

CHEMICALS & PETROCHEMICAL STATISTICS AT A GLANCE: 2013

GOVERNMENT OF INDIA,
MINISTRY OF CHEMICALS & FERTILIZERS
DEPARTMENT OF CHEMICALS & PETROCHEMICALS
NEW DELHI

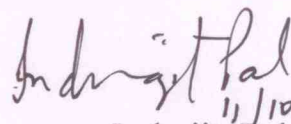
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PREFACE

The Department of Chemicals & Petrochemicals has brought out a publication "Chemicals & Petrochemicals Statistics At A Glance: 2013". It contains group-wise, product-wise, year-wise information on production and installed capacities of major Chemicals and Petrochemicals. It also contains data on Foreign Trade, Foreign Direct Investment, Index of Industrial Production and Wholesale Price Index.

2. I wish to acknowledge the painstaking efforts put in by Shri A.K. Mathur, Deputy Director General of this Department in bringing out this publication. The valuable contribution of Mrs. Swarn Sharma, Research Officer, Shri Darshan Singh, Senior Investigator and Shri Bharat Kumar, Junior Investigator in Statistics and Monitoring Division of this Department are also acknowledged.

3. I am sure the "Chemicals & Petrochemicals Statistics At A Glance : 2013" would be informative and of use to various stakeholders and users. We hope to bring out this publication biennially.

A handwritten signature in dark ink, appearing to read 'Indrajit Pal', with the date '11/10/13' written below it.

Indrajit Pal

Secretary

Department of Chemicals and Petrochemicals
Ministry of Chemicals and Fertilizers

Place: New Delhi

Dated: October 11, 2013

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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
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
NBR	Nitrite Butadiene Rubber
NFY	Nylon Filament Yarn
NIY	Nylon Industrial Yarn
ONCB	Ortho Nitro Chloro Benzene
PAN	Phthalic Anhydride
PBR	Poly Butadiene Rubber
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 (6) | : | Aluminium Fluoride, Calcium Carbide, Carbon Black, Potassium Chlorate, Sodium Chlorate, Titanium Dioxide, Red Phosphorous. |
| (iii) Organic Chemicals (20) | : | Acetic Acid, Acetic Anhydride, Acetone, Phenol, Methanol, Formaldehyde, Nitrobenzene, Citric Acid, Maleic Anhydride, Penta-Erithritol, Aniline, Chloro Methanes, ONCB, PNCB, MEK, Acetaldehyde, Ethanolamines, Ethyl Acetate, Ortho- Nitro Toluene, Iso Butyle Benzene. |
| (iv) Pesticides and Insecticides (44) | : | 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, Captan & Captafol Ziram(Thio Barbamate), Carbendzim (Bavistin), Calixin, Mancozab, Copper-Oxychloride, 2, 4-D , Butachlor, Isoproturon , Basalin , Glyphosate, Paraquat, Diuron, Atrazin, Fluchloralin, Zinc Phosphide, Aluminium Phosphide, Methyl Bromide , Dicofol. |
| (v) Dyes and dyestuff (15) | : | Azo Dyes, Acid Direct Dyes, Basic Dyes, Fast Colour Bases, Ingrain Dyes, Oil Soluble (Solvent Dyes), Optical Whitening Agents, Organic Pigment Colours, Pigment Emulsion, Reactive Dyes, Sulphur Dyes, 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 (7) | : | Low Density Polyethylene, High Density Polyethylene, Polystyrene, Polypropylene (Inc. Co-Polymer), Expandable Polystyrene, Poly Vinyl Chloride, Linear Low Density Polyethylene. |
| (3) Synthetic Rubber (6) | : | Styrene Butadiene Rubber, Poly Butadiene Rubber and 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 Ethylene 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 (20)

- | | |
|---|--|
| : | Diethylene Glycol, Diacetone Alcohol, Ethylene Dichloride, Butanol ,Poly Vinyl Alcohol,Oxo Alcohol, 2-Ethyl Hexanol, Vinyl Chloride Monomer, Epichlorhydrine, Methyl Isobutyl Ketone, Propylene Oxide, Propylene Glycol, Polyvinyl Acetate Resin, Methyl Methacrylate, Iso-Butanol, C4-Raffinate, 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 Industries

An Overview of Chemical and Petrochemical Industries

The chemical industry is an indispensable and 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 insecticides and pesticides 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 has led to a shift in manufacturing from the conventional material based products to synthetic products.

6. Petrochemicals, which comprise of plastic and host of other chemicals are downstream hydrocarbons derived from crude oil and natural gas. These hydrocarbons are valuable resources and constitute vital raw materials for industrial development. 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.

7. 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.

8. 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.

9. According to National Accounts Statistics 2013, brought out by the Central Statistics Office (CSO), chemical and chemical products sector (industry division 24 of NIC 2004) accounted for 2.06% of the GDP (at 2004-05 prices) in 2011-12, compared to 2.18% in 2010-11. The share of this sector in the GDP for manufacturing sector at 2004-05 prices was 13.1 % during 2011-12. The size of the Indian Chemical industry in terms of value of output in the year 2011-12 was 5,99,148 crore. The average Indices of Industrial Production (IIP) for the Chemical and Chemical products (division 24: NIC 2004) for the year 2012-13 stand at 127.3, which is 3.8% higher as compared to the previous year.

10. The export of major chemicals & petrochemicals was Rs. 1,50,706 crore during 2012-13. It contributed 9.2% of the total exports during 2012-13 and 2011-12. The import of major chemicals & petrochemicals was Rs. 2,02,347 crore during 2012-13. Its share in the total imports was 7.6% during 2012-13, compared to 7.2% during 2011-12.

11. According to estimates of the CSO, the registered sector contributed 90.5% in the Value Added from chemicals and petrochemicals products sector (industry division 24 of NIC 2004) at current prices during 2011-12. As per Annual Survey of Industries (Factory Sector), 2010-11, top seven States, namely, Gujarat (33.5%) Maharashtra (19.7%), Uttar Pradesh (6.0%), West Bengal (5.0%), Himachal Pradesh (4.7%), Tamilnadu (4.1%) and Andhra Pradesh (4.1%), contributed 77.2% in the Gross Value Added (GVA) for the chemical & chemical products sector (division 20 of NIC 2008) and the same seven States, namely, Gujarat (30.6%) Maharashtra (16.3), Uttar Pradesh (5.4%), West Bengal (6.4%), Himachal Pradesh (3.1%), Tamilnadu (5.3%) and Andhra Pradesh (5.8%), contributed 72.8% in Value of Output. The estimates of the Value of Output of different product groups in the Chemical Industry during the year 2010-11 are given in the table below:

Industry code NIC-2008	Description	Total Output (Rs. crore)
2011	Manufacture of basic chemicals	74506.74
2012	Manufacture of fertilizers and nitrogen compounds	78368.78
2013	Manufacture of plastics and synthetic rubber in primary forms	55754.94
2021	Manufacture of pesticides and other agrochemical products	20964.52
2022	Manufacture of paints, varnishes and similar coatings, printing ink and mastics	21812.21
2023	Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations	43526.51
2029	Manufacture of other chemical products n.e.c.	43271.04
2030	Manufacture of man-made fibres	14085.60
Total		353390.32

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

Section – II

Chemicals Sector

Table-1: Performance of Selected Major Chemicals (Group Wise) during 2005-06 to 2012-13 At a Glance

(Figures in 000'MT)

GROUP	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	CARG (%) (12-13/05-06)
1	2	3	4	5	6	7	8	9	10
1. Alkali Chemicals									
Capacity	6603	7072	7490	7490	7677	7652	7738	7752	2.32
Production	5475	5269	5443	5442	5602	5981	6113	6081	1.51
Capacity Utilisation (%)	83	75	73	73	73	78	79	78	
Imports	711	409	499	511	868	630	658	995	4.92
Exports	230	179	111	148	342	347	345	145	-6.38
2. Inorganic Chemicals									
Capacity	742	749	716	716	674	814	818	818	1.40
Production	544	602	609	513	518	572	574	533	-0.29
Capacity Utilisation (%)	73	80	85	72	77	70	70	65	
Imports	131	129	174	189	195	196	264	278	11.32
Exports	121	101	123	98	377	383	289	121	0.05
3. Organic Chemicals									
Capacity	1928	2062	2119	2143	2279	2321	2433	2348	2.85
Production	1599	1589	1599	1314	1325	1412	1464	1484	-1.06
Capacity Utilisation (%)	83	77	75	61	58	61	60	63	
Imports	664	869	1211	1639	1548	1639	2182	2487	20.76
Exports	53	62	116	83	143	187	315	407	33.65
4. Pesticides (Tech.)									
Capacity	148	145	146	146	163	200	209	210	5.13
Production	101	106	112	116	117	124	134	133	4.09
Capacity Utilisation (%)	68	73	77	79	72	62	64	63	
Imports	13	11	6	14	13	19	22	19	6.47
Exports	59	66	75	72	87	93	103	110	9.29
5. Dyes & Dyestuffs									
Capacity	111	128	149	164	188	218	252	252	12.43
Production	70	90	117	109	149	169	175	171	13.77
Capacity Utilisation (%)	63	70	79	67	79	78	69	68	
Imports	23	27	32	25	28	30	36	40	8.36
Exports	154	173	200	198	236	258	265	305	10.22
Total Major Chemicals (1 to 5)									
Capacity	9532	10156	10620	10659	10981	11205	11451	11380	2.56
Production	7788	7656	7880	7493	7710	8259	8461	8402	1.09
Capacity Utilisation (%)	82	75	74	70	70	74	74	74	
Imports	1542	1446	1922	2378	2651	2514	3162	3820	13.84
Exports	617	581	626	599	1187	1268	1317	1087	8.43

Table -2 : Production, Installed Capacity & Growth of Selected Major Chemicals (Group-wise) during 2005-06 to 2012-13

(Figures in thousand MT)

Group	Installed Capacity			Growth Rate	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
	2010-11	2011-12	2012-13									
1	2	3	4	5	6	7	8	9	10	11	12	13
Alkali Chemicals	7652	7738	7752	Production	5475	5269	5443	5442	5602	5981	6113	6081
				Growth Rate (%)		-3.8	3.3	0.0	2.9	6.8	2.2	-0.5
Inorganic Chemicals	814	818	818	Production	544	602	609	513	518	572	574	533
				Growth Rate (%)		10.7	1.1	-15.8	1.0	10.5	0.4	-7.2
Organic Chemicals	2321	2433	2348	Production	1599	1589	1599	1314	1325	1412	1464	1484
				Growth Rate (%)		-0.6	0.6	-17.8	0.9	6.6	3.7	1.3
Pesticides	200	209	210	Production	101	106	112	116	117	124	134	133
				Growth Rate (%)		5.8	5.2	3.3	0.9	6.7	8.1	-1.0
Dyes& Dyestuffs	218	252	252	Production	70	90	117	109	149	169	175	171
				Growth Rate (%)		29.4	30.4	-6.7	35.9	13.6	3.5	-2.0
Total Major Chemicals	11205	11451	11380	Production	7788	7656	7880	7493	7710	8259	8461	8402
				Growth Rate %)		-1.7	2.9	-4.9	2.9	7.1	2.4	-0.7

Table-3: Production, Capacity Utilization & Growth of Selected Major Chemicals (Product-Wise) during 2005-06 to 2012-13

Major Groups / Products	Installed Capacity			Production								CARG (%) (12-13 /05-06)	Capacity Utilisation in 2012-13 (Col.12/Col. 4)
	2010-11	2011-12	2012-13	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
I : ALKALI CHEMICALS													
SODA ASH	2951.00	2951.00	2951.00	2298.24	2078.06	2005.51	1989.05	2058.34	2298.75	2410.82	2437.79	0.85	82.61
CAUSTIC SODA	2665.92	2745.25	2794.70	1882.57	1914.22	2050.69	2050.03	2103.75	2178.45	2215.66	2161.66	1.99	77.35
LIQUID CHLORINE	2034.68	2041.86	2006.38	1293.80	1276.71	1387.13	1402.84	1439.92	1503.99	1486.10	1481.17	1.95	73.82
Total	7651.60	7738.11	7752.08	5474.61	5268.99	5443.32	5441.92	5602.00	5981.19	6112.58	6080.63	1.51	78.44
II : INORGANIC CHEMICALS													
ALUMINIUM FLOURIDE	18.16	18.16	18.16	20.08	20.30	19.43	15.07	11.55	9.80	7.31	6.70	-14.51	36.91
CALCIUM CARBIDE	112.00	112.00	112.00	64.64	91.95	97.41	66.55	22.02	44.70	66.39	70.98	1.35	63.38
CARBON BLACK	603.00	607.00	607.00	395.10	422.47	426.96	371.40	419.43	452.44	447.67	404.02	0.32	66.56
POTASSIUM CHLORATE	3.00	3.00	3.00	3.39	4.13	5.36	5.79	2.60	0.61	0.34	0.59	-22.15	19.60
TITANIUM DIOXIDE	76.05	76.05	76.05	60.29	62.92	59.15	53.28	61.32	64.02	52.14	50.14	-2.60	65.93
RED PHOSPHORUS	1.68	1.68	1.68	0.46	0.54	0.54	0.46	0.58	0.48	0.56	0.69	6.05	41.13
Total	813.89	817.89	817.89	543.97	602.31	608.86	512.55	517.51	572.05	574.41	533.13	-0.29	65.18
III : ORGANIC CHEMICALS													
ACETIC ACID	411.03	387.38	272.58	321.84	297.48	341.81	214.04	146.44	156.48	160.73	160.56	-9.46	58.90
ACETIC ANHYDRIDE	73.32	85.32	85.32	28.63	30.60	29.32	36.14	43.42	43.94	43.84	78.28	15.45	91.74
ACETONE	47.82	47.82	47.82	36.79	44.22	47.19	46.83	44.25	50.54	42.80	37.05	0.10	77.49
PHENOL	77.13	77.13	77.13	58.21	71.27	74.94	75.75	71.59	79.81	65.93	59.92	0.41	77.69
METHANOL	496.41	496.41	496.41	386.76	396.23	351.73	237.12	330.83	374.53	359.93	254.91	-5.78	51.35

Table-3: Production, Capacity Utilization & Growth of Selected Major Chemicals (Product-Wise) during 2005-06 to 2012-13

Major Groups / Products	Installed Capacity			Production								CARG (%) (12-13 /05-06)	Capacity Utilisation in 2012-13 (Col.12/Col. 4)
	2010-11	2011-12	2012-13	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
FORMALDEHYDE	389.04	423.29	448.79	249.39	234.82	242.76	231.84	261.29	266.61	263.80	275.36	1.42	61.36
NITROBENZENE	36.00	48.00	48.00	23.59	14.73	13.11	13.93	12.34	9.95	13.97	18.31	-3.55	38.15
MALEIC ANHYDRIDE	23.15	23.15	23.15	12.75	12.95	4.25	2.97	2.55	2.76	2.63	2.48	-20.84	10.73
PENTA-ERITHRITOL	18.60	21.70	22.00	15.18	13.73	14.95	13.82	11.21	11.73	11.40	11.49	-3.90	52.24
ANILINE	39.10	60.10	60.10	48.11	47.37	44.98	34.67	39.39	41.05	40.09	48.23	0.04	80.24
CHLORO METHANES	83.76	94.70	98.60	93.80	92.19	85.86	96.22	91.12	110.78	98.57	90.06	-0.58	91.34
ISOBUTYLE BENZENE	3.50	3.75	3.75	2.31	2.52	3.33	3.34	4.07	2.27	1.94	6.63	16.24	176.83
ONCB	30.00	30.00	30.00	14.75	12.82	13.81	15.71	15.44	16.69	13.74	15.41	0.63	51.38
PNCB	30.00	30.00	30.00	22.23	18.46	20.92	25.25	23.57	24.87	22.14	24.40	1.34	81.32
MEK	5.00	5.00	5.00	1.36	0.10	0.00	0.00	0.00	0.00	2.19	2.49	9.01	49.88
ACETALDEHYDE	261.40	183.51	183.51	172.03	171.66	203.37	117.62	59.82	32.26	65.39	76.27	-10.97	41.56
ETHANOLAMINES	10.00	10.00	10.00	8.65	7.27	9.86	12.31	7.00	3.45	8.73	7.05	-2.87	70.51
ETHYL ACETATE	277.12	389.63	389.63	95.21	113.56	90.84	128.10	147.20	170.48	235.36	305.26	18.11	78.35
ORTHO NITRO TOLUENE	8.80	16.40	16.40	7.45	6.80	5.72	8.10	13.80	14.20	11.14	9.82	4.04	59.90
Total	2321.18	2433.29	2348.19	1599.03	1588.76	1598.74	1313.75	1325.32	1412.38	1464.30	1483.99	-1.06	63.20
IV : PESTICIDES AND INSECTICIDES													
D.D.T.	6.34	6.34	6.34	4.43	4.50	3.44	3.31	3.61	3.09	3.62	3.83	-2.07	60.32
MALATHION	5.60	4.80	4.80	2.74	4.30	6.30	3.38	1.67	3.05	2.55	1.62	-7.26	33.69
DIMETHOATE	6.37	6.37	6.37	0.89	1.01	0.89	0.57	0.98	1.17	0.73	0.81	-1.47	12.65

Table-3:Production, Capacity Utilization & Growth of Selected Major Chemicals (Product-Wise) during 2005-06 to 2012-13

Major Groups / Products	Installed Capacity			Production								CARG (%) (12-13 /05-06)	Capacity Utilisation in 2012-13 (Col.12/Col. 4)
	2010-11	2011-12	2012-13	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
D.D.V.P.	3.68	3.68	3.68	3.84	3.89	3.48	3.01	3.87	3.48	4.64	4.41	1.98	119.70
QUINALPHOS	2.20	2.20	2.80	0.86	0.82	0.52	0.84	0.99	1.01	1.00	1.35	6.70	48.07
MONOCROTOPHOS	12.84	12.84	12.84	4.90	4.91	5.12	4.57	5.74	9.93	9.58	8.25	7.72	64.23
PHOSPHAMIDON	3.20	3.20	3.20	0.54	0.37	0.71	0.85	1.00	0.29	0.06	0.02	-40.10	0.47
PHORATE	7.10	7.10	7.10	9.63	9.89	7.80	6.12	7.12	7.67	7.01	5.75	-7.10	80.97
ETHION	4.02	4.02	4.02	2.03	2.60	2.20	1.41	1.50	1.92	1.33	0.94	-10.46	23.28
ENDOSULPHAN	12.79	12.79	12.79	8.27	9.31	10.54	11.35	9.90	11.49	1.35	0.00		
FENVALERATE	2.44	2.10	2.10	0.57	0.52	0.72	0.49	0.53	0.81	0.55	0.48	-2.53	22.81
CYPERMETHRIN	7.13	10.16	10.16	6.48	5.06	4.66	4.03	6.23	4.95	8.79	5.68	-1.86	55.94
ACEPHATE	11.86	11.86	11.86	9.46	9.27	10.73	10.25	11.55	14.28	15.97	15.76	7.57	132.92
CHLORPYRIPHOS	33.65	34.30	34.30	6.07	6.17	6.55	6.55	6.12	6.41	5.11	6.97	1.99	20.31
TRIAZOPHOS	1.50	1.50	1.50	2.85	1.84	1.84	2.06	0.88	1.58	0.72	0.93	-14.78	62.07
TEMEPHOS	0.50	0.50	0.50	0.03	0.10	0.23	0.27	0.08	0.12	0.13	0.20	31.77	40.00
DELTAMETHRIN	0.30	0.28	0.49	0.31	0.34	0.26	0.03	0.02	0.52	0.33	0.42	4.50	87.01
ALPHAMETHRIN	0.46	0.33	0.33	0.25	0.17	0.21	0.02	0.00	0.31	0.32	0.32	3.42	95.45
CAPTAN & CAPTAFOL	1.80	1.80	1.80	0.01	0.19	0.00	0.00	0.00	0.72	0.92	0.56	71.18	31.11
ZIRAM(THIO BARBAMATE)	0.45	0.45	0.45	0.11	0.24	0.19	0.07	0.00	0.50	0.54	0.39	19.38	85.24
CARBENDZIM(BAVISTIN)	1.17	1.41	1.12	0.54	0.14	0.07	0.20	0.38	0.59	0.43	0.34	-6.27	30.36
MANCOZAB	42.76	42.76	42.76	18.86	22.88	27.12	35.34	31.49	26.05	43.46	45.30	13.34	105.94

Table-3: Production, Capacity Utilization & Growth of Selected Major Chemicals (Product-Wise) during 2005-06 to 2012-13

Major Groups / Products	Installed Capacity			Production								(In thousand MT)	
	2010-11	2011-12	2012-13	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	CARG (%) (12-13 /05-06)	Capacity Utilisation in 2012-13 (Col.12/Col. 4)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
2, 4-D	12.00	17.00	17.00	8.07	8.36	8.90	9.57	10.64	11.52	12.37	12.95	6.99	76.18
BUTACHLOR	0.50	0.50	0.50	0.32	0.18	0.03	0.12	0.24	0.29	0.11	0.18	-7.80	36.60
ISOPROTURON	6.25	6.25	6.25	4.30	3.15	2.96	2.98	2.91	3.68	2.53	4.05	-0.83	64.83
GLYPHOSATE	7.64	9.26	9.26	1.52	2.89	2.58	4.39	4.66	4.86	5.25	6.12	22.05	66.09
DIURON	0.05	0.05	0.05	0.00	0.00	0.08	0.01	0.13	0.23	0.31	0.14		
ATRAZIN	0.50	0.50	0.50	0.00	0.09	0.22	0.26	0.26	0.25	0.66	0.65		130.40
ZINC PHOSPHIDE	1.10	1.10	1.10	0.70	1.11	0.95	0.91	0.92	0.86	0.89	0.60	-2.13	54.91
ALUMINIUM PHOSPHIDE	3.90	3.90	3.90	1.98	2.08	2.53	2.58	3.25	2.82	3.14	4.16	11.22	106.69
DICOFOL	0.15	0.15	0.15	0.04	0.05	0.09	0.09	0.02	0.05	0.08	0.05	3.16	30.67
Total	200.26	209.50	210.02	100.60	106.42	111.91	115.60	116.68	124.46	134.49	133.20	4.09	63.42
V : DYES AND DYESTUFFS													
AZO DYES	8.11	8.13	8.12	5.19	4.68	6.38	3.94	3.84	4.10	3.46	3.03	-7.38	37.33
ACID DIRECT DYES	25.58	25.58	25.58	0.11	3.00	7.68	8.09	11.88	15.69	13.32	10.08	90.18	39.40
DISPERSE DYES	37.21	55.21	55.21	16.74	20.76	21.82	23.26	25.09	28.58	29.29	28.09	7.67	50.88
INGRAIN DYES	1.97	1.61	1.61	0.42	0.57	1.20	1.09	0.93	0.69	0.98	0.58	4.51	35.78
OIL SOLUBLE (SOLVENT DYES)	3.77	3.77	3.77	0.74	0.75	1.23	2.15	2.25	2.02	2.64	2.31	17.64	61.19
OPTICAL WHITENING AGENTS	15.10	22.30	22.30	2.70	3.00	4.67	5.47	8.40	15.02	14.14	18.22	31.34	81.72
ORGANIC PIGMENT COLOURS	12.76	22.59	22.59	13.57	16.45	25.66	13.97	18.24	21.58	20.24	19.65	5.43	87.00

Table-3: Production, Capacity Utilization & Growth of Selected Major Chemicals (Product-Wise) during 2005-06 to 2012-13

Major Groups / Products	Installed Capacity			Production								CARG (%) (12-13 /05-06)	Capacity Utilisation in 2012-13 (Col.12/Col. 4)
	2010-11	2011-12	2012-13	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
PIGMENT EMULSION	4.81	4.81	4.81	2.22	1.82	1.90	3.39	4.79	5.63	4.96	6.17	15.74	128.23
REACTIVE DYES	99.76	99.76	99.56	22.57	31.11	40.48	40.58	62.53	64.66	76.71	75.11	18.74	75.44
SULPHUR DYES (SULPHUR BLACK)	3.00	3.00	3.00	3.00	5.72	4.24	5.64	8.69	8.58	7.02	6.58	11.90	219.33
VAT DYES	2.98	2.98	2.98	1.60	1.49	1.60	1.46	1.70	1.94	1.69	1.38	-2.10	46.21
OTHER DYES	2.652	2.652	2.652	0.656	0.579	0.452	0.416	0.443	0.551	0.465	0.298	-10.66	
Total	217.71	252.40	252.19	69.52	89.94	117.29	109.44	148.79	169.05	174.91	171.49	13.77	68.00
TOTAL MAJOR CHEMICALS (I TO V)	11204.63	11451.19	11380.36	7787.73	7656.41	7880.12	7493.26	7710.30	8259.13	8460.68	8402.43	1.09	73.83

Table -4 : Installed Capacities of Selected Chemicals (Group-wise) from 2005-06 to 2012-13**(Figures in 000'MT)**

GROUP / PRODUCT	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
1. Alkali Chemicals	6603	7072	7490	7490	7677	7652	7738	7752
2. Inorganic Chemicals	742	749	716	716	674	814	818	818
3. Organic Chemicals	1928	2062	2119	2143	2279	2321	2433	2348
4. Pesticides (Tech.)	148	145	146	146	163	200	209	210
5. Dyes & Dyestuffs	111	128	149	164	188	218	252	252
TOTAL ALL CHEMICALS	9532	10156	10620	10659	10981	11205	11451	11380

Table- 5: Consumption of Selected Major Chemicals (product-wise) during 2005-06 to 2012-13

PRODUCT NAME	CONSUMPTION \$							
	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
ALKALI CHEMICALS								
SODA ASH	2753.77	2201.45	2288.23	2261.40	2357.07	2588.95	2598.56	3048.51
CAUSTIC SODA	1913.93	2033.79	2161.92	2145.98	2338.17	2173.14	2346.09	2404.93
LIQUID CHLORINE	1288.08	1263.76	1381.40	1397.64	1432.78	1502.64	1481.72	1477.53
Total	5955.79	5498.99	5831.55	5805.01	6128.02	6264.73	6426.37	6930.97
INORGANIC CHEMICALS								
ALUMINIUM FLOURIDE	20.41	20.12	22.71	29.90	27.56	16.72	32.39	29.19
CALCIUM CARBIDE	110.08	140.93	153.41	137.16	72.65	100.22	121.62	127.09
CARBON BLACK	353.44	393.12	410.43	353.03	133.51	161.87	294.31	436.79
POTASSIUM CHLORATE	2.14	-4.29	-5.52	3.18	8.25	6.40	5.80	7.27
SODIUM CHLORATE	9.40	14.06	13.92	19.02	21.79	24.76	25.01	25.04
TITANIUM DIOXIDE	59.03	66.77	64.65	60.53	70.56	74.82	69.77	64.50
RED PHOSPHORUS	0.24	0.32	0.18	0.39	0.53	0.55	0.57	0.52
Total	554.74	631.04	659.78	603.22	334.85	385.33	549.46	690.38
ORGANIC CHEMICALS								
ACETIC ACID	351.88	407.12	463.20	486.49	523.07	614.21	704.88	800.68
ACETIC ANHYDRIDE	28.74	29.58	28.89	32.01	43.06	42.80	42.72	76.58
ACETONE	100.61	103.90	111.94	113.25	123.83	125.97	142.24	130.33
PHENOL	152.14	137.43	175.73	165.47	171.94	202.01	211.54	232.24
METHANOL	787.39	922.28	1108.81	1292.72	1107.18	1144.39	1439.15	1469.22
FORMALDEHYDE	247.29	233.03	237.49	229.13	258.01	262.94	259.94	270.66
NITROBENZENE	23.48	14.73	13.24	13.89	12.20	9.84	13.86	18.15
CITRIC ACID	13.67	25.00	30.99	34.04	39.10	42.31	50.40	54.33
MALEIC ANHYDRIDE	21.05	22.06	27.38	35.71	30.13	40.66	37.18	39.33
PENTA-ERITHRITOL	19.48	17.53	19.79	19.35	21.80	24.15	25.11	24.76
ANILINE	50.97	56.20	61.42	52.50	58.20	63.91	54.45	63.48
CHLORO METHANES	93.66	92.05	87.82	96.27	91.33	111.25	98.69	90.17
ISOBUTYLE	1.33	0.12	-3.98	-4.18	-6.70	-9.19	-11.98	-6.68
ONCB	13.46	18.03	18.82	20.80	18.56	19.86	15.75	17.12
PNCB	20.99	16.81	20.57	24.92	25.36	25.02	21.22	22.30
MEK	14.50	17.68	21.88	20.36	24.45	21.33	31.98	33.68
ACETALDEHYDE	172.13	171.67	203.26	117.44	59.89	32.23	65.21	76.08
ETHANOLAMINES	8.73	9.67	12.57	13.67	11.38	8.90	13.47	16.65
ETHYL ACETATE	89.54	102.51	58.19	104.07	115.01	75.83	113.77	137.50
MENTHOL	-8.31	-7.54	-10.66	-6.89	-11.92	-8.22	-9.35	-11.85

Table- 5: Consumption of Selected Major Chemicals (product-wise) during 2005-06 to 2012-13

PRODUCT NAME	CONSUMPTION \$							
	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
ORTHO NITRO TOLUENE	6752.00	5846.00	5690.00	8806.00	13462.00	13799.00	10868.00	8888.00
Total	8954.73	8235.85	8377.32	11667.02	16177.88	16649.18	14188.21	12442.73
PESTICIDES AND INSECTICIDES								
D.D.T.	3.23	0.60	0.93	3.31	3.57	3.06	3.62	3.83
MALATHION	2.74	4.30	6.30	3.08	0.67	2.55	2.12	1.29
PARATHION (METHYL)	1.34	0.91	-0.18	0.00	0.00	0.00	0.00	0.00
DIMETHOATE	0.85	0.67	0.43	0.58	0.65	0.87	0.88	0.92
D.D.V.P.	3.39	2.61	2.23	2.01	3.05	2.59	3.54	3.86
QUINALPHOS	0.41	0.47	0.43	0.64	0.65	0.34	0.52	0.88
MONOCROTOPHOS	4.90	4.91	5.12	4.57	5.74	9.93	9.58	8.25
PHOSPHAMIDON	0.54	0.37	0.71	0.85	1.00	0.29	0.06	0.02
PHORATE	9.63	9.89	7.80	6.12	7.12	7.67	7.01	5.75
ETHION	2.03	2.60	2.20	1.41	1.50	1.92	1.33	0.94
ENDOSULPHAN	5.22	6.14	6.49	10.00	6.01	6.98	-0.26	-0.08
FENVALERATE	0.57	0.52	0.72	0.49	0.53	0.81	0.55	0.48
CYPERMETHRIN	-4.29	-7.28	-7.84	-6.46	-7.23	-5.91	-1.78	-4.58
ANILOPHOS	0.20	0.02	0.00	0.00	0.00	0.00	0.00	0.00
ACEPHATE	9.46	9.27	10.73	10.25	11.55	14.28	15.97	15.76
CHLORPYRIPHOS	6.07	6.17	6.55	6.55	6.12	6.41	5.11	6.97
PHOSALONE	0.27	0.25	0.50	0.00	0.00	0.00	0.00	0.00
METASYSTOX	0.32	0.63	0.00	0.00	0.00	0.00	0.00	0.00
FENTHION	0.16	-0.20	-0.01	0.00	-0.02	0.00	0.00	0.00
TRIAZOPHOS	2.85	1.84	1.84	2.06	0.88	1.58	0.72	0.93
LINDANE	0.12	0.13	0.06	0.00	0.00	0.00	0.00	0.00
TEMEPHOS	0.03	0.10	0.23	0.27	0.08	0.12	0.13	0.20
DELTAMETHRIN	0.31	0.34	0.26	0.03	0.02	0.52	0.33	0.42
ALPHAMETHRIN	0.25	0.17	0.21	0.02	0.00	0.31	0.32	0.32
OTHER PESTICIDES	-2.01	-3.85	-7.38	-13.79	-12.17	-21.63	-24.94	-32.21
OTHER INSECTICIDES	-22.24	-25.84	-37.26	-24.84	-30.00	-20.67	-24.55	-24.70
CAPTAN & CAPTAFOL	0.01	0.19	0.00	0.00	0.00	0.72	0.92	0.56
ZIRAM(THIO BARBAMATE)	0.11	0.24	0.19	0.07	0.00	0.50	0.54	0.39
CARBENDZIM(BAVISTIN)	0.54	0.14	0.07	0.20	0.38	0.59	0.43	0.34
CALIXIN	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00
MANCOZAB	18.86	22.88	27.12	35.34	31.49	26.05	43.46	45.30
COPPER-OXYCHLORIDE	-0.41	-0.09	-0.20	-0.22	-0.32	-0.62	-0.43	-0.48

Table- 5: Consumption of Selected Major Chemicals (product-wise) during 2005-06 to 2012-13

PRODUCT NAME	CONSUMPTION \$							
	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
2, 4-D	3.93	5.95	8.16	6.48	2.30	2.89	-0.89	-2.41
BUTACHLOR	0.32	0.18	0.03	0.12	0.24	0.29	0.11	0.18
ISOPROTURON	3.36	1.99	1.95	1.34	1.10	0.36	0.29	-0.13
GLYPHOSATE	1.52	2.89	2.58	4.39	4.66	4.86	5.25	6.12
DIURON	0.00	0.00	0.08	0.01	0.13	0.23	0.31	0.14
ATRAZIN	0.00	0.09	0.22	0.26	0.26	0.25	0.66	0.65
FLUCHLORALIN	0.12	0.10	0.00	0.00	0.00	0.00	0.00	0.00
ZINC PHOSPHIDE	0.70	1.11	0.95	0.91	0.92	0.86	0.89	0.60
ALUMINIUM PHOSPHIDE	0.68	0.65	1.14	1.35	1.50	0.85	1.20	1.84
METHYL BROMIDE	0.05	0.71	0.13	0.31	0.14	0.43	0.50	0.68
DICOFOL	0.04	0.05	0.09	0.09	0.02	0.05	0.08	0.05
Total	56.20	52.86	43.55	57.76	42.53	50.28	53.57	43.07

\$ Derived consumption as Production + Imports - Exports

Section – III

Petrochemicals Sector

Table- 6: Performance of Selected Major Petrochemicals (Group Wise) during 2005-06 to 2012-13 At a Glance

(Figures In thousand MT)

Group	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	CARG (%) (12-13/05-06)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. SYNTHETIC FIBRES / YARN									
Capacity	2339	3223	3570	3220	3266	3459	3674	3800	7.18
Production	1959	2321	2648	2469	2819	3083	3042	3040	6.48
Capacity Utilisation (%)	83.7	72.0	74.2	76.7	86.3	89.1	82.8	80.0	
Imports	162	158	141	132	98	121	142	147	-1.42
Exports	175	322	396	350	404	576	734	776	23.66
2. POLYMERS									
Capacity	4710	5187	5777	5680	6130	7406	7450	7420	6.71
Production	4768	5183	5304	5060	4791	5292	6211	6389	4.27
Capacity Utilisation (%)	101.2	99.9	91.8	89.1	78.2	71.5	83.4	86.1	
Imports	780	750	1152	1275	2160	2500	2435	3180	22.23
Exports	698	881	631	357	658	822	1163	1113	6.89
3. SYNTHETIC RUBBER									
Capacity	148	148	186	113	113	113	113	109	-4.24
Production	92	95	105	96	106	95	88	86	-1.03
Capacity Utilisation (%)	62.3	64.3	56.5	85.0	93.6	83.7	77.9	78.5	
Imports	240	286	342	290	376	446	493	520	11.68
Exports	22	16	14	16	15	15	22	11	-8.61
4. SYNTHETIC DETERGENT INTERMEDIATES									
Capacity	578	578	611	587	621	621	656	671	2.17
Production	555	556	585	552	618	638	623	627	1.74
Capacity Utilisation (%)	96.2	96.3	95.7	94.0	99.5	102.8	94.9	93.4	
Imports	6	26	49	76	91	79	107	127	56.43
Exports	108	127	130	90	95	134	75	50	-10.25
5 : PERFORMANCE PLASTICS									
Capacity	140	166	205	206	206	227	248	248	8.54
Production	127	136	160	145	176	196	188	193	6.08
Capacity Utilisation (%)	91.1	81.8	78.0	70.3	85.4	86.3	75.7	77.6	
Imports	37	46	57	67	85	130	137	168	23.97
Exports	5	6	9	9	9	15	12	18	21.40
Total Basic Major Petrochemicals (1 to 5)									
Capacity	7914	9301	10349	9806	10336	11826	12141	12248	6.44
Production	7502	8291	8801	8322	8509	9304	10151	10334	4.68
Capacity Utilisation (%)	94.8	89.1	85.0	84.9	82.3	78.7	83.6	84.4	
Imports	1225	1266	1741	1840	2810	3276	3315	4142	19.01
Exports	1007	1352	1181	823	1181	1562	2007	1969	10.05

Table -7 : Production, Installed Capacity & Growth of Selected Major Petrochemicals (Group-wise) during 2005-06 to 2012-13

(Figures in thousand MT)

Group	Installed Capacity			Production / Growth Rate	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
	2010-11	2011-12	2012-13									
1	2	3	4	5	6	7	8	9	10	11	12	13
Synthetic Fibers	3459	3674	3800	Production	1959	2321	2648	2469	2819	3083	3042	3040
				Growth Rate (%)		18.5	14.1	-6.8	14.2	9.4	-1.3	-0.1
Polymers	7406	7450	7420	Production	4768	5183	5304	5060	4791	5292	6211	6389
				Growth Rate (%)		8.7	2.3	-4.6	-5.3	10.5	17.4	2.9
Elastomers (S.Rubber)	113	113	109	Production	92	95	105	96	106	95	88	86
				Growth Rate (%)		3.2	10.7	-8.5	10.0	-10.5	-7.0	-2.8
Synth. Detergent Intermediates	621	656	671	Production	555	556	585	552	618	638	623	627
				Growth Rate (%)		0.2	5.1	-5.7	12.0	3.3	-2.4	0.7
Performance Plastics	227	248	248	Production	127	136	160	145	176	196	188	193
				Growth Rate (%)		6.9	17.3	-9.4	21.5	11.4	-4.2	2.6
Total Major Petrochemicals	11826	12141	12248	Production	7502	8291	8801	8322	8509	9304	10151	10334
				Growth Rate (%)		10.5	6.1	-5.4	2.3	9.3	9.1	1.8

Table-8: Production, Capacity Utilization & Growth of Selected Major Petrochemicals (Product-Wise) during 2005-06 to 2012-13

Major Groups / Products	Installed Capacity			Production								(In thousand MT)	
	2010-11	2011-12	2012-13	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	CARG (%) (12 13/05-06)	Capacity Utilisation in 2012-13 (Col.12/Col. 4)
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) (\$)	2038	2252	2363	1068	1265	1474	1387	1562	1789	1834	1833	8.03	77.58
2. Nylon Filament Yarn (NFY) (\$\$)	20	20	20	40	32	28	28	30	33	30	22	-8.08	109.72
3. Nylon Industrial Yarn (NIY) (\$\$)	48	48	48	55	72	84	69	88	86	88	86	6.46	178.89
4. Polypropylene Filament Yarn (PPFY)(\$\$)	8	8	8	9	10	10	9	9	6	7	6	-4.39	80.36
Sub Total Yarn (1+2+3+4)	2114	2328	2439	1171	1378	1595	1493	1689	1914	1960	1948	7.53	79.85
5. Acrylic Fibre (Inc. Dry Spun) (AF)	95	95	107	114	107	85	78	91	76	76	75	-5.78	70.07
6. Polyester Staple Fibre (PSF)	1174	1174	1174	623	785	919	843	980	1037	953	962	6.40	81.93
7. Polypropylene Staple Fibre (PPSF)	4	5	8	3	4	3	3	3	4	4	4	4.59	53.25
8. Polyester Staple Fibrefil (PSFF)	72	72	72	47	47	45	51	54	53	49	51	1.07	70.96
Total Synth. Fibre / Yarn	3459	3674	3800	1959	2321	2648	2469	2819	3083	3042	3040	6.48	79.99
II : POLYMERS													
1. Linear Low Density Polyethylene (LLDPE)	No separate Capacity			689	772	837	817	683	897	1033	1012	5.65	
2. High Density Polyethylene (HDPE)	No separate Capacity			1035	958	974	942	856	887	1119	1177	1.86	
LLDPE/HDPE (Combined) (\$\$\$)	2735	2735	2735	1723	1730	1811	1758	1539	1784	2152	2189	3.47	80.03
3. Low Density Polyethylene (LDPE)	160	160	160	201	195	198	191	193	179	194	187	-1.03	116.61
4. Polystyrene(PS)	462	462	462	311	285	274	240	270	296	288	290	-0.98	62.74
5. Polypropylene(PP)	2676	2676	2676	1541	2001	1978	1771	1617	1684	2209	2387	6.45	89.19
6. Poly Vinyl Chloride(PVC)	1279	1279	1279	953	926	998	1051	1110	1278	1296	1257	4.02	98.25
7. Expandable Polystyrene (EX-PS)	94	138	108	39	46	44	49	63	71	72	81	10.87	74.82
Total Polymers	7406	7450	7420	4768	5183	5304	5060	4791	5292	6211	6389	4.27	86.11
III : SYNTHETIC RUBBER													

Table-8: Production, Capacity Utilization & Growth of Selected Major Petrochemicals (Product-Wise) during 2005-06 to 2012-13

(In thousand MT)													
Major Groups / Products	Installed Capacity			Production								CARG (%) (12 13/05-06)	Capacity Utilisation in 2012-13 (Col.12/Col. 4)
	2010-11	2011-12	2012-13	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Styrene Butadiene Rubber (SBR)	14	14	10	15	13	17	13	19	12	9	8	-8.70	81.69
2. Poly Butadiene Rubber (PBR)	74	74	74	67	72	74	72	73	76	79	77	1.98	104.40
3. Nitrile Butadiene Rubber (NBR)	25	25	25	9	10	13	11	13	6	0	0	-47.53	0.40
Total Synthetic Rubber	113	113	109	92	95	105	96	106	95	88	86	-1.03	78.46
IV : SYNTHETIC DETERGENT INTERMEDIATES													
1. Linear Alkyl Benzene (LAB)	497	532	547	468	460	471	434	464	475	454	455	-0.40	83.17
2. Ethylene Oxide (EO)	124	124	124	88	96	114	117	154	164	169	172	10.12	138.59
Total Synth. Detergent Intermediates	621	656	671	555	556	585	552	618	638	623	627	1.74	93.41
V : PERFORMANCE PLASTICS													
1. ABS Resin	107	128	128	76	74	78	68	84	90	89	91	2.56	70.73
2. Nylon-6 & Nylon 66	20	20	20	13	18	17	16	18	21	18	19	5.27	96.71
3. Polymethyl Methacrylate (PMMA)	4	4	4	2	3	3	2	3	3	3	3	0.42	63.50
4. Styrene Acrylonitrile (SAN)	96	96	96	36	41	61	58	72	82	77	80	12.31	83.48
Total Performance Plastics	227	248	248	127	136	160	145	176	196	188	193	6.08	77.64
TOTAL BASIC MAJOR PETROCHEMICALS													
(I+II+III+IV+V)	11826	12141	12248	7502	8291	8801	8322	8509	9304	10151	10334	4.68	84.37
B : INTERMEDIATES													
I : FIBRE INTERMEDIATES													
1. Acrylonitrile (ACN)	41	41	41	33	37	39	30	39	38	38	33	-0.11	80.47
2. Caprolactum	120	120	120	117	121	86	84	123	123	118	99	-2.37	82.27
3. Mono Ethylene Glycol (MEG)	1040	1040	1040	881	872	923	783	738	746	997	1061	2.69	102.04
4. Purified Terephthalic Acid (PTA)	3753	3753	3753	1734	2379	2059	2154	2985	3191	3308	3494	10.52	93.10
Total Fibre Intermediates	4954	4954	4954	2766	3410	3107	3052	3886	4097	4461	4687	7.83	94.61

Table-8: Production, Capacity Utilization & Growth of Selected Major Petrochemicals (Product-Wise) during 2005-06 to 2012-13

(In thousand MT)													
Major Groups / Products	Installed Capacity			Production								CARG (%) (12 13/05-06)	Capacity Utilisation in 2012-13 (Col.12/Col. 4)
	2010-11	2011-12	2012-13	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
II : BUILDING BLOCKS													
OLEFINS													
1. Ethylene	3783	3783	3783	2719	2683	2810	2639	2515	2665	3320	3315	2.87	87.62
2. Propylene	2886	2886	2886	1745	2089	2157	1887	1859	1930	2528	2621	5.99	90.82
3. Butadiene	295	295	295	207	223	244	214	205	242	250	235	1.84	79.71
Total Olefins	6964	6964	6964	4671	4995	5211	4740	4580	4837	6097	6171	4.06	88.61
AROMATICS													
1. Benzene	1279	1282	1283	686	886	867	880	823	945	1002	1048	6.25	81.72
2. Toluene	258	258	258	159	147	142	139	137	128	132	108	-5.32	42.01
3. Mixed Xylene	165	165	165	56	58	74	78	55	44	51	43	-3.53	26.26
4. Ortho-xylene	420	420	420	242	431	269	224	358	400	390	444	9.05	105.83
5. Paraxylene	2218	2218	2218	1394	1925	2137	2155	2223	2137	2394	2360	7.81	106.39
Total Aromatics	4340	4343	4344	2537	3447	3488	3475	3595	3655	3969	4004	6.74	92.18
C : Other Petro-based Chemicals													
1. Butanol	**	**	26	15	14	14	11	8	18	22	14	-0.35	55.42
2. C4-Raffinate	262	262	262	105	76	77	55	65	71	209	395	20.91	150.82
3. Di-Ethylene Glycol	71	72	72	58	60	68	58	69	73	99	103	8.42	142.89
4. Diacetone Alcohol	9	9	9	9	9	9	8	9	4	5	3	-13.84	35.02
5. Ethylene Dichloride (By Product)	593	593	593	263	220	267	277	445	454	435	316	2.66	53.36
6. 2-Ethyl Hexanol**	25	25	25	24	24	27	23	16	29	49	50	11.11	199.10
7. Epichlorohydrine	10	10	10	11	10	9	8	7	8	9	11	-0.58	106.92
8. Iso-Butanol	**	**	3	4	4	3	3	3	3	2	2	-7.63	79.33
9. Isopropanol (IPA)	70	70	70	28	21	49	51	62	67	71	70	14.30	100.47

Table-8: Production, Capacity Utilization & Growth of Selected Major Petrochemicals (Product-Wise) during 2005-06 to 2012-13

Major Groups / Products	Installed Capacity			Production								CARG (%) (12 13/05-06)	Capacity Utilisation in 2012-13 (Col.12/Col. 4)
	2010-11	2011-12	2012-13	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13		
	2	3	4	5	6	7	8	9	10	11	12	13	14
10. Methyl Methacrylate (MMA)	4	4	4	4	4	4	3	5	5	4	3	-3.66	77.90
11. Phthalic Anhydride (PAN)	284	309	309	192	223	244	207	232	253	250	254	4.14	82.35
12. Propylene Oxide (PO)	27	27	27	27	28	28	29	32	32	35	30	1.33	110.50
13. Propylene Glycol (PG)	15	15	15	16	16	17	16	19	17	19	15	-0.77	100.74
14. Polyvinyl Acetate Resin	0	0	0	12	10	11	10	4	2	0	0		
15. Vinyl Acetate Monomer (VAM)	0	0	0	26	24	23	24	0	0	0	0		
16. Vinyl Chloride Monomer (VCM) (By Product)	541	541	541	308	280	289	303	674	672	689	669	11.73	123.65
(\$): 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 Petrochemicals from 2005-06 to 2012-13**(Figures in 000'MT)**

GROUP / PRODUCT	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
A : BASIC PETROCHEMICALS								
I : SYNTHETIC FIBRES	2339	3223	3570	3220	3266	3459	3674	3800
II : POLYMERS	4710	5187	5777	5680	6130	7406	7450	7420
III : SYNTHETIC RUBBER (ELASTOMERS)	148	148	186	113	113	113	113	109
IV : SYNTH. DETERGENT INTERMEDIATE	578	578	611	587	621	621	656	671
V : PERFORMANCE PLASTICS	140	166	205	206	206	227	248	248
MAJOR PETROCHEMICALS (I TO V)	7914	9301	10349	9806	10336	11826	12141	12248
B : INTERMEDIATES								
VI : FIBRE INTERMEDIATES	2860	4181	4368	4054	4774	4954	4954	4954
VII : OLEFINS	4375	4475	5517	5343	5659	6964	6964	6964
VIII : AROMATICS	3142	3528	4345	4166	4213	4340	4343	4344

Table- 10: Consumption of Selected Major Petrochemicals (Product-wise) during 2005-06 to 2012-13

('000' (MT))

PRODUCT NAME	CONSUMPTION \$							
	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
I. SYNTHETIC FIBRE								
ACRYLIC FIBRE	114	110	89	85	95	75	70	85
POLYESTER STAPLE FIBREFILL	47	47	45	51	54	53	49	51
NYLON FILAMENT YARN	46	41	29	32	35	49	51	44
NYLON INDUSTRIAL YARN/TYRE CORD	68	81	85	70	97	94	93	94
POLYESTER FILAMENT YARN	1057	1188	1341	1276	1385	1431	1353	1307
POLYESTER STAPLE FIBRE	596	675	790	723	834	916	822	821
POLYPROPYLENE FILAMENT YARN	14	12	11	10	9	6	8	6
POLYPROPYLENE STAPLE FIBRE	3	3	3	3	3	3	4	2
Total	1946	2157	2393	2250	2512	2628	2450	2411
II. POLYMERS								
LOW DENSITY POLYETHYLENE	232	254	269	273	348	363	379	434
HIGH DENSITY POLYTHYLENE	888	834	1094	1115	1303	1268	1302	1657
POLYESTYRENE	204	201	212	194	232	262	257	252
POLYPROPYLENE (INC. CO-POLYMER)	1445	1669	1825	1901	1478	1527	1791	2056
EXPANDABLE POLYESTYRENE	37	42	51	53	66	78	77	82
POLY VINYL CHLORIDE	1199	1149	1349	1388	1738	1939	2144	2389
LINEAR LOW DENSITY POLYTHYLENE	790	869	981	1013	1059	1467	1474	1529
PVC COMPOUND	55	34	43	41	70	65	59	59
ULTRA H M W POLYETHYLENE	2	0	0	0	0	0	0	0
Total	4852	5052	5824	5977	6293	6970	7483	8456
III. SYNTHETIC RUBBER								
STYRENE BUTADIENE RUBBER	73	106	122	104	157	195	214	207
POLY BUTADIENE RUBBER	79	95	103	94	122	123	145	147
ETHYL PROPYLENE DIMERS	12	15	16	13	19	26	26	27
ETHYL VINYL ACETATE	103	87	115	88	77	90	83	108
NITRILE BUTADIENE RUBBER	20	23	25	17	25	22	9	26
BUTYL RUBBER	40	47	52	53	66	70	82	78
Total	328	372	433	371	466	526	559	594
IV. YNTHETIC DETERGENT INTERMEDIATES								

Table- 10: Consumption of Selected Major Petrochemicals (Product-wise) during 2005-06 to 2012-13
('000' (MT))

PRODUCT NAME	CONSUMPTION \$							
	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
LINEAR ALKYL BENZENE	366	359	390	420	461	420	486	532
ETHYLENE OXIDE	88	97	114	117	154	163	169	171
Total	453	455	504	538	615	583	655	704
V. PERFOR MANCE PLASTICS								
ABS RESIN	82	85	90	88	114	131	134	147
NYLON-6	31	36	43	47	58	77	86	97
POLYMETHYL METHACRYLATE	7	8	5	3	4	15	10	11
STYRENE ACRYLONITRILE	39	46	68	64	74	87	82	86
NYLON 6,6	1	1	1	1	1	1	1	1
Total	160	176	207	203	252	311	312	342
TOTAL BASIC MAJOR PETROCHEMICALS								
(I+II+III+IV+V)	7740	8212	9361	9339	10138	11018	11459	12507
FIBRE INTERMEDIATE								
ACRYLONITRILE	103	121	121	109	104	110	110	113
CAPROLACTUM	109	114	109	94	122	115	110	111
DIMETHYL TEREPHTHALATE	203	38	7	4	4	4	3	2
MONO EHYLENE GLYCOL	838	966	1133	1173	1415	1482	1565	1644
PURIFIED TEREPHTHALIC ACID	1829	2521	2118	2295	3460	3934	3888	4138
Total	3082	3760	3488	3675	5105	5646	5675	6009
OLEFINS								
BUTADIENE	122	110	116	98	95	111	133	127
ETHYLENE	2741	2699	2812	2659	2550	2780	3334	3338
PROPYLENE	1770	2089	2150	1888	1835	1906	2519	2616
Total	4632	4899	5077	4644	4480	4796	5987	6081
AROMATICS								
BENZENE	466	450	564	522	546	426	544	446
MIXED XYLENE	44	27	-121	-33	-2	-28	-97	-98
ORTHO-XYLENE	181	230	245	207	221	98	238	279
TOLUENE	242	275	283	282	334	312	372	410
PARAXYLENE	1267	1564	1756	1899	2054	2175	2228	2345
Total	2200	2546	2727	2878	3152	2982	3284	3382
OTHER PETROCHEMICALS								

Table- 10: Consumption of Selected Major Petrochemicals (Product-wise) during 2005-06 to 2012-13
('000' (MT))

PRODUCT NAME	CONSUMPTION \$							
	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
DIETHYLENE GLYCOL	58	60	68	58	69	73	99	103
DIACETONE ALCOHOL	9	9	9	8	9	4	5	3
ETHYLENE DICHLORIDE	537	437	451	487	637	739	699	672
BUTANOL	36	32	37	33	42	37	50	46
OXO ALCOHOL	1	1	0	0	1	0	0	1
2-ETHYL HEXANOL	31	33	37	44	54	63	78	108
VINYL CHLORIDE MONOMER	353	401	404	424	829	1057	992	965
EPICHLORHYDRINE	15	17	20	22	24	28	28	30
ISO BUTYLENE	42	38	39	33	40	43	23	9
METHYL ISOBUTYL KETONE	14	12	14	15	17	16	19	18
PIB	10	5	1	0	0	0	1	6
POLYCARBONATE	31	46	46	41	53	102	114	120
PROPYLENE OXIDE	29	32	31	33	42	45	44	43
PROPYLENE GLYCOL	28	33	35	41	47	50	54	53
UNSATURATED POLYESTER RESIN	69	27	11	25	35	28	25	25
METHYL METHACRYLATE	4	4	4	3	5	5	4	3
ISO-BUTANOL	4	4	3	3	3	3	2	2
C4-RAFFINATE	105	76	77	55	65	71	209	395
ACRYLATES	8	2	0	0	0	0	0	0
MELAMINE MOULDING POWDER	1	2	2	2	4	5	7	8
POLYACETAL RESIN	10	12	12	11	15	18	20	26
PHTHALIC ANHYDRIDE	161	174	204	202	240	295	263	286
STYRENE	391	406	411	391	452	457	513	574
VINYL ACTATE MONOMER	67	63	74	-258	74	84	122	126
ISOPROPANOL	60	74	71	70	91	101	95	122

\$ Derived consumption as Production + Imports - Exports

Section – IV

Foreign Trade

Table- 11: Exports and Imports of Major Chemicals and Petrochemicals At a Glance

Values in Rs. Crore

HS Code	Commodity	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	CARG (%) (12-13/05-06)
	Total National Exports of which	456,418	571,779	655,864	840755	845534	1142922	1465959	1634319	20.0
28	INORGANIC CHEMICALS	3,431	3,629	3,317	5166	4540	8561	8689	7176	11.1
29	ORGANIC CHEMICALS	21,504	25,949	28,870	34058	35241	41318	56179	65915	17.4
32	TANNING OR DYEING	3,750	4,562	5,327	5899	6556	7720	9336	11372	17.2
38	MISCELLANEOUS CHEMICAL PRODUCTS.	4,777	5,210	5,969	8615	8611	9409	12485	15545	18.4
39	PLASTIC AND ARTICLES THEREOF.	9,565	12,405	11,219	11502	13012	18150	25312	28021	16.6
54	MAN-MADE FILAMENTS.	4,060	4,650	5,451	7060	9541	10469	12466	12112	16.9
55	MAN-MADE STAPLE FIBRES.	3,643	4,746	5,529	5664	6719	8256	10599	10565	16.4
A: Total major chemicals and petrochemicals		50,730	61,152	65,681	77964	84220	103883	135067	150706	16.8
	% share in total export	11.1	10.7	10.0	9.3	10.0	9.1	9.2	9.2	

HS Code	Commodity	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	CARG (%) (12-13/05-06)
	Total National Imports of which	660,409	840,506	1,012,312	1374436	1363736	1683467	2345463	2669162	22.1
28	INORGANIC CHEMICALS	10,446	11,473	11,393	21492	16270	17236	27792	28770	15.6
29	ORGANIC CHEMICALS	22,775	27,330	32,642	38853	44505	57550	69144	85439	20.8
32	TANNING OR DYEING	2,245	2,721	3,031	3824	4328	5434	7097	8004	19.9
38	MISCELLANEOUS CHEMICAL PRODUCTS.	5,025	6,390	7,357	10688	11579	13935	17855	20650	22.4
39	PLASTIC AND ARTICLES THEREOF.	11,318	13,387	16,558	20385	26129	34477	40578	52283	24.4
54	MAN-MADE FILAMENTS.	2,023	2,010	1,970	2370	2638	3024	3725	4149	10.8
55	MAN-MADE STAPLE FIBRES.	800	942	1,049	1264	1454	1935	2498	3052	21.1
B: Total major chemicals and petrochemicals		54,632	64,253	74,000	98877	106904	133590	168688	202347	20.6
	% share in total import	8.3	7.6	7.3	7.2	7.8	7.9	7.2	7.6	
C: Trade Balance: A-B		-3,901	-3,101	-8,319	-20,913	-22,683	-29,707	-33,621	-51,641	

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; Chapter 54: Man-made Filaments and Chapter 55: Man-made staple fibres

Table-12: Exports of Major Chemicals (Group Wise)

PRODUCT	2005-2006		2006-2007		2007-2008		2008-2009		2009-10		2010-11		2011-12		2012-13	
	QTY.	VALUE	QTY.	VALUE	QTY.	VALUE	QTY.	VALUE	QTY.	VALUE	QTY.	VALUE	QTY.	VALUE	QTY.	VALUE
ALKALI CHEMICALS	229907	19117	179359	15453	111266	13233	148176	25966	341816	36679	346968	44553	344596	51653	144954	33599
INORGANIC CHEMICALS	120592	39080	100754	40347	122943	47881	98240	51434	377471	99800	382629	128126	288690	154497	120982	89996
ORGANIC CHEMICALS	53439	71505	61848	85437	116393	112517	82862	87116	143494	99492	187390	164132	315492	264248	406944	373539
PESTICIDES & INSECTICIDES	58833	212930	65796	211059	75022	228389	71732	299485	87341	294644	93311	315585	102505	439851	109541	583011
DYES & DYESTUFF	154398	278801	172930	344284	200424	391800	198250	431779	236478	475573	257858	558103	265435	643434	305038	797004
EXPORTS OF MAJOR CHEMICALS	617169	621433	580687	696580	626048	793820	599260	895780	1186600	1006188	1268156	1210499	1316718	1553683	1087459	1877149

Note: The data from 2008-09 is based on ITCHS 2007

Table-13: Exports of Major Chemicals (Product-wise)

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

PRODUCT	2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
ALKALI CHEMICALS																
SODA ASH	197225	15545	136991	10472	73193	7310	86204	10956	257219	20931	199765	18281	257622	31586	82144	12766
CAUSTIC SODA	26959	3076	29409	4131	32337	5483	56498	14356	76995	14342	143791	25699	82208	18977	59118	20166
LIQUID CHLORINE	5723	496	12959	850	5736	440	5474	654	7602	1406	3412	573	4766	1090	3692	667
TOTAL	229907	19117	179359	15453	111266	13233	148176	25966	341816	36679	346968	44553	344596	51653	144954	33599
INORGANIC CHEMICALS																
ALUMINIUM FLOURIDE	4812	2060	9146	4525	10013	5351	8417	7192	8127	4771	7068	3363	3362	2181	3755	2410
CALCIUM CARBIDE	2	2	43	12	4	4	250	87	971	346	961	348	1267	592	1758	853
CARBON BLACK	96998	24455	68280	23394	88174	30870	79603	35851	359840	87287	365478	114404	277698	142242	110697	79285
POTASSIUM CHLORATE	1301	310	8420	971	10893	1296	2629	1186	1811	763	1307	393	844	487	791	567
SODIUM CHLORATE	697	81	1194	123	480	66	159	34	375	35	7	22	127	51	40	5
TITANIUM DIOXIDE	16392	11526	13311	10723	12798	9718	6835	6161	5942	5794	7491	8797	5009	7811	3470	5278
RED PHOSPHORUS	390	646	360	599	581	576	347	923	405	804	317	799	383	1133	471	1598
TOTAL	120592	39080	100754	40347	122943	47881	98240	51434	377471	99800	382629	128126	288690	154497	120982	89996
ORGANIC CHEMICALS																
ACETIC ACID	13074	5218	14819	6019	15040	5509	12589	5054	13022	4590	8368	2662	25887	8687	6617	2995
ACETIC ANHYDRIDE	295	142	1294	679	857	425	4168	2314	1256	760	1902	880	2652	1373	3734	1855
ACETONE	112	421	139	283	270	219	1950	1088	501	277	2805	1250	1200	958	2660	1828
PHENOL	2168	1721	2596	2757	2078	2203	3195	3753	2720	3269	1293	2321	1146	2147	436	1028

Table-13: Exports of Major Chemicals (Product-wise)**(QTY. IN MT ; VALUE IN RS. LAKH)**

PRODUCT	2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
METHANOL	462	1376	1233	728	31743	13726	3264	846	45902	6426	43560	8787	120419	20481	184669	34456
FORMALDEHYDE	2774	404	2217	407	5710	672	3256	380	3995	542	4275	533	4474	722	5041	961
NITROBENZENE	443	336	104	80	35	39	126	144	144	99	110	83	128	126	165	141
CITRIC ACID	1968	746	377	188	210	109	338	235	1365	767	1795	1272	2745	1935	2411	1817
MALEIC ANHYDRIDE	1148	696	2952	1780	622	383	274	232	115	80	66	57	38	32	23	27
PENTA-ERITHRITOL	1733	1155	2469	1921	1776	1615	1325	1540	1195	1631	1539	2026	1353	1966	1385	2144
ANILINE	2909	2056	4404	2716	2296	1538	964	1191	249	291	1161	899	953	744	193	344
CHLORO METHANES	539	392	629	465	42	65	46	51	116	75	36	53	126	121	42	49
ISOBUTYLE BENZENE	988	670	2414	1974	7314	5408	7516	6853	10801	9548	11459	9769	13920	14712	13314	17938
ONCB	1294	770	484	381	40	40	267	225	636	357	428	243	323	168	378	319
PNCB	2630	1426	1754	1191	1806	790	1880	1270	1075	533	1413	677	1272	693	2096	1442
MEK	409	390	178	165	207	217	304	466	111	139	56	184	428	501	408	390
ACETALDEHYDE	54	52	95	115	128	251	244	149	19	20	84	352	241	908	239	1005
ETHANOLAMINES	2058	1644	271	243	1353	1232	1975	2017	585	1130	1149	1578	1752	3063	832	3173
ETHYL ACETATE	9327	3922	14773	6777	33054	13712	30753	13955	47114	20398	96996	46806	126601	64994	169166	88388
MENTHOL	8311	47670	7557	56116	10783	63970	6982	44793	11997	48341	8274	83459	9507	139774	12181	212575
ORTHO NITRO TOLUENE	743	298	1089	452	1029	394	1446	560	576	219	621	241	327	143	954	664
TOTAL	53439	71505	61848	85437	116393	112517	82862	87116	143494	99492	187390	164132	315492	264248	406944	373539

Table-13: Exports of Major Chemicals (Product-wise)

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

PRODUCT	2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
PESTICIDES & INSECTICIDES																
D.D.T.	1204	1446	3891	4303	2532	2809	0	0	42	133	32	95	0	0	0	0
MALATHION	0	0	0	0	0	0	296	772	1040	1337	555	676	425	483	328	611
PARATHION (METHYL)	413	904	568	637	803	885	0	0	0	0	0	0	0	0	0	0
DIMETHOATE	148	1796	334	2370	468	640	334	721	458	1181	359	614	4	9	69	182
D.D.V.P.	455	614	1276	1699	1254	1454	1021	2329	837	1233	929	1288	1129	2024	543	1179
QUINALPHOS	442	764	353	669	98	191	202	614	344	924	673	2108	483	1490	463	1657
ENDOSULPHAN	3070	6043	3175	5849	4104	7421	1348	2969	3916	9565	4701	9353	1612	3483	80	260
CYPERMETHRIN	10772	41245	12339	44722	12649	47179	10528	54444	13483	50852	10871	40665	10570	52655	10268	55107
FENTHION	174	804	318	645	5	9	0	0	23	16	0	0	0	0	0	0
LINDANE	60	118	122	204	17	102	0	0	0	0	0	0	0	0	0	0
OTHER PESTICIDES *	3018	6592	5408	13497	8357	20493	14320	40916	12974	49719	22283	84569	27283	83613	33468	136414
OTHER INSECTICIDES **	31588	139456	32874	126439	41178	140147	37110	183543	41630	159975	37925	150093	42940	259829	41853	335623
COPPER-OXYCHLORIDE	412	434	88	148	200	305	242	537	316	612	625	1403	434	1179	478	1231
2, 4-D	4138	4719	2408	2618	739	766	3095	4348	8401	8818	8835	11013	13262	20823	15365	27427
ISOPROTURON	1078	2041	1157	2191	1009	1675	1642	3542	1811	3762	3351	6864	2239	6588	4181	13189
ALUMINIUM PHOSPHIDE	1343	3947	1428	4913	1575	4206	1592	4738	1906	6088	2158	6816	1969	7271	2341	9758
METHYL BROMIDE	518	2007	57	155	34	107	2	12	160	429	14	28	155	404	104	373
TOTAL	58833	212930	65796	211059	75022	228389	71732	299485	87341	294644	93311	315585	102505	439851	109541	583011

Table-13: Exports of Major Chemicals (Product-wise)

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

PRODUCT	2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
DYES & DYESTUFF																
AZO DYES	21016	33416	25583	44970	32437	54333	32784	63046	41323	71777	49700	88623	48638	89802	54228	111415
ACID DIRECT DYES(OTHER THAN AZO)	7724	12988	7663	14534	7047	14927	3890	9720	5144	10666	4220	8870	3264	7815	3629	9770
BASIC DYES	5353	9887	5935	11610	4875	7236	4355	6892	5062	7378	6141	9512	5655	9732	6957	14815
DISPERSE DYES	2794	6192	3605	7264	4201	9001	4735	12218	5064	11716	5700	15642	6452	18596	7017	19417
FAST COLOUR BASES	1461	3081	1852	3732	1904	4427	2116	6242	2629	6391	2683	6939	2815	7442	3106	9349
OIL SOLUBLE (SOLVENT DYES)	2620	6749	2326	7584	2024	6617	2245	8340	3106	10112	4045	13960	5158	17215	4665	17828
OPTICAL WHITENING AGENTS	10702	12928	12671	15897	15509	15452	15171	21115	19045	22637	23625	25112	20346	22941	23049	29156
ORGANIC PIGMENT COLOURS	932	1949	1117	2447	366	990	265	769	559	999	296	648	330	1383	60	386
PIGMENT EMULSION	36292	84349	42457	107119	49644	128666	49707	149583	56678	160071	67539	212430	65704	253341	69919	295002
REACTIVE DYES	46140	64209	52508	79982	64637	102448	65385	103675	77024	119712	69031	113510	77313	137604	98440	200414
SULPHUR DYES (SULPHUR BLACK)	1030	2692	681	1293	391	970	597	1031	934	944	1514	1277	747	838	889	1153
VAT DYES	6212	14835	1910	16055	1837	12839	1536	12160	1906	13292	2073	16295	2229	18768	1954	16816
SOLUBILISED VAT DYES	57	354	68	703	302	1041	346	1322	337	897	481	1309	51	399	47	370
FOOD COLOURS	5725	13889	8130	18901	8435	18497	10103	24506	11355	26703	13211	29415	19012	42563	21786	51772
NAPTHOLS	1518	3231	1222	2910	1119	2718	667	2130	827	2466	608	1369	869	1634	1242	2754
OTHER DYES	4822	8052	5202	9283	5696	11638	4348	9030	5485	9812	6991	13192	6852	13361	8050	16587
TOTAL	154398	278801	172930	344284	200424	391800	198250	431779	236478	475573	257858	558103	265435	643434	305038	797004

* ITC HS Code 38089010 and 38089910

** ITC HS Code 38081099 and 38089199

Table- 14: Imports of Major Chemicals (Group-wise)

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

PRODUCT	2005-2006		2006-2007		2007-2008		2008-2009		2009-10		2010-11		2011-12		2012-13	
	QTY.	VALU E	QTY.	VALU E	QTY.	VALU E	QTY.	VALU E	QTY.	VALU E	QTY.	VALU E	QTY.	VALUE	QTY.	VALUE
ALKALI CHEMICALS	711078	20814	409364	44426	499490	54386	511268	68431	867836	100179	630499	70565	658385	95789	995300	172682
INORGANIC CHEMICALS	131364	36997	129480	51260	173866	69179	188914	96780	194813	93106	195909	102856	263745	173700	278237	195438
ORGANIC CHEMICALS	663893	157083	868789	232129	1210665	299897	1638930	348150	1547520	328542	1638994	418374	2182271	627474	2486575	757437
PESTICIDES & INSECTICIDES	12517	41409	10837	29757	6088	17580	13892	85472	13189	119730	19135	148767	21590	167346	19412	184007
DYES & DYESTUFFS	23057	50118	27394	59972	32344	63646	24738	72502	28023	89729	29938	101807	36494	119038	40437	156015
IMPORTS OF MAJOR CHEMICALS	1541909	306421	1445864	417544	1922453	504688	2377742	671335	2651381	731286	2514475	842369	3162485	1183347	3819961	1465579

Note: The data from 2008-09 is based on ITCHS 2007

Table-15: Imports of Major Chemicals (Product-wise)

PRODUCT	2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
ALKALI CHEMICALS																
SODA ASH	652756	11872	260386	21394	355915	32594	358555	41202	555956	56283	489956	49573	445363	52829	692866	96965
CAUSTIC SODA	58320	8934	148977	23027	143568	21761	152446	27136	311417	43762	138481	20764	212642	42811	302385	75577
LIQUID CHLORINE	2	8	1	5	7	31	267	93	463	134	2062	228	380	149	49	140
TOTAL	711078	20814	409364	44426	499490	54386	511268	68431	867836	100179	630499	70565	658385	95789	995300	172682
INORGANIC CHEMICALS																
ALUMINIUM FLOURIDE	5134	1811	8960	3917	13286	6126	23248	14241	24140	10624	13989	6597	28448	20188	26244	19086
CALCIUM CARBIDE	45446	10489	49026	11354	56000	14649	70860	25260	51598	16657	56479	19046	56500	21507	57865	24734
CARBON BLACK	55337	10760	38930	17636	71638	29212	61237	35998	73920	38260	74905	45674	124338	85053	143461	105503
POTASSIUM CHLORATE	49	13	0	1	22	15	22	8	7464	3693	7095	3171	6300	2991	7468	4217
SODIUM CHLORATE	10100	1906	15255	3042	14399	3471	19175	6513	22162	6635	24762	6655	25135	8251	25076	9375
TITANIUM DIOXIDE	15126	11802	17164	15135	18303	15407	14092	13794	15176	16563	18295	20938	22636	34902	17825	31788
RED PHOSPHORUS	172	216	145	175	218	299	280	966	353	674	384	775	388	808	298	735
TOTAL	131364	36997	129480	51260	173866	69179	188914	96780	194813	93106	195909	102856	263745	173700	278237	195438
ORGANIC CHEMICALS																
ACETIC ACID	43119	12379	124464	32678	136422	36149	285037	69914	389650	82134	466097	96233	570040	152012	646738	171462
ACETIC ANHYDRIDE	409	183	280	136	421	183	37	19	895	498	771	401	1533	856	2042	1049
ACETONE	63933	22828	59826	21005	65026	26380	68364	27260	80081	31181	78236	32100	100637	54505	95939	54615
PHENOL	96098	43945	68754	40552	102871	66153	92918	46763	103071	51907	123490	93671	146762	111194	172758	139980
METHANOL	401088	49516	527287	95787	788816	112426	1058866	125780	822248	89941	813422	103539	1199635	198749	1398982	260025
FORMALDEHYDE	672	260	430	113	439	159	545	186	713	218	605	221	614	395	342	217

Table-15: Imports of Major Chemicals (Product-wise)

PRODUCT	2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
NITROBENZENE	335	321	104	99	164	72	84	39	1	2	0	0	22	36	0	0
CITRIC ACID	15636	4610	25372	7720	31197	10043	34374	14281	40467	14750	44102	18562	53142	25921	56743	27338
MALEIC ANHYDRIDE	9445	5385	12055	6468	23751	12791	33009	18134	27693	14919	37973	24772	34584	25470	36864	35099
PENTA-ERITHRITOL	6030	3236	6273	4132	6617	4937	6855	5354	11786	6659	13961	8764	15059	12162	14650	13819
ANILINE	5774	3514	13231	8012	18736	10953	18798	12312	19067	9902	24012	14563	15310	10544	15441	14410
CHLORO METHANES	400	711	489	692	1999	735	100	159	325	364	502	435	249	268	153	356
ISOBUTYLE BENZENE	9	40	16	15	0	0	2	10	36	26	0	0	0	0	0	0
ONCB	0	1	5694	2887	5050	3568	5358	4008	3760	2180	3598	1697	2336	1092	2089	1313
PNCB	1389	613	100	30	1455	386	1551	658	2868	1027	1564	776	347	187	0	0
MEK	13544	5918	17759	7586	22091	10332	20668	13121	24556	11352	21384	15286	30220	24334	31597	25151
ACETALDEHYDE	156	651	104	381	20	147	62	420	94	815	61	576	67	240	49	230
ETHANOLAMINES	2140	1600	2672	2055	4064	3540	3334	5144	4961	3701	6595	5132	6488	5706	10435	8562
ETHYL ACETATE	3661	1316	3724	1581	404	343	6721	3371	14929	6555	2344	1202	5008	2732	1405	1102
MENTHOL	5	39	17	134	120	226	97	401	80	329	52	369	159	1051	329	2702
ORTHO NITRO TOLUENE	50	17	138	66	1002	374	2150	816	239	82	225	75	59	20	19	7
TOTAL	663893	157083	868789	232129	1210665	299897	1638930	348150	1547520	328542	1638994	418374	2182271	627474	2486575	757437
PESTICIDES & INSECTICIDES																
D.D.T.	1	0	0	0	23	29	0	0	0	0	0	0	0	0	0	0
MALATHION	0	0	0	0	0	0	0	0	40	58	52	50	0	0	0	0
PARATHION (METHYL)	1289	1087	1473	1217	623	539	0	0	0	0	0	0	0	0	0	0
DIMETHOATE	101	133	0	0	12	16	344	650	133	225	58	109	152	299	182	422

Table-15: Imports of Major Chemicals (Product-wise)

PRODUCT	2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
D.D.V.P.	0	0	0	0	0	0	20	31	20	28	45	66	24	46	0	0
ENDOSULPHAN	16	33	0	0	47	61	0	0	24	46	192	592	0	0	0	0
CYPERMETHRIN	0	15	0	0	147	428	31	527	29	455	17	282	0	4	8	20
FENTHION	0	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0
OTHER PESTICIDES	1007	2972	1557	3754	975	2463	528	1726	804	2127	651	1495	2340	7815	1263	6928
OTHER INSECTICIDES	9351	35994	7038	23819	3915	13293	12269	78658	11628	114036	17257	142478	18388	156952	17157	173226
COPPER-OXYCHLORIDE	0	0	0	0	0	2	22	53	0	0	1	7	0	2	0	1
2, 4-D	0	22	0	0	0	0	4	12	62	72	204	486	0	0	0	78
ISOPROTURON	144	426	0	0	0	0	0	0	0	0	23	64	0	0	0	0
ALUMINIUM PHOSPHIDE	45	23	0	0	183	511	362	3285	153	2102	187	2183	31	561	23	741
METHYL BROMIDE	563	704	769	964	163	238	312	528	296	581	448	955	655	1667	779	2591
TOTAL	12517	41409	10837	29757	6088	17580	13892	85472	13189	119730	19135	148767	21590	167346	19412	184007
DYES & DYESTUFFS																
AZO DYES	495	1247	615	1332	465	1343	583	2101	506	1829	536	2055	769	2556	527	2844
ACID DIRECT DYES(OTHER THAN AZO)	382	522	648	773	791	925	501	1101	660	958	643	1205	746	1454	678	1643
BASIC DYES	829	1471	990	1815	1064	1779	814	1799	1560	4228	1275	3970	1401	4807	1189	6195
DISPERSE DYES	6297	8946	7421	11000	7215	10076	7205	12543	8013	14823	8378	17490	10534	22582	11118	28720
FAST COLOUR BASES	231	432	170	413	219	422	249	591	383	978	367	867	292	801	374	1308
OIL SOLUBLE (SOLVENT DYES)	390	776	304	960	323	869	494	2657	608	3567	801	4615	1240	6292	1239	7434
OPTICAL WHITENING AGENTS	560	2876	475	2405	497	2441	378	2264	469	2692	499	3073	392	2755	489	4302
ORGANIC PIGMENT COLOURS	548	1441	919	2222	428	922	670	968	418	619	111	537	186	817	124	561

Table-15: Imports of Major Chemicals (Product-wise)

PRODUCT	2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
PIGMENT EMULSION	2659	10565	3235	12969	4075	15695	4808	23398	4930	27269	6659	33094	8376	40159	6955	43711
REACTIVE DYES	1933	7647	2313	10379	2267	9473	2081	9235	2181	12069	2118	12646	2151	11667	2935	19312
SULPHUR DYES (SULPHUR BLACK)	4495	2038	5103	2231	7957	3214	2240	1471	2574	2018	1900	1680	2167	1888	2189	3318
VAT DYES	2744	6889	2834	6396	4765	9521	2788	8125	3599	11609	4430	13255	6379	16986	10201	27519
SOLUBILISED VAT DYES	75	431	149	518	93	481	90	448	26	220	54	266	193	698	107	483
FOOD COLOURS	438	3009	910	3928	493	3278	351	1917	387	2481	623	1825	290	1768	367	2778
NAPTHOLS	739	1212	1081	1857	1076	1948	993	2159	1275	2721	1200	3492	916	2147	1040	3178
OTHER DYES	242	616	227	774	616	1259	493	1725	434	1648	344	1737	462	1661	905	2709
TOTAL	23057	50118	27394	59972	32344	63646	24738	72502	28023	89729	29938	101807	36494	119038	40437	156015

Table- 16: Top Five Export Destinations of Selected Chemicals during 2012-13			
PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakhs)
SODA ASH	BANGLADESH PR	42853	6599
	SAUDI ARAB	13259	1865
	INDONESIA	7596	1086
	SRI LANKA DSR	6188	1069
	U ARAB EMTS	4050	640
	Product Total	73947	11259
CAUSTIC SODA	TANZANIA REP	11345	3710
	SRI LANKA DSR	6252	1968
	KENYA	6052	1974
	BANGLADESH PR	5098	1794
	NEPAL	5074	1860
	Product Total	33820	11306
LIQUID CHLORINE	SRI LANKA DSR	1633	165
	KENYA	845	171
	U ARAB EMTS	348	63
	PHILIPPINES	204	13
	MAURITIUS	136	15
	Product Total	3166	427
ALUMINIUM FLOURIDE	U ARAB EMTS	3279	1949
	JAPAN	375	390
	BRAZIL	100	71
	U S A	2	0
	BANGLADESH PR	0	0
	Product Total	3755	2410
CALCIUM CARBIDE	U ARAB EMTS	494	257
	BANGLADESH PR	430	129
	OMAN	261	128
	SAUDI ARAB	204	99
	KUWAIT	196	94
	Product Total	1585	708
CARBON BLACK	SRI LANKA DSR	23389	17510
	JAPAN	17669	12793
	KOREA RP	13868	10048
	VIETNAM SOC REP	12306	7807
	INDONESIA	9807	6953
	Product Total	77039	55111
POTASSIUM CHLORATE	PHILIPPINES	305	222
	EGYPT A RP	300	204
	U S A	96	71
	THAILAND	40	27
	TANZANIA REP	22	19

Table- 16: Top Five Export Destinations of Selected Chemicals during 2012-13			
PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakhs)
	Product Total	763	543
SODIUM CHLORATE	AUSTRALIA	22	1
	KENYA	10	1
	SINGAPORE	6	0
	GERMANY	1	2
	NEW ZEALAND	1	0
	Product Total	40	4
TITANIUM DIOXIDE	ITALY	1312	2009
	JAPAN	414	678
	U S A	387	637
	U ARAB EMTS	310	372
	IRAN	233	372
	Product Total	2656	4068
RED PHOSPHORUS	U S A	131	392
	INDONESIA	74	262
	SOUTH AFRICA	47	199
	EGYPT A RP	46	139
	CANADA	40	118
	Product Total	339	1110
ACETIC ACID	BANGLADESH PR	2130	913
	EGYPT A RP	845	349
	U ARAB EMTS	508	190
	OMAN	335	143
	ALGERIA	323	137
	Product Total	4140	1732
ACETIC ANHYDRIDE	BELGIUM	3435	1667
	BANGLADESH PR	219	128
	ECUADOR	26	25
	KOREA RP	20	10
	PAKISTAN IR	14	9
	Product Total	3714	1840
ACETONE	U ARAB EMTS	2020	1239
	IRAN	340	280
	SRI LANKA DSR	117	75
	ALGERIA	38	28
	KENYA	32	26
	Product Total	2547	1648
PHENOL	NETHERLAND	253	596
	U K	50	81
	SAUDI ARAB	20	18
	ARGENTINA	20	32

Table- 16: Top Five Export Destinations of Selected Chemicals during 2012-13			
PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakhs)
	NEPAL	18	17
	Product Total	361	744
METHANOL	CHINA P RP	145350	26251
	INDONESIA	13173	2472
	SINGAPORE	10048	1792
	SRI LANKA DSR	4918	1133
	NETHERLAND	3500	658
	Product Total	176988	32306
FORMALDEHYDE	NEPAL	3932	659
	BHUTAN	289	44
	SRI LANKA DSR	239	89
	KENYA	178	39
	INDONESIA	72	20
	Product Total	4711	852
NITROBENZENE	PAKISTAN IR	111	81
	TURKEY	25	16
	U S A	16	1
	PERU	5	4
	TAIWAN	3	5
	Product Total	160	106
CITRIC ACID	U S A	1621	1269
	SPAIN	147	103
	BANGLADESH PR	117	88
	BRAZIL	75	41
	U ARAB EMTS	57	19
	Product Total	2017	1521
MALEIC ANHYDRIDE	SRI LANKA DSR	8	9
	NEPAL	5	6
	TANZANIA REP	4	4
	BANGLADESH PR	2	4
	LEBANON	2	2
	Product Total	22	25
PENTA-ERITHRITOL	U S A	487	926
	NETHERLAND	358	337
	SPAIN	194	181
	BELGIUM	179	323
	COLOMBIA	54	53
	Product Total	1272	1820
ANILINE	PAKISTAN IR	44	49
	KOREA RP	40	33
	JAPAN	25	27

Table- 16: Top Five Export Destinations of Selected Chemicals during 2012-13			
PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakhs)
	IRAN	24	21
	RUSSIA	23	19
	Product Total	156	149
CHLORO METHANES	SAUDI ARAB	20	16
	IRAN	18	14
	NETHERLAND	2	12
	BULGARIA	1	6
	UNSPECIFIED	0	0
	Product Total	42	49
ISOBUTYLE	U S A	7083	9765
	CHINA P RP	6229	8170
	SWITZERLAND	1	3
	Product Total	13314	17938
ONCB	BRAZIL	235	199
	GERMANY	92	72
	CHINA P RP	50	45
	TURKEY	1	1
	SPAIN	1	1
	Product Total	378	318
PNCB	GERMANY	1492	1010
	TAIWAN	416	279
	JAPAN	94	48
	CHINA P RP	50	30
	NETHERLAND	25	16
	Product Total	2076	1384
MEK	IRAN	264	260
	U S A	102	83
	PAKISTAN IR	37	15
	BANGLADESH PR	2	24
	GUINEA	2	2
	Product Total	407	386
ACETALDEHYDE	U S A	118	503
	CHINA P RP	59	239
	SPAIN	34	162
	GERMANY	14	82
	BARBADOS	9	0
	Product Total	234	986
ETHANOLAMINES	U S A	381	1149
	U K	177	406
	U ARAB EMTS	52	55
	BANGLADESH PR	47	57

Table- 16: Top Five Export Destinations of Selected Chemicals during 2012-13			
PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakhs)
	SAUDI ARAB	34	51
	Product Total	691	1717
ETHYL ACETATE	TURKEY	32183	16253
	BELGIUM	26215	13283
	NETHERLAND	23581	11748
	ITALY	22419	11125
	NIGERIA	10120	5852
	Product Total	114518	58261
MENTHOL	CHINA P RP	8209	137543
	SINGAPORE	1000	17225
	U S A	823	16157
	NETHERLAND	491	10752
	GERMANY	266	5043
	Product Total	10788	186720
ORTHO NITRO TOLUENE	JAPAN	602	398
	MYANMAR	208	146
	NETHERLAND	134	114
	U S A	11	5
	Product Total	353	266
MALATHION			
MALATHION	SAUDI ARAB	270	521
	SUDAN	13	26
	ZIMBABWE	12	14
	IRAN	9	8
	JORDAN	8	9
	Product Total	312	579
DIMETHOATE	EGYPT A RP	52	119
	UGANDA	17	63
	Product Total	69	182
D.D.V.P.	NIGERIA	212	434
	UGANDA	75	242
	NETHERLAND	60	95
	TURKEY	44	91
	JAPAN	36	77
	Product Total	427	938
QUINALPHOS	VIETNAM SOC REP	446	1612
	BANGLADESH PR	7	17
	SINGAPORE	5	13
	MALAYSIA	3	9
	TANZANIA REP	2	7
	Product Total	463	1657

Table- 16: Top Five Export Destinations of Selected Chemicals during 2012-13			
PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakhs)
ENDOSULPHAN	ARGENTINA	74	248
	MEXICO	5	12
	BANGLADESH PR	0	0
	Product Total	80	260
CYPERMETHRIN	BRAZIL	1431	11058
	THAILAND	957	5684
	INDONESIA	575	2247
	BELGIUM	548	3650
	CHINA P RP	518	2913
	Product Total	4028	25552
OTHER PESTICIDES	U S A	3777	17908
	BRAZIL	3571	17542
	NIGERIA	1899	3977
	NEPAL	1342	2538
	MEXICO	1331	4796
	Product Total	11920	46761
OTHER INSECTICIDES	BRAZIL	11682	91981
	U S A	4736	77738
	ARGENTINA	2449	8534
	BANGLADESH PR	1446	11214
	CHINA P RP	1355	11283
	Product Total	21668	200749
COPPER-OXYCHLORIDE	EGYPT A RP	222	523
	TURKEY	96	282
	VIETNAM SOC REP	45	130
	PHILIPPINES	25	60
	IRAN	22	57
	Product Total	410	1053
2, 4-D	U S A	4315	8393
	BRAZIL	4194	8069
	THAILAND	2700	4277
	ARGENTINA	1566	2684
	ETHIOPIA	596	816
	Product Total	13371	24238
ISOPROTURON	NETHERLAND	4026	12707
	BELGIUM	142	437
	THAILAND	13	44
	Product Total	4181	13189
ALUMINIUM PHOSPHIDE	U S A	533	2751
	MEXICO	464	1865
	BANGLADESH PR	243	511

Table- 16: Top Five Export Destinations of Selected Chemicals during 2012-13			
PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakhs)
	NETHERLAND	122	391
	VIETNAM SOC REP	117	461
	Product Total	1479	5979
METHYL BROMIDE	LIBYA	48	178
	INDONESIA	32	114
	MALAYSIA	14	47
	PHILIPPINES	10	34
	BANGLADESH PR	0	0
	Product Total	104	373
AZO DYES	ITALY	9573	22875
	GERMANY	4449	6949
	SPAIN	4189	9350
	SINGAPORE	3501	5139
	BRAZIL	3208	6125
	Product Total	24920	50439
ACID DIRECT DYES(OTHER THAN AZO)	ITALY	465	1276
	TURKEY	365	602
	U S A	231	843
	PAKISTAN IR	229	529
	TAIWAN	228	575
	Product Total	1519	3825
ACID DIRECT DYES(OTHER THAN AZO)	U S A	873	1735
	U K	591	1377
	SPAIN	566	943
	ITALY	462	841
	PAKISTAN IR	402	591
	Product Total	2894	5488
DISPERSE DYES	HONDURAS	841	2138
	PAKISTAN IR	831	1702
	INDONESIA	778	1920
	U S A	570	2047
	BANGLADESH PR	444	730
	Product Total	3464	8537
FAST COLOUR BASES	GERMANY	924	2692
	CHINA P RP	375	1469
	INDONESIA	345	708
	U S A	307	920
	BRAZIL	184	449
	Product Total	2134	6238
OIL SOLUBLE (SOLVENT DYES)	U S A	753	3601
	BRAZIL	602	1441

Table- 16: Top Five Export Destinations of Selected Chemicals during 2012-13			
PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakhs)
	NETHERLAND	582	1160
	ITALY	465	1678
	GERMANY	373	1905
	Product Total	2775	9785
OPTICAL WHITENING AGENTS	FINLAND	3823	1563
	GERMANY	3803	6266
	U S A	1983	1750
	AUSTRALIA	1900	1521
	CHINA P RP	1565	2266
	Product Total	13074	13365
ORGANIC PIGMENT COLOURS	SAUDI ARAB	24	123
	GERMANY	15	155
	BANGLADESH PR	7	13
	U ARAB EMTS	4	10
	IRAN	4	75
	Product Total	54	377
PIGMENT EMULSION	U S A	10021	43224
	NETHERLAND	4805	21279
	JAPAN	4292	17667
	KOREA RP	3552	13056
	GERMANY	3473	19481
	Product Total	26143	114707
REACTIVE DYES	TURKEY	19345	36756
	BANGLADESH PR	15033	22024
	PAKISTAN IR	7456	12554
	BRAZIL	7198	14486
	SINGAPORE	4745	11134
	Product Total	53776	96953
SULPHUR DYES (SULPHUR BLACK)	BANGLADESH PR	262	269
	U S A	162	267
	INDONESIA	157	97
	GERMANY	91	87
	KOREA RP	57	41
	Product Total	729	761
VAT DYES	NIGERIA	307	1137
	BANGLADESH PR	221	2160
	MAURITANIA	154	1156
	CHINA P RP	133	1542
	PAKISTAN IR	131	446
	Product Total	946	6441
SOLUBILISED VAT	INDONESIA	23	259

Table- 16: Top Five Export Destinations of Selected Chemicals during 2012-13			
PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakhs)
DYES	BHUTAN	14	13
	NETHERLAND	3	24
	PHILIPPINES	2	19
	BANGLADESH PR	2	4
	Product Total	43	319
FOOD COLOURS	U S A	2256	8247
	SAUDI ARAB	1509	1348
	INDONESIA	1109	3238
	U ARAB EMTS	1032	1244
	BRAZIL	1018	2876
	Product Total	6924	16953
NAPTHOLS	SOUTH AFRICA	259	376
	CANADA	149	110
	NETHERLAND	144	346
	CHINA P RP	97	295
	EGYPT A RP	90	70
	Product Total	739	1196
OTHER DYES	U S A	821	2005
	SPAIN	784	1415
	AUSTRALIA	709	670
	ITALY	625	1382
	BRAZIL	418	1011
	Product Total	3356	6483

Table- 17: Top Five Sources (Countries) of Import of Selected Chemicals to India during 2012-13			
PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakhs)
SODA ASH	KENYA	143093	20019
	CHINA P RP	118518	16343
	BULGARIA	111041	16029
	TURKEY	90100	12747
	U S A	64449	7522
	Product Total	527202	72660
CAUSTIC SODA	IRAN	94853	23079
	SAUDI ARAB	75154	18869
	KOREA RP	44291	11442
	CHINA P RP	36291	9306
	QATAR	31549	7355
	Product Total	282138	70050
LIQUID CHLORINE	CHINA P RP	33	36
	KOREA RP	7	83
	FRANCE	6	17
	GERMANY	3	2
	CANADA	1	2
	Product Total	49	140
ALUMINIUM FLOURIDE	CHINA P RP	20674	15343
	JORDAN	1700	1181
	ITALY	1450	1124
	INDONESIA	1320	706
	LITHUANIA	1100	733
	Product Total	26244	19086
CALCIUM CARBIDE	CHINA P RP	36411	14045
	BHUTAN	18388	9311
	SOUTH AFRICA	3064	1378
	NEW ZEALAND	1	1
	GERMANY	0.5	0.2
	Product Total	57865	24734
CARBON BLACK	CHINA P RP	98186	59768
	KOREA RP	21825	17319
	U S A	4345	8283
	RUSSIA	3844	2630
	UKRAINE	2544	1764
	Product Total	130745	89764
POTASSIUM CHLORATE	CHINA P RP	7344	4145
	HONG KONG	124	72
	GERMANY	0.1	0.1
	Product Total	7468	4217
SODIUM CHLORATE	SWEDEN	7895	3007
	CHINA P RP	7563	2767

Table- 17: Top Five Sources (Countries) of Import of Selected Chemicals to India during 2012-13			
PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakhs)
	URUGUAY	3584	1355
	FINLAND	2888	1129
	FRANCE	2352	814
	Product Total	24282	9072
TITANIUM DIOXIDE	CHINA P RP	4612	6994
	KOREA RP	2500	4572
	CZECH REPUBLIC	2395	3765
	GERMANY	2295	4846
	U S A	2015	4033
	Product Total	13817	24210
RED PHOSPHORUS	CHINA P RP	298	729
	FRANCE	1	5
	Product Total	298	735
ACETIC ACID	MALAYSIA	177053	47438
	SINGAPORE	101470	26465
	CHINA P RP	98768	29126
	SAUDI ARAB	87533	21547
	IRAN	64857	16712
	Product Total	529681	141288
ACETIC ANHYDRIDE	U S A	2022	1036
	SINGAPORE	21	13
	Product Total	2042	1049
ACETONE	TAIWAN	47265	26837
	SINGAPORE	16526	9132
	KOREA RP	8094	4659
	SAUDI ARAB	7916	4595
	JAPAN	5850	3363
	Product Total	85651	48586
PHENOL	U S A	90350	72621
	TAIWAN	44061	36558
	KOREA RP	15537	13297
	SOUTH AFRICA	14420	10235
	THAILAND	5546	4616
	Product Total	169914	137327
METHANOL	IRAN	765245	136768
	SAUDI ARAB	451778	87693
	OMAN	114778	22434
	U ARAB EMTS	43622	7920
	BRUNEI	12248	2276
	Product Total	1387671	257090
FORMALDEHYDE	SAUDI ARAB	227	98
	SINGAPORE	101	96

Table- 17: Top Five Sources (Countries) of Import of Selected Chemicals to India during 2012-13			
PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakhs)
	ISRAEL	13	19
	GERMANY	0.4	2
	CHINA P RP	0.2	0.3
	Product Total	342	216
NITROBENZENE	GERMANY	0.1	0.3
	Product Total	0.1	0.3
CITRIC ACID	CHINA P RP	56069	26730
	CANADA	400	249
	U S A	77	78
	GERMANY	58	140
	CHILE	50	26
	Product Total	56653	27224
MALEIC ANHYDRIDE	MALAYSIA	13775	13574
	TAIWAN	9228	8534
	CHINA P RP	8414	7409
	INDONESIA	2829	2959
	KOREA RP	1840	1838
	Product Total	36086	34313
PENTA-ERITHRITOL	SAUDI ARAB	9535	9082
	TAIWAN	2488	2074
	RUSSIA	1152	1069
	CHINA P RP	533	623
	SWEDEN	480	463
	Product Total	14187	13310
ANILINE	U S A	10869	10301
	U K	3992	3493
	CZECH REPUBLIC	441	452
	PORTUGAL	138	163
	GERMANY	0	0
	Product Total	15441	14410
CHLORO METHANES	SWITZERLAND	74	212
	CHINA P RP	45	86
	SINGAPORE	20	4
	UNSPECIFIED	11	39
	MALAYSIA	2	8
	Product Total	152	347
ONCB	GERMANY	1744	1094
	BELGIUM	263	166
	SPAIN	48	31
	TAIWAN	34	22
	Product Total	2089	1313
MEK	TAIWAN	12938	10608

Table- 17: Top Five Sources (Countries) of Import of Selected Chemicals to India during 2012-13			
PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakhs)
	SOUTH AFRICA	7559	5590
	CHINA P RP	7114	5871
	JAPAN	3405	2566
	U S A	471	327
	Product Total	31487	24962
ACETALDEHYDE	CHINA P RP	21	78
	U K	15	23
	GERMANY	5	50
	JAPAN	3	26
	PAKISTAN IR	2	25
	Product Total	45	202
ETHANOLAMINES	THAILAND	4924	3760
	SAUDI ARAB	1593	1142
	GERMANY	1317	1088
	TAIWAN	882	719
	MALAYSIA	602	484
	Product Total	9318	7193
ETHYL ACETATE	CHINA P RP	1307	955
	KOREA RP	71	91
	GERMANY	20	35
	U K	2	6
	SPAIN	2	2
	Product Total	1402	1090
MENTHOL	GERMANY	152	1167
	JAPAN	82	788
	U S A	72	487
	SINGAPORE	15	136
	NETHERLAND	4	64
	Product Total	326	2643
ORTHO NITRO TOLUENE	GERMANY	19	7
	Product Total	19	7
MALATHION	MALAYSIA	0	0
	Product Total	0	0
DIMETHOATE	CHINA P RP	124	290
	DENMARK	58	132
	Product Total	182	422
CYPERMETHRIN	U ARAB EMTS	8	18
	BELGIUM	0	2
	ITALY	0	0
	Product Total	8	20
FENTHION	MALAYSIA	0	0
	Product Total	0	0

Table- 17: Top Five Sources (Countries) of Import of Selected Chemicals to India during 2012-13			
PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakhs)
OTHER PESTICIDES	CHINA P RP	964	5978
	RUSSIA	160	577
	U S A	111	293
	TAIWAN	18	25
	GERMANY	10	40
	Product Total	1263	6913
OTHER INSECTICIDES	CHINA P RP	7148	41553
	U S A	2888	55087
	U K	1777	6156
	GERMANY	1081	26626
	SINGAPORE	843	3456
	Product Total	13737	132877
COPPER-OXYCHLORIDE	GERMANY	0	1
	Product Total	0	1
2, 4-D	CHINA P RP	0	78
	Product Total	0	78
ALUMINIUM PHOSPHIDE	FRANCE	21	706
	CHINA P RP	1	11
	SAUDI ARAB	1	22
	ISRAEL	0	1
	U S A	0	0
	Product Total	23	741
METHYL BROMIDE	BELGIUM	565	1830
	CHINA P RP	196	706
	GERMANY	18	56
	Product Total	779	2591
AZO DYES	CHINA P RP	305	1215
	ITALY	59	170
	SPAIN	43	658
	GERMANY	31	198
	THAILAND	29	193
	Product Total	467	2435
ACID DIRECT DYES(OTHER THAN AZO)	CHINA P RP	589	1168
	JAPAN	19	99
	MALAYSIA	15	27
	SPAIN	14	55
	U S A	13	71
	Product Total	650	1419
BASIC DYES	CHINA P RP	1152	6043
	SPAIN	22	52
	GERMANY	8	64
	ITALY	2	13

Table- 17: Top Five Sources (Countries) of Import of Selected Chemicals to India during 2012-13			
PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakhs)
	TAIWAN	2	5
	Product Total	1185	6177
DISPERSE DYES	CHINA P RP	9103	22750
	INDONESIA	1204	2225
	TAIWAN	311	1095
	GERMANY	153	665
	SWITZERLAND	102	672
	Product Total	10873	27406
FAST COLOUR BASES	CHINA P RP	332	875
	TAIWAN	12	14
	GERMANY	10	35
	U S A	8	69
	HUNGARY	4	140
	Product Total	366	1133
OIL SOLUBLE (SOLVENT DYES)	CHINA P RP	663	4891
	KOREA RP	407	1234
	TAIWAN	67	269
	JAPAN	42	448
	MALAYSIA	19	62
	Product Total	1198	6904
OPTICAL WHITENING AGENTS	SWITZERLAND	224	1974
	CHINA P RP	206	1973
	FRANCE	26	208
	THAILAND	11	20
	U K	6	24
	Product Total	472	4199
ORGANIC PIGMENT COLOURS	SPAIN	32	10
	FRANCE	24	25
	CHINA P RP	20	59
	MEXICO	15	36
	ITALY	11	184
	Product Total	101	314
PIGMENT EMULSION	CHINA P RP	3769	16770
	KOREA RP	801	3069
	GERMANY	749	10066
	SWITZERLAND	264	4821
	U S A	243	1911
	Product Total	5824	36637
REACTIVE DYES	CHINA P RP	892	5801
	THAILAND	736	4829
	SWITZERLAND	343	2987
	GERMANY	309	2843

Table- 17: Top Five Sources (Countries) of Import of Selected Chemicals to India during 2012-13			
PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakhs)
	KOREA RP	264	1238
	Product Total	2544	17697
SULPHUR DYES (SULPHUR BLACK)	CHINA P RP	1696	2560
	SPAIN	352	437
	VIETNAM SOC REP	95	189
	MALAYSIA	16	21
	GERMANY	10	24
	Product Total	2169	3231
VAT DYES	CHINA P RP	5426	17773
	GERMANY	2820	6422
	SINGAPORE	1883	2678
	U S A	59	470
	SWITZERLAND	5	45
	Product Total	10192	27388
VAT DYES	CHINA P RP	99	405
	ITALY	7	72
	GERMANY	1	2
	INDONESIA	0	2
	KOREA RP	0	0
	Product Total	107	481
FOOD COLOURS	CHINA P RP	51	424
	KOREA RP	50	156
	UNSPECIFIED	37	41
	U S A	36	229
	U K	31	494
	Product Total	205	1344
NAPTHOLS	CHINA P RP	1025	3062
	U S A	4	7
	U K	4	68
	GERMANY	3	11
	KOREA RP	2	16
	Product Total	1038	3163
OTHER DYES	GERMANY	659	879
	U S A	106	1114
	CHINA P RP	84	241
	SPAIN	14	84
	TAIWAN	7	58
	ITALY	7	41

Table -18: Exports of Major Petrochemicals (Group-wise)

PRODUCT	2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
SYNTHETIC FIBRES	175416	129151	322442	229206	395967	265869	350295	252969	404281	283129	576219	492991	733938	717078	775729	777335
FIBRE INTERMEDIATES	172218	79483	115956	56621	50503	27032	85323	32896	18105	13838	50626	37046	100735	78701	80823	61926
POLYMERS	697778	333548	880698	496360	631491	353626	357445	227052	657572	360065	822208	500436	1163483	815325	1112662	853586
SYNTHETIC RUBBER (ELASTOMERS)	21585	12346	15696	11877	14108	9558	15985	13129	15479	11986	14786	14883	22128	25460	11489	15082
SYNTHETIC DETERGENT INTERMEDIATES	107626	51504	127478	66490	129867	70877	90453	74968	94623	61415	133709	93904	74864	87518	50478	50928
PERFORMANCE PLASTICS	4754	4163	6061	6198	9480	7389	8607	7732	9115	9077	14888	16514	12297	16532	18473	25828
OLEFINS	86533	41517	113077	59703	152851	66634	119965	81935	134471	77807	158503	131755	130472	181191	123827	138968
AROMATICS	806261	327264	1252690	591614	1394158	609926	1117732	474224	1104618	511971	1351789	612929	1445312	985016	1590660	1188161

Table -19: Exports of Major Petrochemicals (Product-wise)

PRODUCT	2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
SYNTHETIC FIBRES																
ACRYLIC FIBRE	11372	11350	9199	10483	5566	6463	6439	9027	10579	12600	24522	44634	26383	37398	19258	26183
NYLON FILAMENT YARN	5655	7132	1929	3719	2803	4721	2644	4936	2102	4733	2110	4925	1923	5412	1865	5728
NYLON INDUSTRIAL YARN/TYRE CORD	4009	6015	4825	7394	5736	8480	1570	1855	2208	2783	3976	5739	3733	6979	3756	6810
POLYESTER FILAMENT YARN	110398	81272	180565	137578	234018	164962	201807	157533	227292	171651	391220	330277	524093	510458	576224	588908
POLYESTER STAPLE FIBRE	42609	22046	124156	68391	145825	79363	136370	78080	160828	89940	152487	105285	176000	154451	170318	144355
POLYPROPYLENE FILAMENT YARN	938	980	1203	1103	1079	1095	571	688	767	1009	1259	1476	1235	1582	2008	2694
POLYPROPYLENE STAPLE FIBRE	435	356	565	538	940	785	894	850	505	413	645	655	571	798	2300	2657
TOTAL	175416	129151	322442	229206	395967	265869	350295	252969	404281	283129	576219	492991	733938	717078	775729	777335
FIBRE INTERMEDIATES																
ACRYLONITRILE	6	13	1	6	76	450	2877	1184	1	3	1	2	5598	6048	2103	2747
CAPROLACTUM	21350	20696	13822	13317	2787	2930	7773	5986	12404	11892	13777	21658	13448	20052	3343	4853
DIMETHYL TEREPHTHALATE	1148	512	737	348	299	129	0	0	1	1	5	15	3	11	0	0
MONO EHYLENE GLYCOL	137410	54088	69177	30432	44306	22393	34570	11194	5577	1710	35959	15116	66483	45720	71796	52515
PURIFIED TEREPHTHALIC ACID	12304	4174	32219	12518	3035	1130	40103	14532	122	232	884	255	15203	6870	3581	1811
TOTAL	172218	79483	115956	56621	50503	27032	85323	32896	18105	13838	50626	37046	100735	78701	80823	61926
POLYMERS																
LOW DENSITY POLYETHYLENE	14212	6762	7188	3899	10937	6885	7536	4466	5739	3363	11919	9167	12670	10470	16892	15296

Table -19: Exports of Major Petrochemicals (Product-wise)

PRODUCT	2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
HIGH DENSITY POLYTHYLENE	285331	131248	263044	146631	134646	75109	101525	58931	21488	12626	133485	81358	239546	159380	159341	123866
POLYESTYRENE	120993	62578	104044	62715	83663	51784	60678	39922	56109	35285	62670	43175	60982	48710	74137	68035
POLYPROPYLENE (INC. CO-POLYMER)	224167	106472	462003	256693	364968	197406	154992	101826	564444	302365	582285	347506	816005	571653	828236	616817
EXPANDABLE POLYESTYRENE	5960	3106	6330	3789	2120	1304	937	540	2719	1455	178	127	377	280	3830	3689
POLY VINYL CHLORIDE	20911	10344	1113	778	4724	2300	1419	850	798	555	10850	5185	3632	2990	1267	1462
LINEAR LOW DENSITY POLYTHYLENE	23190	11339	32194	19125	26033	16356	26434	18067	2502	2323	14809	10428	23007	16734	21821	18582
PVC COMPOUND	3014	1699	4782	2730	4400	2482	3924	2450	3773	2093	6012	3490	7264	5108	7138	5839
TOTAL	697778	333548	880698	496360	631491	353626	357445	227052	657572	360065	822208	500436	1163483	815325	1112662	853586
SYNTHETIC RUBBER (ELASTOMERS)																
STYRENE BUTADIENE RUBBER	12506	6402	8128	5513	8151	4635	7431	5180	7309	4552	7388	5985	7516	9142	7646	8461
POLY BUTADIENE RUBBER	5337	2792	951	751	57	61	1279	511	911	870	1874	1772	185	408	1173	1947
ETHYL PROPYLENE DIMERS	2448	1940	1977	1877	1817	1533	2339	2198	2074	2262	2577	3258	3063	4830	1182	1916
ETHYL VINYL ACETATE	380	297	3434	2460	2574	1963	1350	1320	662	644	1072	986	374	453	804	848
NITRILE BUTADIENE RUBBER	607	643	829	739	1376	1238	3180	3637	3430	3088	1404	2286	10778	10059	431	1297
BUTYL RUBBER	307	272	377	537	133	128	406	283	1093	570	471	596	212	568	253	613
TOTAL	21585	12346	15696	11877	14108	9558	15985	13129	15479	11986	14786	14883	22128	25460	11489	15082
SYNTHETIC DETERGENT INTERMEDIATES																
LINEAR ALKYL BENZENE	107596	51458	127449	66452	129549	70361	90199	74552	93920	60415	133368	93397	74555	86732	50068	50134

Table -19: Exports of Major Petrochemicals (Product-wise)

PRODUCT	2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
ETHYLENE OXIDE	30	46	29	38	318	516	254	416	703	1000	341	507	309	786	410	794
TOTAL	107626	51504	127478	66490	129867	70877	90453	74968	94623	61415	133709	93904	74864	87518	50478	50928
PERFORMANCE PLASTICS																
ABS RESIN	1636	1074	1687	1384	1307	988	1539	959	60	40	5272	4925	807	915	666	780
NYLON-6	1945	2296	3355	4082	3750	3709	2621	3456	3656	4705	4108	5937	5912	9804	9915	16353
POLYMETHYL METHACRYLATE	1073	736	984	714	4404	2679	4439	3311	5391	4323	5497	5631	5545	5747	7849	8626
STYRENE ACRYLONITRILE	100	57	35	18	19	13	8	6	8	9	11	21	33	66	43	69
TOTAL	4754	4163	6061	6198	9480	7389	8607	7732	9115	9077	14888	16514	12297	16532	18473	25828
OLEFINS																
BUTADIENE	86303	41359	112839	59471	132948	59324	119951	81927	110897	66190	134087	121198	121393	176675	117626	135098
ETHYLENE	229	156	189	153	12897	4615	11	3	14	35	44	31	7	6	1	4
PROPYLENE	1	2	49	79	7006	2695	3	5	23560	11582	24372	10526	9072	4510	6200	3866
TOTAL	86533	41517	113077	59703	152851	66634	119965	81935	134471	77807	158503	131755	130472	181191	123827	138968
AROMATICS																
BENZENE	238176	82990	441894	184827	323755	134665	409757	148391	399836	173123	567717	225586	501894	279998	652963	445735
MIXED XYLENE	11604	4923	31029	11064	194298	71181	110056	47770	59158	20126	72334	29652	148512	87950	141564	104472
ORTHO-XYLENE	101640	44771	234841	108858	133635	55609	104360	46791	181348	78509	341918	160600	187083	121039	210822	163337
TOLUENE	665	392	1006	476	1961	788	2026	1171	1993	834	4119	2209	5465	3535	5412	4167

Table -19: Exports of Major Petrochemicals (Product-wise)

PRODUCT	2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
PARAXYLENE	454176	194188	543920	286389	740509	347683	491533	230101	462283	239379	365701	194882	602358	492494	579899	470450
TOTAL	806261	327264	1252690	591614	1394158	609926	1117732	474224	1104618	511971	1351789	612929	1445312	985016	1590660	1188161
OTHER PETRO-BASED CHEMICALS																
ETHYLENE DICHLORIDE	14	6	18	11	681	1107	531	1109	17	5	0	0	0	3	3200	554
BUTANOL	801	708	1941	1457	1700	1615	2640	2443	3358	2402	5454	4463	3591	4458	4762	5986
OXO ALCOHOL	82	224	127	286	510	470	448	663	396	925	339	1415	383	740	812	983
2-ETHYL HEXANOL	6	25	0	5	3	124	8	20	110	410	20	530	78	808	47	1001
VINYL CHLORIDE MONOMER	4578	1661	201	120	2	15	24	14	0	0	26	39	0	0	0	0
EPICHLHYDRINE	359	289	52	55	3	3	8	8	10	9	8	13	19	24	13	10
ISO BUTYLENE	91	90	20	24	43	38	31	6	100	48	1	1	0	1	0	0
METAXYLENE	7200	3572	16	26	40	17	10862	2255	37	22	109406	71083	92344	61389	41061	32749
METHYL ISOBUTYL KETONE	301	711	119	237	476	260	82	72	3	11	107	91	539	519	5	71
PIB	29	5	1336	831	4262	2389	5215	3502	5169	3168	6167	4020	6623	5529	4285	4739
POLYCARBONATE	3056	4317	2147	2874	1997	2833	963	1860	1433	3556	3368	6650	2355	3671	2509	4332
PROPYLENE OXIDE	0	5	20	33	280	379	66	62	0	0	0	4	0	0	0	0
PROPYLENE GLYCOL	527	388	392	286	729	481	894	737	1151	758	1178	971	908	879	2593	1953
PET	284510	149386	302030	172218	262502	141746	279168	153360	284200	152464	346071	220251	290894	229867	324307	256947
POLYVINYL ACETATE RESIN	1973	1139	2332	1207	3840	1785	4442	2528	3583	1923	6877	4415	10077	8188	14064	11563

Table -19: Exports of Major Petrochemicals (Product-wise)

PRODUCT	2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
UNSATURATED POLYESTER RESIN	9495	6144	5410	3720	12202	8665	14197	11367	9919	6653	9131	7849	9455	9479	10709	12477
ETHYL BENZENE	238	251	55	58	297	369	551	725	16	24	0	0	3	1	4	4
CELLULOSE ACETATE BUTYRATE	34	39	47	45	2173	1116	17	28	5	39	25	31	10	15	53	78
CELLULOSE ACETATE SHEET	4024	2433	1769	1111	74	57	137	195	18	42	147	164	17	36	159	166
CELLULOSE NITRATE SHEET	471	381	96	88	45	28	48	81	6	6	112	96	8	14	46	19
MELAMINE MOULDING POWDER	1013	693	1006	710	834	571	765	627	377	304	1079	743	1051	914	1160	940
POLYACETAL RESIN	587	285	66	58	162	127	311	376	527	517	1252	933	710	703	279	403
PHTHALIC ANHYDRIDE	54370	20763	62649	33567	71272	37480	41744	20662	19581	9513	18480	10012	24993	17036	12812	11478
STYRENE	373	340	210	197	2619	1505	4294	2914	801	520	1810	1207	7521	4847	17327	16323
VINYL ACTATE MONOMER	515	207	537	404	3093	1813	332230	630	2413	977	1062	500	2227	1240	1342	822
ISOPROPANOL	2483	1334	870	684	8783	4228	7224	4382	4451	3733	7330	6099	9598	12753	3846	4149

Table -20: Imports of Major Petrochemicals (Group-wise)

PRODUCT	[QTY in MT & VAL in Rs. Lakh]															
	2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
SYNTHETIC FIBRES	162461	129918	157996	133536	140779	108541	131575	111563	97860	97625	120870	144087	142496	181735	146950	211748
FIBRE INTERMEDIATES	291614	131211	438779	207239	427254	226838	708552	301849	1236826	484547	1598939	777720	1315056	800960	1402774	878497
POLYMERS	779957	353812	749830	399641	1152264	604585	1274604	731229	2159886	1188440	2500130	1495239	2435473	1598868	3179593	2254904
SYNTHETIC RUBBER (ELASTOMERS)	239772	173074	285988	225193	341630	272896	290430	343409	375884	352710	446242	540793	492633	794847	519670	797499
SYNTHETIC DETERGENT INTERMEDIATES	5562	2637	26494	12732	49051	23543	76357	47343	91334	56129	78859	60774	106852	96832	127493	131685
PERFORMANCE PLASTICS	37311	42638	45595	52186	57105	63346	67300	79422	85273	97455	129621	161762	137056	211030	167897	259963
OLEFINS	47998	13669	16570	10604	18712	8732	23726	10880	34608	16822	117791	53667	19855	13371	34187	29316
AROMATICS	470178	186499	351092	167585	633018	282280	520259	232590	661910	290174	679025	325942	760164	504683	967941	764603

Table - 21 : Imports of Major Petrochemicals (Product-wise)

PRODUCT	2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
SYNTHETIC FIBRES																
ACRYLIC FIBRE	12009	10477	11958	12210	9427	9611	14015	15659	14568	16723	23611	33365	20200	27538	29359	42077
NYLON FILAMENT YARN	12348	16853	10144	15650	3974	5674	6023	8712	6624	10886	18138	31224	22907	45227	24067	52783
NYLON INDUSTRIAL YARN/TYRE CORD	16570	23673	14402	21060	7659	11903	2763	3957	10789	14581	12269	18388	9068	16629	11912	21275
POLYESTER FILAMENT YARN	99906	64153	103761	72018	100820	67880	90458	69956	50095	43944	33692	36053	43409	52693	50013	64792
POLYESTER STAPLE FIBRE	15808	9704	14213	9266	16119	10654	16483	11412	14417	10040	31549	23070	44677	36811	29670	27653
POLYPROPYLENE FILAMENT YARN	5654	4873	3197	2977	2500	2516	1711	1704	1214	1283	1489	1827	1899	2396	1598	2673
POLYPROPYLENE STAPLE FIBRE	166	185	321	355	280	303	122	163	153	168	122	160	336	441	331	495
TOTAL	162461	129918	157996	133536	140779	108541	131575	111563	97860	97625	120870	144087	142496	181735	146950	211748
FIBRE INTERMEDIATES																
ACRYLONITRILE	70053	40752	83816	59227	81832	61838	81568	57315	64693	42104	72618	73592	77357	77714	81964	83719
CAPROLACTUM	13348	12687	7060	7104	24903	24396	16981	19745	11292	8933	6334	8158	5381	9121	15917	21673
DIMETHYL TEREPHTHALATE	6480	2283	11076	5082	4060	1855	4088	2760	4171	1906	4428	2554	2815	2021	2104	1592
MONO EHYLENE GLYCOL	94488	35827	162603	65133	254734	117025	424427	145042	682182	225455	771189	318756	634589	356418	654831	374593
PURIFIED TEREPHTHALIC ACID	107245	39662	174224	70693	61725	21724	181488	76987	474488	206149	744370	374660	594914	355686	647958	396920
TOTAL	291614	131211	438779	207239	427254	226838	708552	301849	1236826	484547	1598939	777720	1315056	800960	1402774	878497
POLYMERS																
LOW DENSITY POLYETHYLENE	45868	25850	65905	42045	82025	46454	88875	55719	161628	98082	196418	129714	197507	143289	264483	204752

Table - 21 : Imports of Major Petrochemicals (Product-wise)

[QTY in MT & VAL in Rs. Lakh]																
PRODUCT	2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
HIGH DENSITY POLYTHYLENE	138724	69121	138792	83131	255190	150540	274868	176619	468120	279273	514445	306105	422712	298381	639062	464130
POLYESTYRENE	14542	10281	20570	11847	21046	12218	14699	11796	18221	17790	29461	26062	29218	30824	35949	45289
POLYPROPYLENE (INC. CO-POLYMER)	128275	64398	129812	76283	211695	122776	285074	162450	425307	256504	425286	285760	398100	317819	497691	427654
EXPANDABLE POLYESTYRENE	3571	2157	2912	2093	8947	6097	4703	3585	5369	3595	7454	5257	5722	4740	4560	4436
POLY VINYL CHLORIDE	266592	97503	223531	87969	355702	143614	338650	152028	629102	270822	671309	329720	851336	443759	1133124	647857
LINEAR LOW DENSITY POLYTHYLENE	124268	62736	129746	80067	170471	102261	223250	146465	378338	228495	584888	374061	464211	316607	538849	414080
PVC COMPOUND	58117	21766	38562	16206	47188	20625	44485	22567	73801	33879	70869	38560	66667	43449	65875	46706
TOTAL	779957	353812	749830	399641	1152264	604585	1274604	731229	2159886	1188440	2500130	1495239	2435473	1598868	3179593	2254904
SYNTHETIC RUBBER (ELASTOMERS)																
STYRENE BUTADIENE RUBBER	69864	46316	100510	69604	112794	80051	98297	96105	144393	103912	190300	186607	212549	329092	206663	292471
POLY BUTADIENE RUBBER	17487	14514	23863	19292	28245	21872	23312	27877	50385	39186	49000	62256	65935	111555	71052	115107
ETHYL PROPYLENE DIMERS	10647	10235	13406	14063	17539	17048	15837	18996	21187	23819	28391	37231	29231	54698	28373	60006
ETHYL VINYL ACETATE	89531	41319	87213	50857	117775	71162	89773	76757	77807	67380	90773	87925	83186	92285	108324	109280
NITRILE BUTADIENE RUBBER	11924	10827	14095	13161	13270	12428	9924	14113	14916	14811	16887	23822	19615	34667	26733	47496
BUTYL RUBBER	40319	49863	46901	58216	52007	70335	53287	109561	67196	103602	70891	142952	82117	172550	78525	173139
TOTAL	239772	173074	285988	225193	341630	272896	290430	343409	375884	352710	446242	540793	492633	794847	519670	797499
SYNTHETIC DETERGENT INTERMEDIATES																
LINEAR ALKYL BENZENE	5522	2561	26325	12503	48753	23255	76115	46829	91248	55862	78759	60557	106813	96564	127440	131486

Table - 21 : Imports of Major Petrochemicals (Product-wise)

PRODUCT	[QTY in MT & VAL in Rs. Lakh]															
	2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
ETHYLENE OXIDE	40	76	169	229	298	288	242	514	86	267	100	217	39	268	53	199
TOTAL	5562	2637	26494	12732	49051	23543	76357	47343	91334	56129	78859	60774	106852	96832	127493	131685
PERFORMANCE PLASTICS																
ABS RESIN	7524	6631	12383	10858	13365	11550	21073	19409	30368	26744	46224	50870	45470	53929	56897	72383
NYLON-6	20186	28224	23061	32751	31035	41317	34919	50607	44865	60807	60739	93809	74662	135583	88264	159031
POLYMETHYL METHACRYLATE	5960	5546	5836	5558	6510	6161	5247	6029	7141	7816	17748	12576	12444	17024	16488	21487
STYRENE ACRYLONITRILE	3641	2237	4315	3019	6195	4318	6061	3377	2899	2088	4910	4507	4480	4494	6248	7062
TOTAL	37311	42638	45595	52186	57105	63346	67300	79422	85273	97455	129621	161762	137056	211030	167897	259963
OLEFINS																
BUTADIENE	1106	818	249	244	4512	1522	3776	1443	15	39	3077	1761	5035	4539	9187	10430
ETHYLENE	21710	8179	16243	10203	14079	6982	19881	9163	34549	16505	114550	51549	14667	8223	23784	17219
PROPYLENE	25182	4672	78	157	121	228	69	274	44	278	164	357	153	609	1216	1667
TOTAL	47998	13669	16570	10604	18712	8732	23726	10880	34608	16822	117791	53667	19855	13371	34187	29316
AROMATICS																
BENZENE	18520	6932	6053	2749	20342	9675	51859	15208	123011	46067	48410	22786	43465	23677	50660	32106
MIXED XYLENE	4	5	17	50	0	1	1	1	2802	1149	11	21	24	75	169	197
ORTHO-XYLENE	39846	15157	33667	16172	109947	49924	87240	44327	44246	19829	39866	20455	35499	23839	45134	37444
TOLUENE	84252	27320	129118	53632	142896	53918	145719	57228	198906	78644	187442	77449	245391	139206	307145	215447

Table - 21 : Imports of Major Petrochemicals (Product-wise)

PRODUCT	[QTY in MT & VAL in Rs. Lakh]															
	2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
PARAXYLENE	327556	137085	182237	94982	359833	168762	235440	115826	292945	144485	403296	205231	435785	317886	564833	479409
TOTAL	470178	186499	351092	167585	633018	282280	520259	232590	661910	290174	679025	325942	760164	504683	967941	764603
OTHER PETRO-BASED CHEMICALS																
ETHYLENE DICHLORIDE	273986	42064	216594	39029	184235	31418	210965	30979	191648	35963	284997	65400	263401	46737	359009	53578
BUTANOL	22449	9034	19399	10732	25237	15080	24623	15158	37647	18804	25381	17294	31564	23498	36290	27372
OXO ALCOHOL	857	895	996	1085	697	794	669	967	1193	1438	528	1036	842	1842	1329	2102
2-ETHYL HEXANOL	7352	3298	8882	6674	10629	5680	21205	11748	38597	21344	34155	27996	29184	27396	58418	54709
VINYL CHLORIDE MONOMER	49391	15819	121811	41052	114988	40148	120303	43350	154636	62300	385101	163983	302327	147439	296171	145623
EPICHLHYDRINE	4458	3543	6821	7100	11452	9555	13693	10764	16927	10787	19786	19868	19068	19743	19109	18276
ISO BUTYLENE	41890	19191	37540	21387	39350	25490	32713	29472	40105	22883	42939	32730	23351	20485	9260	7938
METAXYLENE	3960	1696	3317	1728	7273	4707	5263	4448	468	304	1541	981	9564	5960	4371	3851
METHYL ISOBUTYL KETONE	11083	7406	11797	7326	14620	8597	14919	10690	16698	10474	16399	12388	19209	17173	17668	20184
PIB	9722	4981	6190	3948	5490	3771	5113	5323	5238	4294	6091	4825	7536	7281	10754	11817
POLYCARBONATE	34133	49271	48251	62086	47846	54450	41638	52817	54315	62610	105264	140607	116029	162876	122742	175907
PROPYLENE OXIDE	1816	1551	3833	3158	3304	2442	4432	3530	10006	7393	12561	10340	9392	9595	13141	13052
PROPYLENE GLYCOL	12885	8678	16491	10625	18716	11352	26070	18275	29374	17958	35120	24035	35736	29641	40036	34340
PET	70968	31553	65012	31780	30082	15036	62150	32009	25064	13376	60290	37519	35978	27152	79743	60854
POLYVINYL ACETATE RESIN	3225	3056	3090	3013	3089	2889	2147	2639	3481	3969	3623	4983	4254	6302	4388	7094

Table - 21 : Imports of Major Petrochemicals (Product-wise)

PRODUCT	[QTY in MT & VAL in Rs. Lakh]															
	2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013	
	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL	QTY	VAL
UNSATURATED POLYSTER RESIN	78540	38622	32757	23574	23423	19819	38920	28801	44833	30742	36633	36032	34237	39319	36013	43468
ETHYL BENZENE	49	30	79	70	20	15	63	51	76	53	54	47	75	82	407	360
CELLULOSE ACETATE BUTYRATE	29	88	11	28	7	17	17	52	4	16	110	203	228	450	8	151
CELLULOSE ACETATE SHEET	158	46	313	74	409	115	342	103	375	129	318	123	459	216	692	312
CELLULOSE NITRATE SHEET	37	28	38	273	93	312	22	88	75	137	99	217	81	236	178	248
MELAMINE MOULDING POWDER	1770	1681	2525	2162	2811	2434	2803	2910	3896	3902	6019	5928	8006	8500	8668	9858
POLYACETAL RESIN	10340	6324	12483	7653	12326	7629	10909	8118	15437	11934	19191	14005	21082	17748	25933	23667
PHTHALIC ANHYDRIDE	24092	10061	14133	7192	31203	16312	37465	19365	28098	13684	61241	31601	38894	25948	44321	36815
STYRENE	391333	182013	405715	223199	413840	230561	395725	207567	453007	236847	458595	252983	520758	348850	591646	492433
VINYL ACTATE MONOMER	41864	17478	40103	17908	53895	26570	50377	25881	76658	30906	85369	34884	124726	67921	127536	69804
ISOPROPANOL	34422	15929	53770	26472	30563	14705	25737	16132	34107	16488	40556	23598	33441	22148	55724	42087

Table-22: Top Five Export Destinations of Selected Petrochemicals during 2012-13			
PRODUCT	COUNTRY	QUANTITY (MT)	VALUE(Rs. Lakhs)
ACRYLIC FIBRE	CHINA P RP	4110.061	4970.226
	KENYA	3608.933	2923.499
	ETHIOPIA	3449.42	3433.444
	IRAN	1071.223	1685.747
	CHILE	916.811	1116.541
	Product Total	13156.45	14129.46
NYLON FILAMENT YARN	SRI LANKA DSR	285.845	803.625
	U ARAB EMTS	257.01	880.108
	U S A	167.108	530.764
	BRAZIL	166.27	590.021
	U K	128.607	457.138
	Product Total	1004.84	3261.66
NYLON INDUSTRIAL YARN/TYRE CORD	U ARAB EMTS	2739.995	4985.987
	THAILAND	808.654	1469.874
	U K	63.061	112.321
	BANGLADESH PR	54.271	83.574
	SRI LANKA DSR	31.976	77.34
	Product Total	3697.96	6729.10
POLYESTER FILAMENT YARN	TURKEY	129776.117	135478.707
	BRAZIL	126920.675	121740.697
	EGYPT A RP	63614.205	53850.054
	MEXICO	24784.355	24878.296
	SYRIA	20321.255	16224.842
	Product Total	365416.61	352172.60
POLYESTER STAPLE FIBRE	U S A	28154.377	24788.881
	GERMANY	16713.124	14638.641
	BELGIUM	12910.122	10653.181
	SPAIN	11774.583	9659.793
	NEPAL	11117.046	9900.752
	Product Total	80669.25	69641.25
POLYPROPYLENE FILAMENT YARN	BRAZIL	349.728	532.104
	U ARAB EMTS	289.605	370.067
	BANGLADESH PR	245.224	305.464
	ETHIOPIA	187.117	250.254
	U S A	110.202	169.805
	Product Total	1181.88	1627.69
POLYPROPYLENE STAPLE FIBRE	NEPAL	879.34	940.153
	U S A	841.514	1000.856
	MEXICO	183.2	237.902
	U ARAB EMTS	175.225	214.866
	AUSTRALIA	164.431	183.571

Table-22: Top Five Export Destinations of Selected Petrochemicals during 2012-13			
PRODUCT	COUNTRY	QUANTITY (MT)	VALUE(Rs. Lakhs)
	Product Total	2243.71	2577.35
ACRYLONITRILE	U ARAB EMTS	2087	2699.743
	INDONESIA	13.171	32.42
	SRI LANKA DSR	1.31	1.48
	NEPAL	1	1.68
	TAIWAN	0.15	11.162
	Product Total	2102.63	2746.49
CAPROLACTUM	MALAYSIA	2766.544	3879.673
	IRAN	576	973.415
	Product Total	3342.54	4853.09
MONO EHYLENE GLYCOL	U S A	15171.649	12570.288
	CHINA P RP	9949.952	5217.247
	MEXICO	9709.6	7727.28
	TAIWAN	9480	7339.575
	U K	8503.2	6819.285
	Product Total	52814.40	39673.68
PURIFIED TEREPHTHALIC ACID	CHINA P RP	3505.464	1784.809
	SRI LANKA DSR	1.001	0.677
	TURKEY	75	25.578
	Product Total	3581.47	1811.06
LOW DENSITY POLYETHYLENE	TURKEY	7804.684	6985.126
	PORTUGAL	1185.76	955.666
	ARGENTINA	889	963.197
	IRAN	881.752	939.894
	NEPAL	806.102	585.495
	Product Total	11567.30	10429.38
HIGH DENSITY POLYTHYLENE	CHINA P RP	52445.544	39040.628
	TURKEY	45198.02	34100.378
	PAKISTAN IR	15719.901	12107.864
	VIETNAM SOC REP	12955.148	9636.414
	NEPAL	4069.479	3625.784
	Product Total	130388.09	98511.07
POLYESTYRENE	TURKEY	11166.104	10603.798
	EGYPT A RP	9821.018	9201.311
	U ARAB EMTS	6387.985	5657.05
	ITALY	5101.747	4855.064
	BANGLADESH PR	3759.744	3620.608
	Product Total	36236.60	33937.83
POLYPROPYLENE (INC. CO-POLYMER)	CHINA P RP	328646.712	244658.657
	TURKEY	88920.811	67317.965
	VIETNAM SOC REP	62951.44	47063.046

Table-22: Top Five Export Destinations of Selected Petrochemicals during 2012-13			
PRODUCT	COUNTRY	QUANTITY (MT)	VALUE(Rs. Lakhs)
	INDONESIA	48895.648	36433.168
	PAKISTAN IR	41411.41	31873.59
	Product Total	570826.02	427346.43
EXPANDABLE POLYSTYRENE	TAIWAN	1099.853	1061.704
	EGYPT A RP	370.027	328.496
	HONG KONG	320.797	313.181
	SINGAPORE	293.797	286.063
	JORDAN	216	195.465
	Product Total	2300.47	2184.91
POLY VINYL CHLORIDE	U S A	223.881	359.043
	NIGERIA	199	261.981
	BANGLADESH PR	175.127	178.854
	NEPAL	124.366	130.574
	SOUTH AFRICA	63.907	53.303
	Product Total	786.28	983.76
LINEAR LOW DENSITY POLYTHYLENE	TURKEY	5737.145	4280.756
	PAKISTAN IR	2723.6	2107.08
	ITALY	1767	1265.53
	BANGLADESH PR	1686.55	1276.641
	EGYPT A RP	1435.325	1416.606
	Product Total	13349.62	10346.61
PVC COMPOUND	ETHIOPIA	1672	1429.263
	THAILAND	1060.911	711.354
	TANZANIA REP	774.138	536.541
	SRI LANKA DSR	630.728	610.215
	KUWAIT	620	646.521
	Product Total	4757.78	3933.89
STYRENE BUTADIENE RUBBER	THAILAND	1298.801	1498.197
	PAKISTAN IR	1005.32	819.617
	U ARAB EMTS	921.394	791.167
	CHINA P RP	766.48	746.53
	BELGIUM	465	499.472
	Product Total	4457.00	4354.98
POLY BUTADIENE RUBBER	CHINA P RP	1013.442	1661.312
	SRI LANKA DSR	139.13	253.165
	PERU	16	29.702
	BANGLADESH PR	3.106	1.436
	NEPAL	1.49	1.387
	Product Total	1173.17	1947.00
ETHYL PROPYLENE DIMERS	U ARAB EMTS	525.482	637.941
	U S A	86.767	199.548

Table-22: Top Five Export Destinations of Selected Petrochemicals during 2012-13			
PRODUCT	COUNTRY	QUANTITY (MT)	VALUE(Rs. Lakhs)
	TURKEY	51.08	206.595
	SOUTH AFRICA	50.825	118.293
	U K	50.14	89.464
	Product Total	764.29	1251.84
ETHYL VINYL ACETATE	IRAN	425	474.36
	SAUDI ARAB	170.31	137.624
	BANGLADESH PR	53.796	43.162
	NEPAL	20.462	10.241
	LEBANON	20.069	12.033
	Product Total	689.64	677.42
NITRILE BUTADIENE RUBBER	U S A	166.64	415.864
	MALAYSIA	53.66	118.078
	INDONESIA	52.193	203.684
	THAILAND	37.246	126.643
	JAPAN	36.854	222.025
	Product Total	346.59	1086.29
BUTYL RUBBER	BANGLADESH PR	115.2	241.549
	SRI LANKA DSR	53.88	126.919
	U ARAB EMTS	24.315	41.771
	U K	20.024	88.333
	CHINA P RP	14	43.48
	Product Total	227.42	542.05
LINEAR ALKYL BENZENE	INDONESIA	14974.2	15203.016
	PAKISTAN IR	12132	12144.211
	VIETNAM SOC REP	5334	5240.261
	TANZANIA REP	3644	3625.102
	OMAN	3601	3501.845
	Product Total	39685.20	39714.44
ETHYLENE OXIDE	SPAIN	207.879	539.774
	MALAYSIA	125.843	123.003
	PAKISTAN IR	34.1	36.254
	BANGLADESH PR	11.005	7.935
	VIETNAM SOC REP	10.5	31.92
	Product Total	389.33	738.89
ABS RESIN	U S A	255.1	283.977
	TURKEY	216.1	245.232
	THAILAND	60.096	43.345
	RUSSIA	38.9	52.708
	KOREA RP	32.291	54.61
	Product Total	602.49	679.87
NYLON-6	HONG KONG	2309.502	3991.888

Table-22: Top Five Export Destinations of Selected Petrochemicals during 2012-13			
PRODUCT	COUNTRY	QUANTITY (MT)	VALUE(Rs. Lakhs)
	U ARAB EMTS	827.963	1330.619
	SAUDI ARAB	791.134	1262.019
	KOREA RP	664.276	794.26
	U S A	591.337	882.526
	Product Total	5184.21	8261.31
POLYMETHYL METHACRYLATE	NIGERIA	1642.764	1217.111
	MAURITIUS	622.4	412.236
	CHINA P RP	577.557	476.269
	SRI LANKA DSR	423.544	339.062
	KENYA	333.867	250.123
	Product Total	3600.13	2694.80
STYRENE ACRYLONITRILE	MOZAMBIQUE	18	22.315
	MALAWI	18	19.374
	U S A	3.5	13.087
	MALTA	1.6	10.997
	EGYPT A RP	1	1.273
	Product Total	42.10	67.05
BUTADIENE	KOREA RP	32300	36668.884
	MALAYSIA	30870	35616.062
	TAIWAN	21885	25241.451
	THAILAND	18690	22060.281
	INDONESIA	10725	12486.395
	Product Total	114470.00	132073.07
ETHYLENE	SRI LANKA DSR	0.41	1.583
	FRANCE	0.1	0.196
	U S A	0.04	1.865
	IRAN	0.028	0.165
	NETHERLAND	0.005	0.003
	Product Total	0.58	3.81
PROPYLENE	CHINA P RP	6190	3864.194
	BANGLADESH PR	9.331	1.43
	ETHIOPIA	0.46	0.23
	Product Total	6199.79	3865.85
BENZENE	SAUDI ARAB	184558.065	126006.694
	U S A	161997.406	110821.165
	BELGIUM	89840.525	61458.242
	SINGAPORE	56070	37744.377
	SPAIN	48445.78	35082.914
	Product Total	540911.78	371113.39
MIXED XYLENE	KOREA RP	55811	43424.996
	U ARAB EMTS	31604.5	20691.098

Table-22: Top Five Export Destinations of Selected Petrochemicals during 2012-13			
PRODUCT	COUNTRY	QUANTITY (MT)	VALUE(Rs. Lakhs)
	SINGAPORE	20889	16185.531
	KOREA DP RP	17778	14265.709
	TAIWAN	10448	6693.987
	Product Total	136530.50	101261.32
ORTHO-XYLENE	CHINA P RP	165100	127341.133
	INDONESIA	32761.72	26070.627
	PAKISTAN IR	10605	8234.481
	UNSPECIFIED	2100	1463.254
	MALAYSIA	231.347	224.562
	Product Total	210798.07	163334.06
TOLUENE	U ARAB EMTS	4366.115	3273.314
	SRI LANKA DSR	363.343	271.652
	KENYA	125.8	101.45
	SAUDI ARAB	115.84	82.274
	CHINA P RP	76.16	158.743
	Product Total	5047.26	3887.43
PARAXYLENE	INDONESIA	223595	178417.153
	MALAYSIA	196140	165640.332
	PAKISTAN IR	89245.022	73530.868
	CHINA P RP	50120	37796.782
	TURKEY	10500	7584.124
	Product Total	569600.02	462969.26
ETHYLENE DICHLORIDE	THAILAND	3200	553.86
	FRANCE	0.05	0.349
	SAUDI ARAB	0.012	0.022
	Product Total	3200.06	554.23
BUTANOL	SINGAPORE	2859.148	2299.537
	BELGIUM	609.179	1158.883
	U S A	492.936	715.579
	KOREA RP	283.855	807.188
	CHINA P RP	223.66	553.758
	Product Total	4468.78	5534.95
OXO ALCOHOL	U S A	378.903	378.786
	BRAZIL	177.753	276.498
	KAZAKHSTAN	103	19.552
	NETHERLAND	73.157	64.91
	ARGENTINA	16.016	24.772
	Product Total	748.83	764.52
2-ETHYL HEXANOL	U S A	19.01	74.439
	BRAZIL	10	12.429
	BANGLADESH PR	9.7	11.034

Table-22: Top Five Export Destinations of Selected Petrochemicals during 2012-13			
PRODUCT	COUNTRY	QUANTITY (MT)	VALUE(Rs. Lakhs)
	SAUDI ARAB	4.066	75.937
	GERMANY	1.291	331.02
	Product Total	44.07	504.86
VINYL CHLORIDE MONOMER	U ARAB EMTS	0.001	0.002
	Product Total	0.00	0.00
EPICHLHYDRINE	BANGLADESH PR	7.89	0.989
	U ARAB EMTS	4.14	6.365
	YEMEN REPUBLC	0.5	1.769
	IRAN	0.48	0.825
	Product Total	13.01	9.95
ISO BUTYLENE	SWITZERLAND	0.001	0.011
	Product Total	0.00	0.01
METAXYLENE			
2-ETHYL HEXANOL	INDONESIA	15750	12575.002
	PAKISTAN IR	11660.038	9221.54
	TURKEY	5250	4313.101
	MALAYSIA	5250	4068.461
	NETHERLAND	3150	2496.918
	Product Total	41060.04	32675.02
METHYL ISOBUTYL KETONE	GERMANY	3.2	18.99
	ITALY	0.8	48.863
	U ARAB EMTS	0.705	0.405
	BANGLADESH PR	0.555	2.616
	KENYA	0.006	0.013
	Product Total	5.27	70.89
PIB	INDONESIA	1529.423	1596.974
	SINGAPORE	1223.2	1187.022
	NETHERLAND	256	325.702
	U ARAB EMTS	221.45	279.293
	GERMANY	183	225.559
	Product Total	3413.07	3614.55
POLYCARBONATE	ARGENTINA	206	257.277
	AUSTRALIA	0.2	0.962
	BANGLADESH PR	0.25	0.161
	BRAZIL	0.172	0.349
	CANADA	0.325	1.208
	Product Total	206.95	259.96
PROPYLENE GLYCOL	U ARAB EMTS	1352.368	930.102
	SAUDI ARAB	338.277	250.193
	TANZANIA REP	244.809	181.953
	IRAN	86	73.985

Table-22: Top Five Export Destinations of Selected Petrochemicals during 2012-13			
PRODUCT	COUNTRY	QUANTITY (MT)	VALUE(Rs. Lakhs)
	ETHIOPIA	62.811	64.779
	Product Total	2084.27	1501.01
PET	U ARAB EMTS	39989.786	32121.474
	ITALY	31861.71	25287.496
	U S A	28678.482	23603.774
	BANGLADESH PR	21269.123	16193.076
	TUNISIA	13463	10208.565
	Product Total	135262.10	107414.39
POLYVINYL ACETATE RESIN	U S A	4060.396	4767.022
	NIGERIA	2736.231	1256.363
	EGYPT A RP	783.456	418.75
	IRELAND	700	864.16
	U ARAB EMTS	644.342	362.07
	Product Total	8924.43	7668.37
UNSATURATED POLYSTER RESIN	SPAIN	1970.776	1907.69
	SAUDI ARAB	1139.828	1174.905
	NIGERIA	830.571	863.198
	AUSTRALIA	748.953	954.64
	CHINA P RP	651.814	734.026
	Product Total	5341.94	5634.46
ETHYL BENZENE	NEPAL	4	3.795
	Product Total	4.00	3.80
CELLULOSE ACETATE BUTYRATE	SOUTH AFRICA	30.025	41.128
	ITALY	21.258	14.382
	GERMANY	1.1	16.909
	PAKISTAN IR	0.1	1.687
	NEPAL	0.1	0.133
	Product Total	52.58	74.24
CELLULOSE ACETATE SHEET	NEPAL	132.79	112.14
	THAILAND	16.657	48.203
	KENYA	9.023	5.068
	HUNGARY	0.08	0.116
	SOUTH AFRICA	0.025	0.65
	Product Total	158.58	166.18
CELLULOSE NITRATE SHEET	CONGO D. REP.	45	14.505
	MEXICO	0.661	1.79
	SRI LANKA DSR	0.333	0.621
	SWEDEN	0.25	0.669
	ITALY	0.04	0.967
	Product Total	46.28	18.55
MELAMINE MOULDING	NEPAL	288.295	73.379

Table-22: Top Five Export Destinations of Selected Petrochemicals during 2012-13			
PRODUCT	COUNTRY	QUANTITY (MT)	VALUE(Rs. Lakhs)
POWDER	ETHIOPIA	141	30.4
	CHINA P RP	128	144.089
	INDONESIA	114.5	136.958
	PAKISTAN IR	99	68.259
	Product Total	770.80	453.09
POLYACETAL RESIN	BANGLADESH PR	112	134.19
	U ARAB EMTS	37.45	29.405
	U S A	28.018	41.413
	MALAYSIA	18	15.917
	NORWAY	17.7	13.726
	Product Total	213.17	234.65
PHTHALIC ANHYDRIDE	SAUDI ARAB	6168	5568.556
	U ARAB EMTS	2681	2366.724
	TURKEY	1578	1372.055
	KUWAIT	791.01	779.528
	EGYPT A RP	315.02	250.486
	Product Total	11533.03	10337.35
STYRENE	SPAIN	4798.322	5062.755
	TAIWAN	4200	3608.482
	TURKEY	3600	3648.172
	CHINA P RP	2229.183	1786.972
	NETHERLAND	1500	1208.819
	Product Total	16327.51	15315.20
VINYL ACTATE MONOMER	BANGLADESH PR	768.68	475.492
	U ARAB EMTS	382	220.483
	KENYA	91	58.549
	SRI LANKA DSR	86.768	57.738
	NEPAL	12.2	8.893
	Product Total	1340.65	821.16
ISOPROPANOL	U ARAB EMTS	620.375	475.317
	CHINA P RP	591.922	495.626
	U S A	488.998	503.45
	BELGIUM	430.357	1186.082
	EGYPT A RP	400	338.427
	Product Total	2531.65	2998.90

Table - 23: Top Five Sources (Countries) of Import of Selected Petrochemicals to India during 2012-13			
PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakhs)
ACRYLIC FIBRE	THAILAND	10508	13369
	GERMANY	8807	12096
	BELARUS	3525	5242
	JAPAN	2877	5638
	EGYPT A RP	2430	3266
	Product Total	28147	39612
NYLON FILAMENT YARN	TAIWAN	5608	11627
	MALAYSIA	5100	9618
	CHINA P RP	3527	8580
	VIETNAM SOC REP	2627	5477
	KOREA RP	1900	3953
	Product Total	18761	39254
NYLON INDUSTRIAL YARN/TYRE CORD	CHINA P RP	8361	14840
	TAIWAN	2771	5129
	INDONESIA	498	911
	KOREA RP	118	65
	BELARUS	56	111
	Product Total	11805	21056
POLYESTER FILAMENT YARN	CHINA P RP	16836	22347
	MALAYSIA	9116	9540
	KOREA RP	8442	11315
	INDONESIA	4976	5899
	THAILAND	3260	4331
	Product Total	42631	53432
POLYESTER STAPLE FIBRE	AUSTRALIA	9	3
	BANGLADESH PR	3	3
	BELGIUM	8	6
	CHINA P RP	16859	13822
	GERMANY	853	1391
	Product Total	17732	15225
POLYPROPYLENE FILAMENT YARN	BELGIUM	51	85
	CHINA P RP	698	1205
	GERMANY	3	26
	INDONESIA	12	32
	ITALY	0	6
	Product Total	765	1354
POLYPROPYLENE STAPLE FIBRE	CHINA P RP	222	286
	AUSTRIA	36	58
	GERMANY	31	57
	U S A	20	59
	KOREA RP	15	17

Table - 23: Top Five Sources (Countries) of Import of Selected Petrochemicals to India during 2012-13			
PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakhs)
	Product Total	324	477
ACRYLONITRILE	U S A	56120	55302
	BRAZIL	5171	6047
	RUSSIA	4879	4520
	TURKEY	3985	4136
	BELGIUM	3448	4323
	Product Total	73603	74329
CAPROLACTUM	RUSSIA	9076	12608
	POLAND	5324	6970
	BELGIUM	1512	2083
	JAPAN	3	7
	CHINA P RP	1	2
	Product Total	15916	21671
DIMETHYL TEREPHTHALATE	JAPAN	828	632
	KOREA RP	648	492
	TURKEY	288	221
	U S A	240	173
	IRAN	100	73
	Product Total	2104	1592
MONO EHYLENE GLYCOL	SAUDI ARAB	432855	245208
	KUWAIT	134716	78143
	IRAN	39210	21445
	SINGAPORE	38812	24123
	U ARAB EMTS	6546	3858
	Product Total	652139	372777
PURIFIED TEREPHTHALIC ACID	KOREA RP	359272	219674
	THAILAND	227714	139899
	MALAYSIA	15180	9854
	POLAND	11352	6859
	U ARAB EMTS	10985	6367
	Product Total	624504	382654
LOW DENSITY POLYETHYLENE	SAUDI ARAB	60189	44419
	QATAR	51793	39476
	U S A	23772	16817
	IRAN	22023	16218
	U ARAB EMTS	17210	9660
	Product Total	174986	126589
HIGH DENSITY POLYTHYLENE	QATAR	171209	97308
	SAUDI ARAB	130450	97398
	U ARAB EMTS	92391	57484
	THAILAND	46158	39903

Table - 23: Top Five Sources (Countries) of Import of Selected Petrochemicals to India during 2012-13			
PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakhs)
	SINGAPORE	40774	36136
	Product Total	480983	328230
POLYESTYRENE	SINGAPORE	12352	12531
	KOREA RP	9463	12772
	TAIWAN	5409	7078
	U S A	2041	3839
	MALAYSIA	1471	2231
	Product Total	30736	38451
POLYPROPYLENE (INC. CO-POLYMER)	SAUDI ARAB	166013	128523
	KOREA RP	69464	62214
	U ARAB EMTS	68129	52112
	SINGAPORE	60637	53787
	THAILAND	28186	27072
	Product Total	392430	323708
EXPANDABLE POLYESTYRENE	TAIWAN	1974	1911
	CHINA P RP	1527	1481
	MALAYSIA	902	845
	KOREA RP	60	53
	SINGAPORE	34	38
	Product Total	4497	4327
POLY VINYL CHLORIDE	TAIWAN	322467	175842
	KOREA RP	307015	171346
	CHINA P RP	118126	65089
	GERMANY	97523	52627
	U S A	74286	41923
	Product Total	919417	506827
LINEAR LOW DENSITY POLYTHYLENE	SAUDI ARAB	184896	139348
	QATAR	77694	59187
	U ARAB EMTS	52498	38440
	SINGAPORE	44158	35121
	THAILAND	37673	30666
	Product Total	396918	302763
PVC COMPOUND	KOREA RP	22471	13670
	GERMANY	9132	5897
	TAIWAN	9034	5499
	U S A	3983	2460
	THAILAND	3426	3173
	Product Total	48047	30699
STYRENE BUTADIENE RUBBER	KOREA RP	83822	119080
	POLAND	35511	49962
	TAIWAN	17509	24245

Table - 23: Top Five Sources (Countries) of Import of Selected Petrochemicals to India during 2012-13			
PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakhs)
	U S A	10054	14489
	RUSSIA	9298	13565
	Product Total	156194	221342
POLY BUTADIENE RUBBER	KOREA RP	22352	35746
	CZECH REPUBLIC	10662	17558
	RUSSIA	8436	13542
	U S A	6149	10046
	IRAN	3907	5934
	Product Total	51507	82826
ETHYL PROPYLENE DIMERS	U S A	7407	15168
	JAPAN	6429	13963
	KOREA RP	5111	10729
	NETHERLAND	4675	10491
	FRANCE	2165	4591
	Product Total	25786	54942
ETHYL VINYL ACETATE	KOREA RP	35425	34665
	THAILAND	17697	17142
	TAIWAN	14786	14339
	CANADA	9310	8817
	U S A	8301	8303
	Product Total	85520	83266
NITRILE BUTADIENE RUBBER	KOREA RP	11211	18070
	JAPAN	4036	9584
	FRANCE	3880	7041
	RUSSIA	2721	4397
	TAIWAN	1105	2159
	Product Total	22953	41251
BUTYL RUBBER	BELGIUM	3578	10000
	CANADA	209	403
	CHINA P RP	4962	9250
	FINLAND	65	139
	FRANCE	6903	17422
	Product Total	15717	37214
LINEAR ALKYL BENZENE	SAUDI ARAB	45373	48307
	QATAR	39733	40756
	IRAN	31709	31655
	U ARAB EMTS	8985	8956
	EGYPT A RP	980	941
	Product Total	126780	130615
ETHYLENE OXIDE	U S A	31	162
	CHINA P RP	18	16

Table - 23: Top Five Sources (Countries) of Import of Selected Petrochemicals to India during 2012-13			
PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakhs)
	JAPAN	2	10
	NETHERLAND	1	2
	TURKEY	1	2
	Product Total	53	192
ABS RESIN	KOREA RP	46419	57862
	MALAYSIA	5043	6598
	TAIWAN	1973	2255
	CHINA P RP	705	1046
	SINGAPORE	686	1107
	Product Total	54826	68868
NYLON-6	TAIWAN	19636	30509
	U S A	16757	26200
	RUSSIA	10932	16014
	GERMANY	10219	18491
	CHINA P RP	5857	15891
	Product Total	63401	107105
POLYMETHYL METHACRYLATE	KOREA RP	6275	8621
	SINGAPORE	3662	4143
	THAILAND	1711	1439
	GERMANY	893	1564
	CHINA P RP	699	897
	Product Total	13240	16663
STYRENE ACRYLONITRILE	BRAZIL	113	143
	CHINA P RP	23	49
	GERMANY	198	285
	ITALY	2	4
	JAPAN	101	119
	Product Total	436	600
BUTADIENE	KOREA RP	7133	8559
	NETHERLAND	1900	1508
	CZECH REPUBLIC	133	246
	GERMANY	13	88
	CHINA P RP	7	21
	Product Total	9186	10421
ETHYLENE	SAUDI ARAB	18946	13592
	QATAR	4652	3371
	IRAN	90	20
	GERMANY	40	101
	U S A	34	77
	Product Total	23762	17162
PROPYLENE	U S A	1017	747

Table - 23: Top Five Sources (Countries) of Import of Selected Petrochemicals to India during 2012-13			
PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakhs)
	CHINA P RP	179	872
	NETHERLAND	13	14
	BELGIUM	5	21
	GERMANY	3	13
	Product Total	1216	1667
BENZENE	IRAN	34889	21436
	THAILAND	10648	7264
	UNSPECIFIED	5000	3293
	U ARAB EMTS	120	108
	GERMANY	2	3
	Product Total	50659	32104
MIXED XYLENE	KOREA RP	100	69
	CHINA P RP	52	112
	U S A	14	11
	GERMANY	2	4
	U ARAB EMTS	1	1
	Product Total	169	197
ORTHO-XYLENE	SINGAPORE	21692	17980
	ISRAEL	10086	8281
	IRAN	6873	5622
	GERMANY	2924	2449
	SPAIN	1874	1536
	Product Total	43449	35868
TOLUENE	KOREA RP	160111	110923
	SINGAPORE	61513	45034
	THAILAND	50174	34560
	ISRAEL	8986	6274
	NETHERLAND	5630	4174
	Product Total	286413	200966
PARAXYLENE	OMAN	247219	208914
	SINGAPORE	140257	120507
	KUWAIT	107393	91655
	MALAYSIA	61781	52398
	IRAN	8176	5932
	Product Total	564826	479405
ETHYLENE DICHLORIDE	QATAR	96830	13713
	GERMANY	71904	11241
	SAUDI ARAB	58953	9174
	U S A	42030	6436
	IRAN	19309	2640
	Product Total	289026	43203

Table - 23: Top Five Sources (Countries) of Import of Selected Petrochemicals to India during 2012-13			
PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakhs)
BUTANOL	MALAYSIA	16711	12369
	SOUTH AFRICA	6698	5076
	GERMANY	6461	5092
	U S A	1979	1325
	RUSSIA	1197	806
	Product Total	33045	24668
OXO ALCOHOL	INDONESIA	358	424
	U S A	337	625
	SINGAPORE	215	274
	GERMANY	84	227
	THAILAND	77	67
	Product Total	1070	1617
2-ETHYL HEXANOL	MALAYSIA	17216	15926
	SAUDI ARAB	12275	10827
	GERMANY	7756	8392
	NETHERLAND	4588	4030
	INDONESIA	3900	3550
	Product Total	45735	42724
VINYL CHLORIDE MONOMER	QATAR	204619	98171
	JAPAN	57584	30056
	TAIWAN	19765	9997
	NORWAY	7035	3524
	SAUDI ARAB	4199	2293
	Product Total	293201	144041
EPICHLHYDRINE	THAILAND	6013	5372
	KOREA RP	5446	5395
	GERMANY	5420	5195
	JAPAN	975	897
	CHINA P RP	367	570
	Product Total	18221	17429
ISO BUTYLENE	KOREA RP	5569	4671
	TAIWAN	2320	1993
	EGYPT A RP	568	407
	KOREA DP RP	480	447
	NETHERLAND	179	199
	Product Total	9116	7717
METAXYLENE	U S A	1969	1828
	JAPAN	1410	1266
	KOREA RP	870	605
	SINGAPORE	88	116
	KOREA DP RP	20	23

Table - 23: Top Five Sources (Countries) of Import of Selected Petrochemicals to India during 2012-13			
PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakhs)
	Product Total	4356	3838
METHYL ISOBUTYL KETONE	TAIWAN	6808	7339
	SOUTH AFRICA	6144	6640
	NETHERLAND	1775	2646
	U S A	1301	1257
	KOREA RP	887	993
	Product Total	16914	18875
PIB	KOREA RP	8528	8494
	BELGIUM	740	867
	GERMANY	529	1425
	BRAZIL	419	414
	KOREA DP RP	138	131
	Product Total	10353	11331
POLYCARBONATE	THAILAND	38665	52985
	SPAIN	37336	51445
	NETHERLAND	12931	21333
	SINGAPORE	10456	15242
	U S A	7733	12729
	Product Total	107120	153735
PROPYLENE OXIDE	SAUDI ARAB	9234	8804
	KOREA RP	2143	2256
	THAILAND	1490	1434
	TAIWAN	126	128
	CHINA P RP	79	327
	Product Total	13073	12949
PROPYLENE GLYCOL	SINGAPORE	13203	11401
	U S A	11691	9795
	KOREA RP	7459	6413
	CHINA P RP	4262	4064
	THAILAND	2292	1502
	Product Total	38907	33174
PET	CHINA P RP	14239	10843
	MALAYSIA	11911	9307
	TAIWAN	11116	8379
	IRAN	10171	7474
	KOREA RP	9831	7294
	Product Total	57268	43297
POLYVINYL ACETATE RESIN	GERMANY	2338	2813
	KOREA RP	424	385
	U S A	414	2064
	CHINA P RP	374	512

Table - 23: Top Five Sources (Countries) of Import of Selected Petrochemicals to India during 2012-13			
PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakhs)
	JAPAN	264	437
	Product Total	3813	6211
UNSATURATED POLYSTER RESIN	CHINA P RP	10407	11080
	U ARAB EMTS	8728	9129
	TAIWAN	8625	8671
	KOREA RP	2234	2025
	ITALY	2005	3295
	Product Total	31999	34201
ETHYL BENZENE	UNSPECIFIED	300	235
	GERMANY	61	75
	KOREA RP	18	16
	CHINA P RP	14	17
	NETHERLAND	14	17
	Product Total	407	360
CELLULOSE ACETATE BUTYRATE	FINLAND	4	69
	GERMANY	3	77
	JAPAN	1	3
	SRI LANKA DSR	0	1
	SINGAPORE	0	0
	Product Total	8	151
CELLULOSE ACETATE SHEET	CHINA P RP	392	135
	ITALY	210	91
	HONG KONG	37	8
	CYPRUS	33	25
	SWITZERLAND	12	25
	Product Total	683	283
CELLULOSE NITRATE SHEET	KOREA RP	137	187
	SPAIN	21	16
	KOREA DP RP	15	21
	NEW ZEALAND	3	12
	GERMANY	2	6
	Product Total	177	242
MELAMINE MOULDING POWDER	THAILAND	3236	3207
	TAIWAN	1654	1590
	U S A	1210	1541
	GERMANY	939	1290
	CHINA P RP	823	968
	Product Total	7863	8596
POLYACETAL RESIN	KOREA RP	4850	4337
	THAILAND	4789	4160
	MALAYSIA	3963	3797

Table - 23: Top Five Sources (Countries) of Import of Selected Petrochemicals to India during 2012-13			
PRODUCT	COUNTRY	QUANTITY(MT)	VALUE(RS.Lakhs)
	U S A	3448	2968
	NETHERLAND	3428	2502
	Product Total	20478	17764
PHTHALIC ANHYDRIDE	KOREA RP	14409	12050
	TAIWAN	11013	9156
	ISRAEL	7677	6422
	RUSSIA	3547	2824
	IRAN	3048	2407
	Product Total	39693	32859
STYRENE	SAUDI ARAB	232098	189920
	SINGAPORE	197159	165574
	KUWAIT	98936	81438
	IRAN	23612	18978
	PAKISTAN IR	19517	18075
	Product Total	571321	473984
VINYL ACTATE MONOMER	SINGAPORE	63916	36406
	SAUDI ARAB	39311	20861
	TAIWAN	16444	8499
	U S A	4660	2313
	KOREA RP	2950	1461
	Product Total	127280	69540
ISOPROPANOL	U S A	13620	9433
	NETHERLAND	10922	9132
	TAIWAN	10788	8196
	KOREA RP	8607	6523
	SINGAPORE	5368	4004
	Product Total	49305	37288

Table - 24: Exchange Rates of Indian Rupee vis-a-vis US\$

MONTH	RS./US\$
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
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: www.rbi.org.in/scripts/referenceratearchive.aspx

Section – V

*Foreign
Direct
Investment
(FDI)*

Table -25 : Sector-wise FDI during 2010-11 to 2012-13

Amount in Rs. crores (US\$ in million)

S.No.	Sector	2010-11 (April -March)	2011-12 (April - March)	2012-13 (April – March)	Cumulative Inflows (April '00 –March '13)	% age to total Inflows (In terms of US\$)
1	SERVICES SECTOR **	15054 (3296)	24656 (5216)	26306 (4833)	172275 (37235)	19%
2	CONSTRUCTION DEVELOPMENT: TOWNSHIPS, HOUSING, BUILT-UP INFRASTRUCTURE	7590 (1663)	15236 (3141)	7248 (1332)	101049 (22080)	11%
3	TELECOMMUNICATIONS (radio paging, cellular mobile, basic telephone services)	7542 (1665)	9012 (1997)	1654 (304)	58732 (12856)	7%
4	COMPUTER SOFTWARE & HARDWARE	3551 (780)	3804 (796)	2656 (486)	52774 (11691)	6%
5	DRUGS & PHARMACEUTICALS	961 (209)	14605 (3232)	6011 (1123)	48880 (10318)	5%
6	CHEMICALS (OTHER THAN FERTILIZERS)	10612 (2354)	18422 (4041)	1596 (292)	40496 (8881)	5%
7	AUTOMOBILE INDUSTRY	5864 (1299)	4347 (923)	8384 (1537)	39170 (8295)	4%
8	POWER	5796 (1272)	7678 (1652)	2923 (536)	36137 (7834)	4%
9	METALLURGICAL INDUSTRIES	5023 (1098)	8348 (1786)	7878 (1466)	34814 (7507)	4%
10	HOTEL & TOURISM	1405 (308)	4754 (993)	17777 (3259)	33260 (6631)	3%

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

Section – VI

*Index of
Industrial
Production*

**Table - 26: Monthly Production Growth in 'Chemicals and Chemical Products' vis-a-vis Manufacturing Sector during April 2012 To March 2013
(Based on Index of Industrial Production)**

Period	Chemicals and chemical products	Manufacturing	General
Production Growth (%)			
Apr'12	-4.4	-12.9	-12.5
May'12	2.1	3.5	3.8
Jun'12	-2.6	-0.5	-1.4
Jul'12	8.7	-0.4	-0.5
Aug'12	2.4	-0.9	-1.4
Sept'12	-6.7	-0.7	-1.0
Oct'12	2.9	4.5	5.2
Nov'12	-8.3	-3.3	-3.4
Dec'12	10.4	8.3	8.1
Jan'13	0.7	1.3	1.5
Feb'13	-6.1	-1.7	-3.3
Mar'13	5.2	8.8	10.2
Index of Industrial Production (Base : 2004-05=100)			
March'12	127.6	198.7	187.6
Apr'12	122.0	173.0	164.1
May'12	124.6	179.0	170.3
Jun'12	121.3	178.1	168.0
Jul'12	131.9	177.4	167.1
Aug'12	135.1	175.8	164.7
Sept'12	126.0	174.6	163.1
Oct'12	129.6	182.4	171.6
Nov'12	118.9	176.4	165.8
Dec'12	131.3	191.1	179.3
Jan'13	132.2	193.6	182.0
Feb'13	124.2	190.4	176.0
Mar'13	130.6	207.1	194.0

Table- 27: Annual Production Growth in Chemicals and Chemical Products Vis -a-Vis Manufacturing Sector during 2005-06 to 2012-13
(Based on Index on Industrial Base: 2004-05 =100)

Years	Chemicals and Chemical Products	Manufacturing	General
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
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

Table- 28: 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	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	0.0560
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	3.1858	24134	Paraxylene	1.9321
24124	Single Super Phosphate	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	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	0.8070
24224	Phthalic anhydride	0.5494	24233	Ayurvedic Medicaments	2.6967
24232	Antibiotics & it's	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	0.6310
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	0.2090
24248	Agarbattis and Dhoop	0.4106	24304	Nylon filament yarn	0.0709
24291	Safety Matches	0.7892	24304	Polyester filament yarn	1.1900
24292	Explosives	0.7204			

Section – VII

Inflation Based on Wholesale Price Index

Table -29 : Annual Inflation of Chemicals & Chemical products vis-à-vis other commodities during 2005-06 to 2012-13

(Based on Wholesale Price Index- Base: 2004-05 =100)

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
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

**Table- 30: Monthly Inflation of Chemicals & Chemical Products vis-a-vis Other Commodities
during April 12 to March 13 (Based On Wholesale Price Index- Base: 2004-05 =100)**

Month	All Commodities	Food Articles	Manufactured Products	Chemicals & Chemical Products
April,12	1.55	5.12	0.84	0.79
May,12	0.24	-0.53	0.56	0.78
June,12	0.49	1.60	0.48	0.35
July,12	0.67	1.43	0.55	0.49
August,12	0.90	-0.28	0.75	0.56
September,12	0.90	0.61	0.54	0.42
October,12	-0.18	-0.19	-0.07	0.14
November,12	0.18	0.52	0.07	-0.07
December,12	0.00	-1.22	0.00	0.28
January,13	0.89	1.66	0.34	0.76
February,13	0.35	0.33	0.07	0.14
March,13	-0.18	-0.51	-0.13	-0.21

Table- 31: WPI of Chemicals & Chemical Products (Group Wise) During 2005-06 to 2012-13

DESCRIPTION	WEIGHT	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013
CHEMICALS & CHEMICAL PRODUCTS	12.02	103.8	108.9	112.8	118.1	117.8	124.0	134.7	143.64
BASIC INORGANIC CHEMICALS	1.19	106.4	109.5	117.1	126.2	125.0	126.3	138.2	147.78
BASIC ORGANIC CHEMICALS	1.95	103.6	111.0	112.0	118.0	115.7	124.4	135.0	140.27
FERTILIZERS	2.66	102.2	104.4	106.3	106.8	108.2	116.8	132.6	149.01
PESTICIDES	0.48	102.2	108.4	106.7	110.5	110.6	113.6	114.9	123.09
PAINTS, VARNISHES & LACQUERS	0.53	104.3	105.7	110.6	117.6	117.5	122.6	128.5	143.59
DYESTUFFS & INDIGO	0.56	102.3	110.6	115.0	115.5	111.9	116.3	122.5	126.92
DRUGS & MEDICINES	0.46	101.3	102.6	108.1	111.4	112.7	115.4	119.6	124.24
PERFUMES, COSMETICS, TOILETRIES ETC	1.13	104.5	111.1	119.1	129.2	134.8	138.5	145.3	151.94
TURPENTINE, PLASTIC CHEMICALS	0.59	109.6	115.2	115.3	116.9	117.4	123.4	136.1	140.02
POLYMERS INCLUDING SYNTHETIC RUBBER	0.97	103.0	108.8	115.5	119.6	116.3	123.4	130.4	135.33
PETROCHEMICAL INTERMEDIATES	0.87	105.1	116.6	121.0	133.5	127.7	137.4	156.2	164.24
MATCHES, EXPLOSIVES & OTHER CHEMICALS	0.63	102.7	107.1	114.4	121.6	123.8	128.7	135.5	142.6

Section – VIII

Miscellaneous

Table-32 : Production of Molasses in India during 2006-07 to 2011-12**(Figure in Lakh MT)**

States/UT	Production of Molasses					
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Andhra Pradesh	7.76	6.61	2.69	3.20	3.56	4.97
Bihar	1.09	1.26	0.82	0.76	1.06	1.20
Gujarat	5.34	5.75	5.26	5.08	4.98	5.91
Haryana	6.00	6.32	6.78	5.11	7.17	7.40
Karnataka	9.12	12.73	10.18	9.65	13.41	14.77
Maharashtra	32.06	28.88	15.56	24.89	32.64	30.88
Punjab	1.90	1.85	1.38	0.72	1.39	2.25
Tamil Nadu	12.88	10.50	7.79	7.50	9.99	11.77
Uttar Pradesh	46.86	37.41	22.59	29.14	32.83	38.88
Uttrakhand	2.67	2.63	1.48	1.80	1.86	2.29
Total 10 States	125.68	113.94	74.53	87.85	108.89	120.32

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

Table-33 : State-wise/Year-wise Production of Alcohol from Molasses in India during 2006-07 to 2011-12

(Figure in Lakh Litre)

States/UT	Production of Alcohol					
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Andhra Pradesh	986.70	1006.29	1459.33	739.98	507.77	1324.06
Bihar	137.40	161.31	352.01	183.14	279.66	428.16
Gujarat	1077.52	792.20	849.03	510.22	686.44	1084.43
Haryana	382.25	510.23	406.09	524.72	682.64	607.90
Karnataka	1804.27	2162.08	2403.14	2154.09	2823.53	3823.73
Maharashtra	5136.39	5218.95	4414.18	3368.69	3762.65	3851.81
Punjab	1084.43	2270.09	913.19	249.68	582.72	565.24
Tamil Nadu	1913.53	1726.44	1595.46	1700.75	2119.43	2301.72
Uttar Pradesh	6710.49	9265.22	6814.79	4516.05	6546.59	7201.42
Uttrakhand	1215.84	1468.75	866.99	495.48	297.72	923.41
Total 10 States	20448.82	24581.56	20074.21	14442.8	18289.15	22111.88

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

Table-34 : Prices of Ethanol during 2005-06 to 2012-13

(Rs./Litre)		
Year	Import Prices	Export Prices
2005-06	19.67	21.43
2006-07	27.49	24.95
2007-08	54.96	30.63
2008-09	35.87	35.00
2009-10	24.21	39.43
2010-11	32.58	32.05
2011-12	50.03	41.10
2012-13	57.53	43.91

Source : Directorate General of Commercial Intelligence & Statistics (DGCIS), Kolkata

Table -35 : Employment in Chemicals and Chemicals products (Industry division 24, NIC 2004) during 2001-02 to 2010-11

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
1	Chemicals and Chemicals products (Industry division 24, NIC 2004)	761244	755113	740441	784907	825435	877083	892944	961306	1005167	1100320
2	Industries Other Than Chemicals and Chemicals products	6989122	7180835	7129640	7668717	8286245	9451351	9559591	10366179	10786888	11594533
3	All Industries	7750366	7935948	7870081	8453624	9111680	10328434	10452535	11327485	11792055	12694853
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
	(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
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
	(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
	(c) All Industries	-	2.39	-0.83	7.41	7.78	13.35	1.20	8.37	4.10	7.66

Note : 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, Ministry of Statistics & Programme Implementation, New Delhi.

Table -36 : Employment in Chemicals and Chemicals products (Industry Division 20, NIC-2008) during 2008-09 to 2010-11

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

Note: As per NIC- 2008, Chemical & Chemical products are covered under the industry division 20.

Source : Annual Survey of Industries, Ministry of Statistics & Programme Implementation, New Delhi.

Table- 37: Gross Value Added from Chemicals 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	2011-12
Chemical and chemical products (Registered)	50287	57757	65230	71352	90931	103370	120774	131590
Chemical and chemical products (Unregistered)	8610	9146	10114	11189	11366	11906	12701	13839
Chemical and chemical products (Reg. + Unreg.)	58897	66904	75344	82541	102297	115276	133476	145429
Growth over previous year (%)		13.6	12.6	9.6	23.9	12.7	15.8	9.0
Manufacturing (Registered)	292344	345443	427075	492758	561460	641573	760650	848734
Manufacturing (Unregistered)	160881	176226	207753	239962	256862	280578	320100	353352
Manufacturing (Reg. + Unreg.)	453225	521669	634827	732720	818322	922151	1080750	1202086
Growth over previous year (%)		15.1	21.7	15.4	11.7	12.7	17.2	11.2
GDP at Factor cost: All Economic activities	2971464	3390503	3953276	4582086	5303567	6108903	7266966	8353495
Growth over previous year (%)		14.1	16.6	15.9	15.7	15.2	19.0	15.0
Share of Manufacturing sector in GDP	15.3	15.4	16.1	16.0	15.4	15.1	14.9	14.4
Share of chemical and chemical products in GDP	1.98	1.97	1.91	1.80	1.93	1.89	1.84	1.74
Share of chemical and chemical products in Manufacturing Sector	13.00	12.82	11.87	11.26	12.50	12.50	12.35	12.10

Source: National Accounts Statistics 2013, CSO, Ministry of Statistics & Programme Implementation

Table- 38: Gross Value Added from Chemicals 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	2011-12
Chemical and chemical products (Registered)	50287	55648	59877	63238	77015	87780	97367	97677
Chemical and chemical products (Unregistered)	8610	8812	9284	9917	9626	10110	10240	10272
Chemical and chemical products (Reg. + Unreg.)	58897	64461	69161	73155	86641	97891	107607	107949
Growth over previous year (%)		9.4	7.3	5.8	18.4	13.0	9.9	0.3
Manufacturing (Registered)	292344	327739	379374	417528	442055	504601	559407	573761
Manufacturing (Unregistered)	160881	171281	191084	211545	214247	225834	242069	249262
Manufacturing (Reg. + Unreg.)	453225	499021	570458	629073	656302	730435	801477	823023
Growth over previous year (%)		10.1	14.3	10.3	4.3	11.3	9.7	2.7
GDP at Factor cost for All Economic activities	2971464	3253073	3564364	3896636	4158676	4516071	4937006	5243582
Growth over previous year (%)		9.5	9.6	9.3	6.7	8.6	9.3	6.2
Share of Manufacturing sector in GDP	15.3	15.3	16.0	16.1	15.8	16.2	16.2	15.7
Share of chemical and chemical products in GDP	1.98	1.98	1.94	1.88	2.08	2.17	2.18	2.06
Share of chemical and chemical products in Manufacturing Sector	13.00	12.92	12.12	11.63	13.20	13.40	13.43	13.12

Source: National Accounts Statistics 2013, CSO, Ministry of Statistics & Programme Implementation

Table- 39: 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
No of factories (no.)	11065	11177	11896	11900	15863
No of workers (no.)	593264	611022	659519	691150	754902
Total Output (Rs. crore)	275375	301218	391605	391849	488052
Total Inputs (Rs. crore)	210287	228293	300674	288479	372317
Gross Value Added (Rs. crore)	65088	72925	90931	103370	115735

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

Table- 40: 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	2008-09	2009-10	2010-11	2008-09	2009-10	2010-11
Andhra Pradesh	577	474	822	417581	225290	297251	1826274	1265598	2056995
Assam	57	42	75	51855	99263	58631	140308	189403	256921
Bihar	32	30	47	961	2417	1391	4859	22207	6572
Chhattisgarh	69	81	84	14657	7887	9936	94685	64497	58414
Goa	48	45	44	78674	103716	7402	797162	704017	635274
Gujarat	1453	1518	2002	1731087	2531866	2417220	8866289	9290846	10765309
Haryana	183	170	247	133821	139327	120222	548270	548286	515904
Himachal Pradesh	112	111	182	212010	137995	341716	522418	431461	1090580
Jammu & Kashmir	109	95	134	92213	89271	108621	457895	367013	603313
Jharkhand	89	111	94	29425	31840	33069	90994	96793	142199
Karnataka	407	407	484	183983	156554	237431	850096	593745	997957
Kerala	188	144	202	70243	111999	181163	469808	503161	622249
Madhya Pradesh	182	221	259	71660	102720	87693	409095	408562	539171
Maharashtra	1387	1278	1903	1163984	1073108	1419596	5558636	4743143	5750230
Meghalaya	9	9	6	2372	3051	2851	7517	8687	7680
Orissa	62	71	87	150532	116835	140600	1049576	602468	864061
Punjab	152	169	184	2518	109915	97023	518485	672066	590584
Rajasthan	233	291	308	219319	206365	101501	954820	1107205	1180427
Sikkim		-	5		-	12565		-	51727
Tamil Nadu	1826	1776	2315	142646	276050	298864	1102234	1431041	1850244
Tripura	4	5	6	329	72	6590	1074	1022	13445
Uttarkhand	87	158	195	216156	179985	192206	446458	598592	807472
Uttar Pradesh	518	531	688	309267	329614	431233	1462601	1565327	1898520
West Bengal	234	230	307	121801	162724	361775	1772276	1228201	2249716
Dadra & N Haveli	136	144	197	72238	120046	83178	356515	842582	649504
Daman & Diu	123	146	127	24552	57886	80644	329785	318834	544474
Chandigarh	4	3	-	238	201	-	2412	2301	-
Delhi	70	61	77	14087	10117	9737	128381	98932	116959
Puducherry	107	96	119	51984	39107	75738	170732	150398	362865
All India	8456	8418	11202	5580194	6440369	7213220	289396.56	27911458	35229032

Source :Annual Survey of Industries, 2008-09, 2009-2010 and 2010-11, Ministry of Statistics & Programme Implementation