422
	KOREA RP	3	3
	Product Total	678943	607864
ETHYLENE DICHLORIDE	SAUDI ARAB	117342	27279
	QATAR	106538	23757
	U S A	97951	21886
	GERMANY	63984	13291
	INDONESIA	21858	4776
	Product Total	407673	90988
BUTANOL	MALAYSIA	15903	13018
	SINGAPORE	9123	8288
	SOUTH AFRI	6055	4726
	GERMANY	5391	4639
	U S A	3144	2448
	Product Total	39615	33120
OXO ALCOHOL	INDONESIA	622	1001
	SINGAPORE	283	346
	U S A	251	628
	NETHERLAND	151	206
	CHINA P RP	123	392
	Product Total	1430	2572
2-ETHYL HEXANOL	MALAYSIA	21823	20459
	SAUDI ARAB	18625	12598
	INDONESIA	16106	15391
	GERMANY	14358	13207
	NETHERLAND	7891	7118
	Product Total	78802	68773

Table-28 :Top Five Sources (countries) of Import of Selected Petrochemicals to India during 2013-14

PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakh)
VINYL CHLORIDE MONOMER	QATAR	218581	119327
	JAPAN	41701	23727
	U S A	27651	16389
	PAKISTAN IR	10309	5335
	TAIWAN	4000	2655
	Product Total	302242	167433
EPICHLORHYDRINE	THAILAND	14375	13573
	TAIWAN	3103	3194
	GERMANY	2154	2234
	KOREA RP	1992	2090
	JAPAN	1287	1297
	Product Total	22911	22387
ISO BUTYLENE	KOREA RP	18711	17244
	BRAZIL	1750	1632
	TAIWAN	1540	1469
	SAUDI ARAB	585	768
	EGYPT A RP	479	388
	Product Total	23065	21501
METAXYLENE	ITALY	2109	2045
	JAPAN	887	1059
	CHINA P RP	33	118
	GERMANY	1	1
	U K	0	0
	Product Total	3029	3223
METHYL ISOBUTYL KETONE	KOREA RP	5812	6389
	SOUTH AFRI	4906	5479
	NETHERLAND	2624	4008
	JAPAN	2485	2668
	TAIWAN	1402	1551
	Product Total	17229	20094
PIB	KOREA RP	7215	8967
	BELGIUM	929	1235
	GERMANY	867	2550
	BRAZIL	200	279
	FRANCE	116	246
	Product Total	9326	13276
POLYCARBONATE	THAILAND	39133	57167
	SPAIN	30197	43354
	SINGAPORE	12846	19752
	KOREA RP	10555	17612
	NETHERLAND	9820	15600
	Product Total	102551	153485
PROPYLENE OXIDE	SAUDI ARAB	8006	8708
	KOREA RP	3632	4310

Table-28 :Top Five Sources (countries) of Import of Selected Petrochemicals to India during 2013-14

PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakh)
	SINGAPORE	36	47
	BELGIUM	1	5
	U S A	0	2
	Product Total	11675	13072
PROPYLENE GLYCOL	SINGAPORE	15038	14507
	THAILAND	12840	11306
	CHINA P RP	5998	5405
	KOREA RP	5035	5192
	U S A	2746	2273
	Product Total	41658	38683
PET	CHINA P RP	39020	33828
	IRAN	19799	16127
	MALAYSIA	16019	13415
	TAIWAN	14800	12535
	THAILAND	3470	2956
	Product Total	93108	78861
POLYVINYL ACETATE RESIN	GERMANY	2215	3115
	U S A	522	3159
	CHINA P RP	426	966
	U ARAB EMT	327	438
	JAPAN	228	377
	Product Total	3716	8054
UNSATURATED POLYSTER RESIN	TAIWAN	13455	13296
	U ARAB EMT	7186	8103
	CHINA P RP	5749	6038
	ITALY	1669	3841
	GERMANY	626	1617
	Product Total	28684	32894
ETHYL BENZENE	CHINA P RP	83	119
	NETHERLAND	20	28
	BELGIUM	20	27
	KOREA RP	18	24
	GERMANY	16	21
	Product Total	158	219
CELLULOSE ACETATE BUTYRATE	FRANCE	0	1
	CHINA P RP	0	0
	SINGAPORE	0	0
	Product Total	0	1
CELLULOSE ACETATE SHEET	CHINA P RP	745	421
	ITALY	161	88
	U S A	47	22
	HONG KONG	19	5
	GERMANY	7	30
	Product Total	979	566

Table-28 :Top Five Sources (countries) of Import of Selected Petrochemicals to India during 2013-14

PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakh)
CELLULOSE NITRATE SHEET	KOREA RP	434	653
	JAPAN	61	169
	GERMANY	3	9
	CHINA P RP	2	11
	FRANCE	2	1
	Product Total	502	843
MELAMINE MOULDING POWDER	THAILAND	3463	3845
	TAIWAN	2519	2821
	CHINA P RP	959	1239
	NETHERLAND	945	1077
	GERMANY	767	1206
	Product Total	8653	10188
POLYACETAL RESIN	KOREA RP	6150	5463
	MALAYSIA	6049	6111
	THAILAND	5316	4794
	NETHERLAND	3405	2962
	GERMANY	1906	2265
	Product Total	22825	21594
PHTHALIC ANHYDRIDE	KOREA RP	18619	16483
	RUSSIA	18529	16019
	ISRAEL	6958	6157
	TAIWAN	5466	5045
	JAPAN	3300	2955
	Product Total	52871	46659
STYRENE	SINGAPORE	274731	285393
	SAUDI ARAB	179972	191421
	KUWAIT	102137	110197
	INDONESIA	6150	6175
	MALAYSIA	2902	3256
	Product Total	565892	596442
VINYL ACTATE MONOMER	SINGAPORE	115021	69077
	SAUDI ARAB	23329	12827
	TAIWAN	7736	4436
	U S A	979	546
	NETHERLAND	299	387
	Product Total	147364	87272
ISOPROPANOL	SINGAPORE	13675	10908
	U S A	11942	9876
	KOREA RP	7398	5805
	TAIWAN	6645	5863
	NETHERLAND	4258	3228
	Product Total	43918	35678

Table - 29: Exchange Rates of Indian Rupee vis-a-vis US\$

MONTH	RS./US\$
June-14	59.73
May-14	59.31
April-14	60.36
March-14	61.01
February-14	62.25
January-14	62.08
December-13	61.91
November-13	62.63
October-13	61.62
September-13	63.75
August-13	63.21
July-13	59.78
June-13	60.05
May-13	55.01
April-13	54.38
March-13	54.40
February-13	53.77
January-13	53.32
December-12	54.65
November-12	54.78
October-12	53.02
September-12	54.61
August-12	55.56
July-12	55.49
June-12	56.03
May-12	54.47
April-12	51.80
March-12	50.32
February-12	49.16
January-12	51.35
December-11	52.67
November-11	50.84
October-11	49.26
September-11	47.64
August-11	45.28
July-11	44.42
June-11	44.85
May-11	44.90
April-11	44.37
March-11	44.99
February-11	45.44
January-11	45.39
December-10	45.16
November-10	45.02
October-10	44.41
September-10	46.06
August-10	46.57

Table - 29: Exchange Rates of Indian Rupee vis-a-vis US\$

MONTH	RS./US\$
July-10	46.84
June-10	46.56
May-10	45.80
April-10	44.50
March-10	45.50
February-10	46.33
January-10	45.96

Note : Worked out on the basis of average daily exchange rates, as notified by RBI.

Source:<http://dbie.rbi.org.in/DBIE/dbie.rbi?site=home>

Table - 30 : World Exports of Chemicals by top 10 countries- 2013

Value in US\$ Million

Rank	HS Code									
	28		29		30		31		32	
	Country	Trade Value	Country	Trade Value	Country	Trade Value	Country	Trade Value	Country	Trade Value
1st	China	13593	USA	48656	Germany	74930	Russian Federation	9121	Germany	13887
2nd	USA	12827	China	42202	Switzerland	57550	Canada	6605	USA	8112
3rd	Germany	9495	Belgium	40773	Belgium	50357	China	6253	China	5803
4th	Russian Federation	8035	Germany	30217	USA	42451	USA	5909	Belgium	4431
5th	Australia	5996	Ireland	26798	France	37005	Belgium	2971	Japan	4381
6th	Canada	5140	Japan	26294	United Kingdom	32104	Netherlands	2921	United Kingdom	3614
7th	Belgium	4496	Rep. of Korea	24856	Ireland	26126	Germany	2874	France	3316
8th	France	4424	Switzerland	18871	Italy	26885	Belarus	2486	Italy	3253
9th	United Kingdom	4009	Singapore	18038	Spain	13030	Israel	1730	Spain	2873
10th	Japan	3951	France	13907	India	11732	Egypt	1186	India	2617
	World Export	104318		379096		456158		58580		72543

Table - 30 : World Exports of Chemicals by top 10 countries- 2013

Value in US\$ Million

Rank	HS Code									
	38		39		4002		54		55	
	Country	Trade Value	Country	Trade Value	Country	Trade Value	Country	Trade Value	Country	Trade Value
1st	USA	28259	China	61753	USA	3237	China	16014	China	11211
2nd	Germany	24887	Germany	60879	Rep. of Korea	2967	Rep. of Korea	3479	USA	2808
3rd	China	12304	USA	63522	Japan	2808	India	2681	Indonesia	2328
4th	France	12188	Belgium	35554	Russian Federation	2377	Italy	2242	India	2186
5th	Japan	10129	Rep. of Korea	31172	Belgium	1901	Japan	2217	Japan	1986
6th	Belgium	8765	Japan	25704	Germany	1847	Germany	1892	Rep. of Korea	1934
7th	United Kingdom	7425	France	22128	France	890	USA	1882	Germany	1807
8th	Italy	5518	Italy	20575	China	557	Turkey	1691	Turkey	1382
9th	Israel	4872	Singapore	14634	Poland	489	Indonesia	1257	Thailand	1359
10th	Singapore	4669	Canada	12585	Canada	469	United Kingdom	845	Belgium	1233
	World Export	165248		486511		20954		41594		35143

Table - 30 : World Exports of Chemicals by top 10 countries- 2013

Value in US\$ Million

Rank	HS Code			
	All Chemicals @		All Chemicals excluding Pharmaceuticals	
	Country	Trade Value	Country	Trade Value
1st	Germany	222714	USA	175307
2nd	USA	217757	China	169691
3rd	China	175899	Germany	147783
4th	Belgium	151218	Belgium	100861
5th	France	95576	Japan	77627
6th	Switzerland	87277	Rep. of Korea	73725
7th	Japan	80870	France	58571
8th	Rep. of Korea	74968	Italy	43215
9th	United Kingdom	74238	United Kingdom	42135
10th	Italy	70100	Singapore	39833
	World Export	1820145	World Export	1363987

@-Includes all products covered under the HS code 28,29,30,31,32,38,39, 4002,54 and 55

Chapter 28: Inorganic Chemicals; Organic or Inorganic Compounds of Precious Metals, of Rare-Earth Metals, of Radioactive Elements or of Isotopes; Chapter 29: Organic Chemicals; Chapter 30: Pharmaceutical products; Chapter 31: Fertilizers ; Chapter 32: Tanning or Dyeing Extracts; Tannins and their Derivatives; Dyes, Pigments and Other Colouring Matter; Paints and Varnishes; Putty and other Mastics; Inks; Chapter 38: Miscellaneous Chemical Products; Chapter 39: Plastics and articles thereof; 4002: Synthetic rubber and factice derived from oils, in primary forms or in plates, sheets or strip; mixtures of any pro; Chapter 54: Man-made Filaments and Chapter 55: Man-made staple fibres

Source : <http://comtrade.un.org/> (UN Comtrade Database)

Table - 31 : World Imports of Chemicals by top 10 countries- 2013

Value in US\$ Million

Rank	HS Code									
	28		29		30		31		32	
	Country	Trade Value	Country	Trade Value	Country	Trade Value	Country	Trade Value	Country	Trade Value
1st	USA	15515	China	66002	USA	63407	Brazil	8885	Germany	7514
2nd	China	9632	USA	54738	Germany	45153	USA	8464	China	4390
3rd	Germany	8341	Belgium	37562	Belgium	40963	India	5958	France	4132
4th	France	7370	Germany	33484	United Kingdom	27976	China	3375	USA	3972
5th	Japan	6159	France	19207	France	26350	France	2820	Italy	2753
6th	Rep. of Korea	5919	Italy	18346	Switzerland	22111	Thailand	2531	United Kingdom	2619
7th	India	5100	India	16960	Italy	21171	Germany	1911	Russian Federation	2607
8th	Canada	4221	Japan	16164	Japan	20864	Indonesia	1748	Rep. of Korea	2488
9th	United Kingdom	4090	Switzerland	14580	China	15102	Belgium	1712	Belgium	2333
10th	Belgium	3794	Rep. of Korea	14382	Russian Feder	14552	Malaysia	1564	Canada	2258
	World Import	112804		421261		437525		69025		66887

Table - 31 : World Imports of Chemicals by top 10 countries- 2013

Value in US\$ Million

Rank	HS Code									
	38		39		4002		54		55	
	Country	Trade Value	Country	Trade Value	Country	Trade Value	Country	Trade Value	Country	Trade Value
1st	China	15983	China	74895	China	4460	China	4011	China	3672
2nd	Germany	14929	USA	46547	USA	1680	USA	2455	Turkey	2175
3rd	USA	12490	Germany	42751	Germany	1557	Turkey	2090	Germany	2018
4th	France	8868	France	25254	India	1231	Germany	1778	USA	1861
5th	Rep. of Korea	7116	Mexico	20810	Belgium	1205	Italy	1605	Indonesia	1354
6th	Italy	6333	Italy	20299	Thailand	1149	Brazil	1559	Italy	1356
7th	Belgium	6037	Belgium	20180	France	800	Indonesia	1218	Rep. of Korea	954
8th	Canada	5770	United Kingdom	18834	Italy	773	Rep. of Korea	1076	Brazil	894
9th	United Kingdom	5655	Canada	15432	Malaysia	769	Mexico	1033	France	798
10th	Japan	5372	Japan	15086	Indonesia	738	France	959	Russian Federation	754
	World Import	156876		506072		23235		31526		27783

Table - 31 : World Imports of Chemicals by top 10 countries- 2013

Value in US\$ Million

Rank	HS Code			
	All Chemicals		All Chemicals excluding Pharmaceuticals	
	Country	Trade Value	Country	Trade Value
1st	USA	211129	China	186420
2nd	China	201523	USA	147722
3rd	Germany	159436	Germany	114282
4th	Belgium	115162	Belgium	74199
5th	France	96574	France	70224
6th	Italy	76699	Italy	55529
7th	United Kingdom	75461	United Kingdom	47485
8th	Japan	68084	Japan	47220
9th	Canada	49130	India	46007
10th	Rep. of Korea	48101	Rep. of Korea	43857
	World Import	1954492	World Import	1516967

@-Includes all products covered under the HS code 28,29,30,31,32,38,39, 4002,54 and 55

Chapter 28: Inorganic Chemicals; Organic or Inorganic Compounds of Precious Metals, of Rare-Earth Metals, of Radioactive Elements or of Isotopes; Chapter 29: Organic Chemicals; Chapter 30: Pharmaceutical products; Chapter 31: Fertilizers ; Chapter 32: Tanning or Dyeing Extracts; Tannins and their Derivatives; Dyes, Pigments and Other Colouring Matter; Paints and Varnishes; Putty and other Mastics; Inks; Chapter 38: Miscellaneous Chemical Products; Chapter 39: Plastics and articles thereof; 4002: Synthetic rubber and factice derived from oils, in primary forms or in plates, sheets or strip; mixtures of any pro; Chapter 54: Man-made Filaments and Chapter 55: Man-made staple fibres

Source : <http://comtrade.un.org/> (UN Comtrade Database)

Table - 32 : India's share in World Exports and Imports of Chemicals-2013

HS Code	Commodity	Value in US\$ Million							
		Export				Import			
		Trade Value		% of World Export	Rank in the World	Trade Value		% of World Import	Rank in the World
		India	World			India	World		
28	INORGANIC CHEMICALS	1466	104318	1.41	16	5100	112804	4.52	7
29	ORGANIC CHEMICALS	13340	379096	3.52	11	16960	421261	4.03	7
30	PHARMACEUTICAL PRODUCTS	11732	456158	2.57	10	1668	437525	0.38	37
31	FERTILISERS.	76	58580	0.13	48	5958	69025	8.63	3
32	TANNING OR DYEING	2617	72543	3.61	10	1517	66887	2.27	15
38	MISCELLANEOUS CHEMICAL PRODUCTS.	3398	165248	2.06	16	3843	156876	2.45	15
39	PLASTIC AND ARTICLES THEREOF.	6223	486511	1.28	17	9985	506072	1.97	16
4002	SYNTHETIC RUBBER AND FACTICE	37	20954	0.18	28	1231	23235	5.30	4
54	MAN-MADE FILAMENTS.	2681	41594	6.45	3	785	31526	2.49	13
55	MAN-MADE STAPLE FIBRES.	2186	35143	6.22	4	627	27783	2.26	14
All Chemicals @		43755	1820145	2.40	13	47675	1852995	2.57	15
Chemicals (excluding Pharmaceutical products)		32023	1363987	2.35	13	46007	1415470	3.25	9
Total of all HS code commodities		336611	16392518.31	2.05	15	466046	16727375	2.79	11

@-Includes all products covered under the HS code 28,29,30,31,32,38,39, 4002,54 and 55

Chapter 28: Inorganic Chemicals; Organic or Inorganic Compounds of Precious Metals, of Rare-Earth Metals, of Radioactive Elements or of Isotopes; Chapter 29: Organic Chemicals; Chapter 30: Pharmaceutical products; Chapter 31: Fertilizers ; Chapter 32: Tanning or Dyeing Extracts; Tannins and their Derivatives; Dyes, Pigments and Other Colouring Matter; Paints and Varnishes; Putty and other Mastics; Inks; Chapter 38: Miscellaneous Chemical Products; Chapter 39: Plastics and articles thereof; 4002: Synthetic rubber and factice derived from oils, in primary forms or in plates, sheets or strip; mixtures of any pro; Chapter 54: Man-made Filaments and Chapter 55: Man-made staple fibres
Source : <http://comtrade.un.org/> (UN Comtrade Database)

Section – V

***Foreign
Direct
Investment
(FDI)***

Table -33 : Sectors Attracting Highest FDI Equity Inflows during 2011-12 to 2013-14

Amount in Rs. crores (US\$ in million)						
S.No.	Sector	2011-12 (April - March)	2012-13 (April – March)	2013-14 (April – March)	Cumulative Inflows (April “00 –March “14)	% age to total Inflows (In terms of US\$)
1	SERVICES SECTOR **	24656 (5216)	26306 (4833)	13294 (2225)	185570 (39460)	18
2	CONSTRUCTION DEVELOPMENT: TOWNSHIPS, HOUSING, BUILT-UP INFRASTRUCTURE	15236 (3141)	7248 (1332)	7508 (1226)	108558 (23306)	11
3	TELECOMMUNICATION S (radio paging, cellular mobile, basic telephone services)	9012 (1997)	1654 (304)	7987 (1307)	66720 (14163)	7
4	COMPUTER SOFTWARE & HARDWARE	3804 (796)	2656 (486)	6896 (1126)	59671 (12817)	6
5	DRUGS & PHARMACEUTICALS	14605 (3232)	6011 (1123)	7191 (1279)	56070 (11598)	5
6	AUTOMOBILE INDUSTRY	4347 (923)	8384 (1537)	9027 (1517)	48197 (9812)	5
7	CHEMICALS (OTHER THAN FERTILIZERS)	18422 (4041)	1596 (292)	4738 (878)	45234 (9668)	4
8	POWER	7678 (1652)	2923 (536)	6519 (1066)	42655 (8900)	4
9	METALLURGICAL INDUSTRIES	8348 (1786)	7878 (1466)	3436 (568)	38250 (8075)	4
10	HOTEL & TOURISM	4754 (993)	17777 (3259)	2949 (486)	36209 (7118)	3

Note: (i)** Services sector includes Financial, Banking, Insurance, Non-Financial / Business, Outsourcing, R&D, Courier, Tech. Testing and Analysis

Source : http://dipp.nic.in/English/Publications/FDI_Statistics/2014/india_FDI_March2014.pdf

Table 34: Sector-wise FDI Inflows (in US \$ million)

Industry Groups	1991-2000	2000-10	2010-11	2011-12	2012-13	Total
Food products	707.4	1237.3	246.9	239.7	522.1	2431.3
Fermentation Industries	24.0	770.1	57.7	69.7	107.2	921.6
Textiles	241.8	828.6	129.8	164.7	104.0	1364.9
Wood Products	0.0	18.8	1.6	29.6	29.2	50.0
Paper	250.5	716.9	44.0	454.7	19.4	1466.1
Leather	33.5	42.6	9.3	8.3	46.7	93.6
Chemicals	1480.9	4446.1	2690.2	7534.1	1618.2	16151.3
Rubber, Plastic & Petroleum Products (Including Oil exploration)	90.3	2953.6	573.6	2217.4	857.0	5834.9
Non Metallic Minerals	261.1	2263.6	657.3	310.0	225.9	3492.0
Metals and Metal products	186.2	3143.2	1098.1	1786.1	1466.2	6213.6
Machinery & Equipments	2043.1	15670.4	1836.3	4147.5	1907.8	23697.2
Transport Equipments	0.0	4603.2	1299.4	923.0	1537.3	6825.6
Others Manufacturing	1761.6	5705.6	1495.6	850.5	282.1	9813.2
Mining(including mining services)	0.0	730.9	79.5	142.7	57.9	953.0
Power	1038.9	5220.9	1486.2	2104.6	1642.2	9850.5
Telecommunication	1089.4	8915.9	1664.5	1997.2	303.9	13667.1
Total (Industry)	9208.6	57267.7	13369.9	22979.7	10727.2	102825.9
Services	3037.6	53021.6	8013.1	12141.1	11696.4	76213.5
Others	4453.3	0.0	0.0	0.0	0.0	4453.3
Total	16699.6	110289.3	21383.1	35120.8	22423.6	183492.7

Source:DIPP <http://eaindustry.nic.in/>

Section – VI

*Index of
Industrial
Production*

Table - 35: Monthly Production Growth in 'Chemicals and Chemical Products' vis-a-vis Manufacturing Sector during April 2013 to May 2014 (Based on Index of Industrial Production)

Period	Chemicals and chemical products	Manufacturing	General
Weight	100.59	755.27	1000.00
Production Growth (%)			
Apr'13	2.4	-15.1	-14.3
May'13	0.5	-1.6	-0.3
Jun'13	1.5	1.0	-0.7
Jul'13	0.7	4.4	3.9
Aug'13	5.3	-4.0	-3.5
Sep'13	-2.8	1.0	1.3
Oct'13	-1.4	1.7	1.3
Nov'13	1.4	-4.6	-3.5
Dec'13	5.2	10.0	9.7
Jan'14	-3.0	2.7	2.5
Feb'14	-10.9	-5.6	-6.1
Mar'14	5.2	11.7	11.9
Apr'14	-4.6	-11.8	-10.9
May'14	9.3	0.9	1.2
Index of Industrial Production (Base : 2004-05=100)			
Mar'13	130.9	207.3	194.2
Apr'13	134.1	176.1	166.5
May'13	134.8	173.3	166.0
Jun'13	136.8	175.0	164.9
Jul'13	137.8	182.7	171.4
Aug'13	145.1	175.4	165.4
Sep'13	141.0	177.1	167.5
Oct'13	139.0	180.1	169.6
Nov'13	140.9	171.8	163.6
Dec'13	148.2	189.0	179.5
Jan'14	143.7	194.1	184.0
Feb'14	128.1	183.3	172.7
Mar'14	134.8	204.7	193.2
Apr'14	128.6	180.5	172.2
May'14	140.5	182.1	174.3

Table: 36 Annual Production Growth in Chemicals and Chemical Products Vis -a-Vis Manufacturing Sector during 2005-06 to 2013-14 (Based on Index on Industrial Production)

Years	Chemicals and Chemical Products	Manufacturing	General
Weight	100.59	755.27	1000.00
Production Growth (%)			
2005-06	1.0	10.3	8.6
2006-07	9.3	15.0	12.9
2007-08	7.2	18.4	15.5
2008-09	-2.9	2.5	2.5
2009-10	5.0	4.8	5.3
2010-11	2.0	9.0	8.2
2011-12	-0.4	3.0	2.9
2012-13	3.8	1.3	1.1
2013-14	8.9	-0.8	-0.1
Index of Industrial Production (Base: 2004-05=100)			
2005-06	101.0	110.3	108.6
2006-07	110.4	126.8	122.6
2007-08	118.4	150.1	141.7
2008-09	115.0	153.8	145.2
2009-10	120.7	161.3	152.9
2010-11	123.1	175.7	165.5
2011-12	122.7	181.0	170.3
2012-13	127.3	183.3	172.2
2013-14	138.6	181.9	172.0

Table 37: Weights of Products Covered Under Chemical and Chemical Products (Industry Division 24 of NIC- 2004)

NIC Code	Description of Item	Weights	NIC Code	Description of Item	Weights
24111	Caustic soda	2.2336	24295	Adhesives	1.2891
24111	Dissolved Acetylene Gas	0.0216	24295	Gelatin	0.4953
24111	Liquid chlorine	0.4796	24298	salt, processed	0.5305
24111	Oxygen	0.1713	24301	Polyester staple fibre	0.7167
24111	Soda ash	1.4539	24301	Viscose Staple Fibre	0.3273
24112	Sulphuric Acid, including Oleum	0.3183	24304	Nylon industrial yarn/tyre cord	0.1348
24112	Titanium dioxide	0.3198	24111	Aniline	0.2338
24114	Dyes	1.3942	24112	Phosphoric Acid	0.2226
24116	Acetic acid	0.6127	24116	Acetone	0.1685
24116	Formaldehyde	0.1761	24116	Purified terephthalic acid	4.2279
24116	Maleic anhydride	0.0652	24117	Sodium Hydrosulphate/Sodium	0.056
24116	Methanol	0.4553	24121	Ammonia	0.0634
24116	Phenol	0.3558	24121	Ammonia Sulphate(A/S)	0.4186
24118	Fatty Acid	0.5217	24121	Calcium Ammonium Nitrate(CAN)	0.0586
24118	Glycerine	0.0627	24124	Complex grade fertilizers	1.1993
24123	Caprolactum	0.8176	24131	Poly butadiene rubber	0.1409
24123	Urea	6.4322	24131	Styrene butadiene rubber	0.0375
24124	Di Ammonium Phosphate (DAP)	3.1858	24134	Paraxylene	1.9321
24124	Single Super Phosphate (SSP)	1.2442	24134	Poly vinyl chloride	1.3808
24132	PVC Resins	1.2379	24134	Polypropylene (including co-polymer)	3.0237
24132	Synthetic Resins	0.9583	24139	ABS Resin	0.1796
24134	Benzene	0.8732	24211	Acephate	0.6888
24134	Ethylene	4.0019	24211	Atrazin	0.0026
24134	High density polyethylene	1.8377	24211	Carbendzim(Bavistin)	0.0619
24134	Linear low density polyethylene	1.1488	24211	Chlorpyriphos	0.3881
24134	Mono ethylene glycol	1.1662	24211	Cypermethrin	0.6158
24134	Polystyrene	0.6733	24211	Di ethyl easter technical(2, 4-D)	0.0062
24134	Synthetic Rubber	0.2259	24211	Fenvalerate	0.0379
24211	Endosulphan	0.1948	24211	Mancozab	0.9176
24211	Monocrotophos	0.6913	24211	Quinalphos	0.0523
24219	Rubber Chemical	0.4916	24211	Triazophos	0.2521
24222	Paints of all kinds	2.2465	24223	Printing Ink	0.807
24224	Phthalic anhydride	0.5494	24233	Ayurvedic Medicaments	2.6967
24232	Antibiotics & it's preparations	23.8392	24243	Ethylene oxide	0.3296
24232	Vitamins	3.0131	24243	Whitening Agents	0.0918
24241	Synthetic Detergents	1.8398	24246	Hair Shampoo	0.2925
24241	Toilet Soap	1.9112	24295	Empty Capsules	0.4887
24241	Washing Soap	0.6664	24297	Guar Gum Splits	0.631
24243	Linear alkyl benzene	1.7213	24297	Leather Finishing Chemicals &	0.2863
24245	Tooth Powder	0.0197	24299	Acrylonitrile	0.3125
24246	Tooth Paste	0.6499	24299	Butadiene	0.8738
24247	Hair Oil	0.2495	24303	Acrylic fibre	0.209
24248	Agarbattis and Dhoop	0.4106	24304	Nylon filament yarn	0.0709
24291	Safety Matches	0.7892	24304	Polyester filament yarn	1.19
24292	Explosives	0.7204			

Section – VII

Inflation Based on Wholesale Price Index

Table -38 : Annual Inflation of Chemicals & Chemical products vis-à-vis other commodities during 2005-06 to 2013-14 (Based on Wholesale Price Index)

Year	All Commodities	Food Articles	Manufactured Products	Chemicals & Chemical Products
Weight	100	14.34	64.97	12.02
Inflation(%)				
2005-2006	4.47	5.38	2.42	3.79
2006-2007	6.59	9.62	5.66	4.96
2007-2008	4.74	6.97	4.78	3.57
2008-2009	8.05	9.09	6.16	4.64
2009-2010	3.80	15.27	2.22	-0.26
2010-2011	9.56	15.60	5.70	5.33
2011-2012	8.94	7.30	7.26	8.61
2012-2013	7.36	9.90	5.41	6.62
2013-2014	5.98	12.76	2.99	3.63
Wholesale Price Index(Base : 2004-05=100)				
2005-2006	104.47	105.38	102.42	103.79
2006-2007	111.35	115.52	108.22	108.94
2007-2008	116.63	123.57	113.39	112.83
2008-2009	126.02	134.8	120.38	118.07
2009-2010	130.81	155.39	123.05	117.76
2010-2011	143.32	179.63	130.07	124.04
2011-2012	156.13	192.74	139.51	134.72
2012-2013	167.62	211.82	147.06	143.64
2013-2014	177.64	238.85	151.46	148.85

Table 39: Monthly Inflation of Chemicals & Chemical Products vis-a-vis Other Commodities during April 13 to March 14 (Based on Wholesale Price Index)

Month	All Commodities	Food Articles	Manufactured Products	Chemicals & Chemical Products
Apr-13	0.71	2.66	0.27	0.21
May-13	0.06	1.50	0.13	-0.21
Jun-13	1.05	3.50	0.13	0.21
Jul-13	1.33	3.29	0.27	0.82
Aug-13	1.99	5.83	0.47	0.47
Sep-13	0.95	0.20	0.60	0.61
Oct-13	0.00	-0.47	0.40	0.07
Nov-13	0.44	1.67	0.13	0.07
Dec-13	-1.05	-6.14	0.13	0.47
Jan-14	-0.33	-2.71	0.26	0.60
Feb-14	0.28	-0.51	0.46	0.66
Mar-14	0.45	0.90	0.39	0.53
Whole Sale Price Index (Base: 2004-05=100)				
Mar-13	170.1	214.1	148.7	145.9
Apr-13	171.3	219.8	149.1	146.2
May-13	171.4	223.1	149.3	145.9
Jun-13	173.2	230.9	149.5	146.2
Jul-13	175.5	238.5	149.9	147.4
Aug-13	179	252.4	150.6	148.1
Sep-13	180.7	252.9	151.5	149
Oct-13	180.7	251.7	152.1	149.1
Nov-13	181.5	255.9	152.3	149.2
Dec-13	179.6	240.2	152.5	149.9
Jan-14	179	233.7	152.9	150.8
Feb-14	179.5	232.5	153.6	151.8
Mar-14	180.3	234.6	154.2	152.6

Table 40: WPI of Chemicals & Chemical Products (Group Wise) during 2005-06 to 2013-14

DESCRIPTION	WEIGHT	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
CHEMICALS & CHEMICAL PRODUCTS	12.0	103.8	108.9	112.8	118.1	117.8	124.0	134.7	143.6	148.9
BASIC INORGANIC CHEMICALS	1.2	106.4	109.5	117.1	126.2	125.0	126.3	138.2	147.8	150.6
BASIC ORGANIC CHEMICALS	2.0	103.6	111.0	112.0	118.0	115.7	124.4	135.0	140.3	147.5
FERTILIZERS	2.7	102.2	104.4	106.3	106.8	108.2	116.8	132.6	149.0	152.3
PESTICIDES	0.5	102.2	108.4	106.7	110.5	110.6	113.6	114.9	121.2	125.9
PAINTS, VARNISHES & LACQUERS	0.5	104.3	105.7	110.6	117.6	117.5	122.6	128.5	143.6	147.6
DYESTUFFS & INDIGO	0.6	102.3	110.6	115.0	115.5	111.9	116.3	122.5	126.9	132.6
DRUGS & MEDICINES	0.5	101.3	102.6	108.1	111.4	112.7	115.4	119.6	124.2	126.8
PERFUMES, COSMETICS, TOILETRIES ETC	1.1	104.5	111.1	119.1	129.2	134.8	138.5	145.3	151.9	157.3
TURPENTINE, PLASTIC CHEMICALS	0.6	109.6	115.2	115.3	116.9	117.4	123.4	136.1	140.0	147.6
POLYMERS INCLUDING SYNTHETIC RUBBER	1.0	103.0	108.8	115.5	119.6	116.3	123.4	130.4	135.3	142.8
PETROCHEMICAL INTERMEDIATES	0.9	105.1	116.6	121.0	133.5	127.7	137.4	156.2	164.2	170.4
MATCHES, EXPLOSIVES & OTHER CHEMICALS	0.6	102.7	107.1	114.4	121.6	123.8	128.7	135.5	142.6	149.8

Section – VIII

Miscellaneous

Table 41 : Selected Indicators of the Indian Economy

S.No.	Indicator	Unit/base	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
1	Human Population (mid FY)	Million	1154	1170	1186	1202	1217	1233
2	GDP at Market prices (At current prices)	Rs.'000 crore	5630	6477	7784 (3rd RE)	9010 (2nd RE)	10112 (1st RE)	11355 (PE)
3	GDP at factor cost							
	(i) At current prices	Rs.'000 crore	5304	6109	7249	8392	9389	10473
	(ii) At 2004-05 prices	Rs.'000 crore	4159	4516	4919	5248	5482	5742
4	GDP at factor cost (at 2004-05 prices)	Growth (%)	6.7	8.6	8.9	6.7	4.5	4.7
5	Per capita Ner National Product							
	(i) At current prices	Rupees	40775	46249	54021	61855	67839	74380
	(ii) At 2004-05 prices	Rupees	31754	33901	36202	38048	38856	39904
6	Gross Domestic Saving at current prices	Growth (%)	32.0	33.7	33.7	31.3	30.1	
7	Rate of Gross Capital Formation at current prices	%	34.3	36.5	36.5	35.5	34.8	
8	Index of Industrial Production	Growth (%)	2.5	5.3	8.2	2.9	1.1	-0.1
9	Foreign Trade							
	(i) Exports	\$ billion	185.3	178.8	251.1	306.0	300.4	312.6
	(ii) Imports	\$ billion	303.7	288.4	369.8	489.3	490.7	450.1
	(iii) Trade Balance	\$ billion	-118.4	-109.6	-118.6	-183.4	190.3	137.5
10	Foreign Exchange Reserves(End of FY)	\$ billion	252.0	279.1	304.8	294.4	292.0	304.2
11	Foreign Exchange Rate	Rs./US\$	45.99	47.42	45.58	47.92	54.41	60.50
12	Foreign Institutional Investment	Rs.Crore	(-) 45811	142658	146438	93726	168367	51649
13	Fiscal Deficit (Central Government)	Rs. Crore	336992	418482	373590	515990	490596	508149
		% of GDP	6.0	6.5	4.8	5.7	4.9	4.5
14	WPI(Average of 12 months)	Inflation	8.05	3.80	9.56	8.94	7.36	5.98
15	Agricultural Production (Food grain)	MMT	234.47	218.11	244.49	259.29	257.13	264.4 (3rd AE)
16	Consumer Price Index							
	Industrial Workers	2001=100	145	163	180	195	215	236
	Agricultural Labourers	1986-87=10	450	513	564	611	672	750
	Rural Labourers	1986-87=10	451	513	564	611	673	751
17	Electricity Generated (Gross)							
	Utilities							
	Hydro	Billion Kwh	110	104	114	131	114	135
	Thermal+R.E.S.	Billion Kwh	616	677	704	759	761	793
	Nuclear	Billion Kwh	15	19	26	33	33	34
	Total	Billion Kwh	741	800	845	923	907	962
	Non-Utilites	Billion Kwh	100	106	121	128	na	na
	Grand total	Billion Kwh	841	906	966	1051	na	na

Source: Economic Survey 2013-14, Central Statistics Office, Ministry of Staistics & PI and office of Economic Adviser, Ministry of Commerece & Industry

3rd RE: Third Revised Estimate; 2nd RE: Second Revised Estimate; 1st RE: First Revised Estimate; 3rd AE: 3rd Advanced Estimate

Table - 42: Growth Rates of Core Industries (%)

Sector	Weight	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Coal	4.379	6.3	8.0	8.1	-0.2	1.3	4.6	0.7
Crude Oil	5.216	0.4	-1.8	0.5	11.9	1.0	-0.6	-0.2
Natural Gas	1.708	2.1	1.3	44.6	10.0	-8.9	-14.5	-13.0
Refinery Products	5.939	6.5	3.0	-0.4	3.0	3.1	29.0	1.7
Fertilizers	1.254	-7.9	-3.9	12.7	0.0	0.4	-3.4	1.5
Steel	6.684	6.8	1.9	6.0	13.2	10.3	4.1	4.9
Cement	2.406	8.1	7.2	10.5	4.5	6.7	7.7	3.0
Electricity	10.316	6.3	2.7	6.2	5.6	8.1	4.0	5.6
Overall Index	37.903	5.2	2.8	6.6	6.6	5.0	6.5	2.7

Source: Office of Economic Adviser,DIPP

Table-43: Consumption of Naptha, Natural Gas and Fuel oil during 2007-08 to 2013-14

Name of Product	Description	Unit	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14*
Naptha	Production	K Tonnes	17964	16452	18788	19196	18825	19018	18505
	Import	K Tonnes	5983	5023	1734	2063	2091	1735	1026
	Export	K Tonnes	9297	7601	10043	10655	10139	8647	8322
	Consumption\$	K Tonnes	14650	13874	10479	10603	10777	12107	11210
Natural Gas	Production	MMSCM	32417	32845	47496	52219	47559	40679	35407
	Import	MMSCM	11607	11952	12092	13077	17465	17371	17296
	Consumption\$	MMSCM	44024	44796	59588	65296	65024	58050	52703
Fuel Oil	Production	K Tonnes	15804	17684	18346	20519	18433	15054	13405
	Import	K Tonnes	3659	2760	896	1013	1203	1068	1283
	Export	K Tonnes	4718	6207	5186	6734	7895	5922	6159
	Consumption\$	K Tonnes	14745	14237	14056	14798	11740	10200	8529
Naptha	Fertilizers Sector	K Tonnes	1689	1803	844	892	962	898	516
	Petrochemical Sector	K Tonnes	6048	5889	6968	7500	8141	9412	9620
Natural Gas **	Fertilizer Industrys	MMSCM	9823	9082	13168	11464	11330	11496	11060
	Petrochemicals Industry	MMSCM	1432	1105	1264	1309	1409	1074	1395
Fuel Oil	Chemicals & allied	K Tonnes	332	411	393	333	299	228	204

\$ Derived Consumption as Production+ Imports -Exports; * Provional; ** Excludes offtake of Imported LNG

Source: Ministry of Petroleum & Natural Gas

Table 44: Persons in workforce (according to usual status) in 2011-12

Description	Unit	Rural			Urban			Rural + Urban
		Male	Female	Persons	Male	Female	Persons	Persons
Projected population	million	431.7	409.8	841.5	199.8	186.1	385.9	1227.4
Persons in the work force in all sectors	lakh	2346	1018	3364	1092	273	1365	4729
Persons in the work force in all sectors	per 10000	5434	2484	3998	5465	1467	3537	3853
Persons in work force in Industry Division 20 of NIC 2008	per 10000	16	15	15	51	54	52	25
Persons in work force in Industry Division 21 of NIC 2008	per 10000	7	2	5	53	24	47	17
Persons in work force in Industry Division 20 of NIC 2008	lakh	3.8	1.5	5.3	5.6	1.5	7.0	12.3
Persons in work force in Industry Division 21 of NIC 2008	lakh	1.6	0.2	1.8	5.8	0.7	6.4	8.3
Persons in work force in Division 20 and 21 of NIC 2008	lakh	5.4	1.7	7.1	11.4	2.1	13.5	20.6

Note: The industry division 24 of NIC 2004 is equivalent of industry division 20 (manufacture of chemical & chemical products), 21(manufacture of pharmaceuticals, medicinal chemicals and botanical products) and 268 (manufacture of magnetic and optical media) of NIC 2008.

Source:Key Indicators of Employment and Unemployment in India, NSS 68th Round (July 2011- June 2012), NSSO

Table-45 : Production of Molasses in India during 2006-07 to 2012-13**(Figure in Lakh MT)**

States/UT	Production of Molasses						
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Andhra Pradesh	7.76	6.61	2.69	3.2	3.56	4.97	4.32
Bihar	1.09	1.26	0.82	0.76	1.06	1.20	2.93
Gujarat	5.34	5.75	5.26	5.08	4.98	5.91	4.20
Haryana	6.00	6.32	6.78	5.11	7.17	7.40	8.65
Karnataka	9.12	12.73	10.18	9.65	13.41	14.77	13.48
Maharashtra	32.06	28.88	15.56	24.89	32.64	30.88	26.64
Punjab	1.90	1.85	1.38	0.72	1.39	2.25	2.37
Tamil Nadu	12.88	10.50	7.79	7.50	9.99	11.85	10.39
Uttar Pradesh	46.86	37.41	22.59	29.14	32.83	38.88	42.46
Uttrakhand	2.67	2.63	1.48	1.80	1.86	2.29	1.68
Total 10 States	125.68	113.94	74.53	87.85	108.89	120.40	117.12

Source: Compiled on the basis of information received from State Excise Departments of 10 major Sugarcane producing States.

Table-46 : State-wise/Year-wise Production of Alcohol from Molasses in India during 2006-07 to 2012-13

(Figure in Lakh litre)

States/UT	Production of Alcohol						
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Andhra Pradesh	986.7	1006.29	1459.33	739.98	507.77	1324.06	1561.22
Bihar	137.4	161.31	352.01	183.14	279.66	428.16	539.22
Gujarat	1077.52	792.20	849.03	510.22	686.44	1084.43	839.88
Haryana	382.25	510.23	406.09	524.72	682.64	607.90	1060.12
Karnataka	1804.27	2162.08	2403.14	2154.09	2823.53	3823.73	3656.99
Maharashtra	5136.39	5218.95	4414.18	3368.69	3762.65	3851.81	4685.00
Punjab	1084.43	2270.09	913.19	249.68	582.72	565.24	75.60
Tamil Nadu	1913.53	1726.44	1595.46	1700.75	2119.43	2301.72	2288.69
Uttar Pradesh	6710.49	9265.22	6814.79	4516.05	6546.59	7201.42	7916.45
Uttrakhand	1215.84	1468.75	866.99	495.48	297.72	923.41	974.20
Total 10 States	20448.82	24581.56	20074.21	14442.80	18289.15	22111.88	23597.37

Source: Compiled on the basis of information received from State Excise Departments of 10 major Sugarcane producing States.

Table-47 :Export and Import of Ethanol (ITC HS code no. 22072000) during 2005-06 to 2013-14

(Quantity in thousand Litres & Value in Rs. Lakh)

Year	Export			Import		
	Quantity	Value	Price (Rs./LTR)	Quantity	Value	Price (Rs./LTR)
2005-06	37288	7992	21.43	310768	61127	19.67
2006-07	10083	2516	24.95	39239	10788	27.49
2007-08	13540	4147	30.63	5042	2771	54.96
2008-09	4424	1548	35.00	71543	25660	35.87
2009-10	4270	1684	39.43	278957	67535	24.21
2010-11	18872	6049	32.05	105982	34533	32.58
2011-12	30974	12729	41.10	53936	26983	50.03
2012-13	19613	8613	43.91	4606	2650	57.53
2013-14	22520	10748	47.72	59816	36935	61.75

Table -48 : Employment in Chemicals and Chemicals products (Industry division 24, NIC 2004) during 2001-02 to 2011-12

S. No.	Industry	Number of Person Engaged										
		2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
1	Chemicals and Chemicals products (Industry division 24, NIC 2004)	761244	755113	740441	784907	825435	877083	892944	961306	1005167	1100320	1223243
2	Industries Other than Chemicals and Chemicals products	6989122	7180835	7129640	7668717	8286245	9451351	9559591	10366179	10786888	1.2E+07	12206713
3	All Industries	7750366	7935948	7870081	8453624	9111680	1E+07	10452535	11327485	11792055	1.3E+07	13429956
4	Share in Employment (%)											
	(a) Share of Chemicals and Chemicals products	9.82	9.52	9.41	9.28	9.06	8.49	8.54	8.49	8.52	8.67	9.11
	(b) Share of Other than Chemicals and Chemicals products	90.18	90.48	90.59	90.72	90.94	91.51	91.46	91.51	91.48	91.33	90.89
5	Growth Rate in Employment (%)											
	(a) Chemicals and Chemicals products	-	-0.81	-1.94	6.01	5.16	6.26	1.81	7.66	4.56	9.47	11.17
	(b) Industries Other Than Chemicals and Chemicals products	-	2.74	-0.71	7.56	8.05	14.06	1.15	8.44	4.06	7.49	5.28
	(c) All Industries	-	2.39	-0.83	7.41	7.78	13.35	1.20	8.37	4.10	7.66	5.79

Note: 1. The description of product groups at 4-digit level under the division 24, NIC 2004 is given at page-3.

2. Figures for total person engaged for the period from 2008-09 to 2010-11 has been complied by adding figures in respect of Industry Division 20, 21 and 268 of NIC 2008

Source : Annual Survey of Industries (Factory Sector), Ministry of Statistics & Programme Implementation, New Delhi.

Table -49 : Employment in Chemicals and Chemicals products (Industry Division 20, NIC-2008) during 2008-09 to 2011-12

S.No.	Industry	Number of Person Engaged			
		2008-09	2009-10	2010-11	2011-12
1	Chemicals and Chemicals products (Industry Division 20, NIC 2008)	581053	588669	630017	674018
2	Industries Other than Chemicals and Chemicals products	10746432	11203386	12064836	12755938
3	All Industries	11327485	11792055	12694853	13429956
4	Share in Employment (%)				
	(a) Share of Chemicals and Chemicals products	5.13	4.99	4.96	5.02
	(b) Share of Other than C&PC	94.87	95.01	95.04	94.98
5	Growth Rate in Employment (%)				
	(a) Chemicals and Chemicals products		1.31	7.02	6.98
	(b) Industries Other Than Chemicals and Chemicals products		4.25	7.69	5.73
	(c) All Industries		4.10	7.66	5.79

Note: As per NIC- 2008, Chemical & Chemical products are covered under the industry division 20. The description of product groups at 4-digit level under the division 20, NIC 2008 is given at page-4.

Source : Annual Survey of Industries (Factory Sector), Ministry of Statistics & Programme

Table- 50: Gross Value Added from Chemical and Chemical products (Industry Division 24: NIC 2004) vis-a-vis Manufacturing sector and all Economic Activities

(at current prices)

(Rs.crore)

Description	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11 (3rd RE)	2011-12 (2nd RE)	2012-13 (1st RE)
Chemical and chemical products (Registered)	50287	57757	65230	71352	90931	103370	115729	165050	182589
Chemical and chemical products (Unregistered)	8610	9146	10114	11189	11366	11906	12701	13839	15310
Chemical and chemical products (Reg. + Unreg.)	58897	66904	75344	82541	102297	115276	128430	178889	197899
Growth over previous year (%)		13.6	12.6	9.6	23.9	12.7	11.4	39.3	10.6
Manufacturing (Registered)	292344	345443	427075	492758	561460	643538	754553	885547	948913
Manufacturing (Unregistered)	160881	176226	207753	239962	256862	278613	317936	350635	371994
Manufacturing (Reg. + Unreg.)	453225	521669	634828	732720	818322	922151	1072489	1236182	1320907
Growth over previous year (%)		15.1	21.7	15.4	11.7	12.7	16.3	15.3	6.9
GDP at Factor cost- All Economic activities	2971464	3390502.8	3953276	4582086	5303567	6108903	7248859.5	8391691	9388876
Growth over previous year (%)		14.1	16.6	15.9	15.7	15.2	18.7	15.8	11.9
Share of Manufacturing sector in GDP	15.3	15.4	16.1	16.0	15.4	15.1	14.8	14.7	14.1
Share of chemical and chemical products in GDP	1.98	1.97	1.91	1.80	1.93	1.89	1.77	2.13	2.11
Share of chemical and chemical products in Manufacturing Sector	13.00	12.82	11.87	11.26	12.50	12.50	11.97	14.47	14.98

Note: The description of product groups at 4-digit level under the division 24, NIC 2004 is given at page-3.

Source: National Accounts Statistics 2014, CSO, Ministry of Statistics & Programme Implementation

Table-51: Gross Value Added from Chemical and Chemical products (Industry Division 24:NIC 2004) vis-a-vis Manufacturing sector and all Economic Activities

(at 2004-05 prices)

(Rs.crore)

Description	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11 (3rd RE)	2011-12 (2nd RE)	2012-13 (1st RE)
Chemical and chemical products (Registered)	50287	55648	59877	63238	77015	87780	93300	122513	127115
Chemical and chemical products (Unregistered)	8610	8812	9284	9917	9626	10110	10240	10272	10658
Chemical and chemical products (Reg. + Unreg.)	58897	64461	69161	73155	86641	97891	103540	132785	137773
Growth over previous year (%)		9.4	7.3	5.8	18.4	13.0	5.8	28.2	3.8
Manufacturing (Registered)	292344	327739	379374	417528	442055	506679	555240	607589	614569
Manufacturing (Unregistered)	160881	171281	191084	211545	214247	223756	239912	246509	249307
Manufacturing (Reg. + Unreg.)	453225	499020	570458	629073	656302	730435	795152	854098	863876
Growth over previous year (%)		10.1	14.3	10.3	4.3	11.3	8.9	7.4	1.1
GDP at Factor cost for All Economic activities	2971464	3253073	3564364	3896636	4158676	4516071	4918533	5247530	5482111
Growth over previous year (%)		9.5	9.6	9.3	6.7	8.6	8.9	6.7	4.5
Share of Manufacturing sector in GDP	15.3	15.3	16.0	16.1	15.8	16.2	16.2	16.3	15.8
Share of chemical and chemical products in GDP	1.98	1.98	1.94	1.88	2.08	2.17	2.11	2.53	2.51
Share of chemical and chemical products in Manufacturing Sector	13.00	12.92	12.12	11.63	13.20	13.40	13.02	15.55	15.95

Note: The description of product groups at 4-digit level under the division 24, NIC 2004 is given at page-3.

Source: National Accounts Statistics 2014, CSO, Ministry of Statistics & Programme Implementation

Table-52: Value of Output from Chemicals and Chemical products (Industry Division 24: NIC 2004) vis-a-vis Manufacturing sector At current prices

(Rs. In crore)

VALUE OF OUTPUT	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
MANUFACTURING-REGISTERED	1657655	1885953	2360689	2726660	3195260	3644324	4541657	5561982	6002497
MANUFACTURING-UNREGISTERED	618227	672710	791809	911559	975519	1049435	1193596	1332800	1411845
Total MANUFACTURING	2275882	2558663	3152498	3638219	4170779	4693759	5735252	6894782	7414342
CHEMICAL AND CHEMICAL PRODUCTS-REGISTERED	210915	241554	275375	301218	391605	391849	488052	645715	714332
CHEMICAL AND CHEMICAL PRODUCTS-UNREGISTERED	38589	40994	45329	50149	50942	53363	56928	62026	68617
Total CHEMICAL AND CHEMICAL PRODUCTS	249504	282548	320704	351367	442547	445212	544980	707741	782949

Note: The description of product groups at 4-digit level under the division 24, NIC 2004 is given at page-3.

Source: National Accounts Statistics 2014, CSO, Ministry of Statistics & Programme Implementation

Table- 53: Value of Output from Chemicals and Chemical products (Industry Division 24: NIC 2004) vis-a-vis Manufacturing sector (At 2004-05 prices)

(In Rs. Crore)

VALUE OF OUTPUT	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
MANUFACTURING-REGISTERED	1657655	1804337	2126906	2351533	2568284	2915388	3396568	3838768	3908090
MANUFACTURING-UNREGISTERED	618227	653590	725734	799730	804331	839888	898130	934734	940707
Total MANUFACTURING	2275882	2457927	2852641	3151263	3372614	3755275	4294698	4773502	4848797
CHEMICAL AND CHEMICAL PRODUCTS-REGISTERED	210915	232733	252777	266966	331672	332752	393463	479301	497307
CHEMICAL AND CHEMICAL PRODUCTS-UNREGISTERED	38589	39497	41610	44447	43146	45315	45895	46041	47770
Total CHEMICAL AND CHEMICAL PRODUCTS	249504	272230	294386	311413	374818	378067	439358	525342	545077

Note: The description of product groups at 4-digit level under the division 24, NIC 2004 is given at page-3.

Source: National Accounts Statistics 2014, CSO, Ministry of Statistics & Programme Implementation

Table - 54: All India Estimate of Selected Characteristics of Factory Sector for Industry Division 24: NIC 2004: Chemicals and Chemical products

Characteristics	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
No of factories (no.)	11065	11177	11896	11900	15863	16118
No of workers (no.)	593264	611022	659519	691150	754902	830416
Total Output (Rs. crore)	275375	301218	391605	391849	488052	646320
Total Inputs (Rs. crore)	210287	228293	300674	288479	372317	480890
Gross Value Added (Rs. crore)	65088	72925	90931	103370	115735	165430

Note: The description of product groups at 4-digit level under the division 24, NIC 2004 is given at page-3.

Source: Collated from Annual Survey of Industries, Ministry of Statistics & Programme Implementation

Table - 55: State wise Estimate of Selected Characteristics of Factory Sector for Industry Division 20: NIC 2008: Chemicals and Chemical Products

State	No. of Factories				GVA (Rs. Lakh)				Total output (Rs. Lakh)			
	2008-09	2009-10	2010-11	2011-12	2008-09	2009-10	2010-11	2011-12	2008-09	2009-10	2010-11	2011-12
Andhra Pradesh	577	474	822	892	417581	225290	297251	400403	1826274	1265598	2056995	2593697
Assam	57	42	75	72	51855	99263	58631	110354	140308	189403	256921	315072
Bihar	32	30	47	35	961	2417	1391	2525	4859	22207	6572	8714
Chhattisgarh	69	81	84	87	14657	7887	9936	6759	94685	64497	58414	51128
Goa	48	45	44	51	78674	103716	7402	74026	797162	704017	635274	985807
Gujarat	1453	1518	2002	2058	1731087	2531866	2417220	2752199	8866289	9290846	10765309	13256514
Haryana	183	170	247	220	133821	139327	120222	88376	548270	548286	515904	617104
Himachal Pradesh	112	111	182	188	212010	137995	341716	230688	522418	431461	1090580	858930
Jammu & Kashmir	109	95	134	126	92213	89271	108621	165448	457895	367013	603313	678301
Jharkhand	89	111	94	87	29425	31840	33069	68908	90994	96793	142199	317488
Karnataka	407	407	484	503	183983	156554	237431	137609	850096	593745	997957	888872
Kerala	188	144	202	145	70243	111999	181163	174739	469808	503161	622249	617200
Madhya Pradesh	182	221	259	275	71660	102720	87693	194443	409095	408562	539171	993733
Maharashtra	1387	1278	1903	1809	1163984	1073108	1419596	1675960	5558636	4743143	5750230	7706704
Meghalaya	9	9	6	5	2372	3051	2851	5407	7517	8687	7680	10328
Orissa	62	71	87	79	150532	116835	140600	87938	1049576	602468	864061	1110286
Punjab	152	169	184	182	2518	109915	97023	1618002	518485	672066	590584	2267164
Rajasthan	233	291	308	325	219319	206365	101501	519941	954820	1107205	1180427	2572578
Sikkim		-	5	4		-	12565	20074		-	51727	73691
Tamil Nadu	1826	1776	2315	2398	142646	276050	298864	511281	1102234	1431041	1850244	3165390
Tripura	4	5	6	7	329	72	6590	197	1074	1022	13445	556
Uttarkhand	87	158	195	183	216156	179985	192206	284943	446458	598592	807472	834599
Uttar Pradesh	518	531	688	678	309267	329614	431233	548065	1462601	1565327	1898520	2469980
West Bengal	234	230	307	322	121801	162724	361775	170220	1772276	1228201	2249716	2209018
Dadra & N Haveli	136	144	197	192	72238	120046	83178	91058	356515	842582	649504	676284
Daman & Diu	123	146	127	133	24552	57886	80644	65051	329785	318834	544474	636930
Chandigarh	4	3	-	3	238	201	-	312	2412	2301	-	4799
Delhi	70	61	77	79	14087	10117	9737	19264	128381	98932	116959	207993
Puducherry	107	96	119	137	51984	39107	75738	98065	170732	150398	362865	290386
All India	8456	8418	11202	11276	5580194	6440369	7213220	10122362	28939656	27911458	35229032	46419406

Note: 1. The description of product groups at 4-digit level under the division 20, NIC 2008 is given at page-4.

Source :Annual Survey of Industries (Factory Sector), 2008-09, 2009-2010, 2010-11 and 2012-13, Ministry of Statistics & Programme Implementation

Table 56 : Exports of Major Chemicals and Petrochemicals as % of Production and Imports of Major Chemicals and Petrochemicals as % of Consumption

(In Thouand Tonnes)

Group	Description	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Major Chemicals	Production	7713	7945	7564	7895	8509	8730	8690	8839
Major Petrochemicals									
A. Basic major Petrochemicals		8291	8801	8322	8509	9304	10151	10384	10766
B. Intermediates		11852	11943	11325	12182	12671	14683	15053	15221
C. Other Petro-based Chemicals		1024	1139	1086	1648	1707	1899	1937	1930
Total Major Chemicals and Petrochemicals		28880	29828	28296	30235	32192	35464	36064	36755
Major Chemicals	Exports	581	626	599	1187	1268	1317	1087	1087
Major Petrochemicals									
A. Basic major Petrochemicals		1352	1181	823	1181	1562	2007	1969	2165
B. Intermediates		1482	1598	1323	1257	1561	1677	1795	1977
C. Other Petro-based Chemicals		383	379	707	338	519	463	445	520
Total Major Chemicals and Petrochemicals		3798	3783	3452	3963	4910	5463	5297	5748
Major Chemicals	Imports	1446	1922	2378	2651	2514	3162	3820	3721
Major Petrochemicals									
A. Basic major Petrochemicals		1266	1741	1840	2810	3276	3315	4142	4187
B. Intermediates		806	1079	1253	1933	2396	2095	2405	2950
C. Other Petro-based Chemicals		1132	1086	1148	1282	1742	1689	1964	2151
Total Major Chemicals and Petrochemicals		4650	5828	6619	8677	9928	10261	12330	13009

Table 56 : Exports of Major Chemicals and Petrochemicals as % of Production and Imports of Major Chemicals and Petrochemicals as % of Consumption

Major Chemicals	Consumption\$	8578	9241	9342	9360	9756	10576	11423	11473
Major Petrochemicals									
A. Basic major Petrochemicals		8205	9361	9339	10138	11018	11459	12557	12788
B. Intermediates		11177	11425	11254	12859	13506	15101	15663	16194
C. Other Petro-based Chemicals		1773	1846	1527	2592	2930	3125	3455	3561
Total Major Chemicals and Petrochemicals		29732	31873	31462	34949	37209	40262	43097	44016
Major Chemicals	Exports as % of Production	7.5	7.9	7.9	15.0	14.9	15.1	12.5	12.3
Major Petrochemicals									
A. Basic major Petrochemicals		16.3	13.4	9.9	13.9	16.8	19.8	19.0	20.1
B. Intermediates		12.5	13.4	11.7	10.3	12.3	11.4	11.9	13.0
C. Other Petro-based Chemicals		37.4	33.2	65.1	20.5	30.4	24.4	23.0	26.9
Total Major Chemicals and Petrochemicals		13.2	12.7	12.2	13.1	15.3	15.4	14.7	15.6
Major Chemicals	Imports as % of Consumption	16.9	20.8	25.5	28.3	25.8	29.9	33.4	32.4
Major Petrochemicals									
A. Basic major Petrochemicals		15.4	18.6	19.7	27.7	29.7	28.9	33.0	32.7
B. Intermediates		7.2	9.4	11.1	15.0	17.7	13.9	15.4	18.2
C. Other Petro-based Chemicals		63.9	58.8	75.2	49.5	59.5	54.1	56.8	60.4
Total Major Chemicals and Petrochemicals		15.6	18.3	21.0	24.8	26.7	25.5	28.6	29.6

Note: Product coverage under each group is given at page vii and viii. \$ Derived consumption as Production+ Imports-Exports

Table 57: Exports of all Chemicals as % of Value of output and Imports of all Chemicals as % of Consumption

(Rs. In Crore)

Item	Code	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Exports of Pharmaceutical products	HS code 30	14380	16712	23379	24566	30383	40817	54707
Exports of Fertilizers	HS code 31	49	104	337	512	236	397	480
Exports of all Chemicals (including Pharmaceutical products and Fertilizers)	HS codes 28,29,30,31,32,38,39,4002,54 and 55	75703	82589	101820	109435	135071	177046	206644
Imports of Pharmaceutical products	HS code 30	2914	2819	4262	5197	5504	8131	9521
Imports of Fertilizers	HS code 31	12119	18454	54837	28480	28322	44996	40412
Imports of Chemicals and Chemical products	HS codes 28,29,30,31,32,38,39,4002,54 and 55	81357	97646	160998	143790	172557	229546	259842
Value of Output of Chemicals and Chemical products at current prices	Industry Division 24 of NIC 2004	320704	351367	442547	445212	544980	707741	782949
Consumption of Chemicals and Chemical products	Value of Output + Imports - Exports	326358	366424	501725	479566	582465	760241	836146
Exports of all Chemicals as % of Value of Output		23.6	23.5	23.0	24.6	24.8	25.0	26.4
Imports of all Chemicals as % of Derived Consumption		24.9	26.6	32.1	30.0	29.6	30.2	31.1

Chapter 28: Inorganic Chemicals; Organic or Inorganic Compounds of Precious Metals, of Rare-Earth Metals, of Radioactive Elements or of Isotopes; Chapter 29: Organic Chemicals; Chapter 30: Pharmaceutical products; Chapter 31: Fertilizers ; Chapter 32: Tanning or Dyeing Extracts; Tannins and their Derivatives; Dyes, Pigments and Other Colouring Matter; Paints and Varnishes; Putty and other Mastics; Inks; Chapter 38: Miscellaneous Chemical Products; Chapter 39: Plastics and articles thereof; 4002: Synthetic rubber and factice derived from oils, in primary forms or in plates, sheets or strip; mixtures of any proChapter 54: Man-made Filaments and Chapter 55: Man-made staple fibres