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## **INVENTORY OF HAZARDOUS CHEMICALS IMPORT IN INDIA**



**CENTRAL POLLUTION CONTROL BOARD**  
(Ministry of Environment & Forests, Govt. of India)  
East Arjun Nagar, Delhi – 110 032

**September, 2008**

## **FOREWORD**

The Govt. of India has promulgated “Manufacture, Storage, and Import of Hazardous Chemicals (MSIHC) Rules, 1989” under the Environment (Protection) Act, 1986. According to these Rules, any person responsible for importing hazardous chemicals in India is to provide the data of import to the concerned authorities, as identified in Column 2 of Schedule 5 to the Rules. The Central Pollution Control Board (CPCB) has been identified as one of such Authorities.

In order to study the inventory of Hazardous Chemicals being imported by various categories of industrial units in India, the data provided by these industrial units to the Central Pollution Control Board (CPCB) have been compiled. The Report contains information regarding various chemicals imported, quantity of import, ports used for import, name of importing units, etc.

My colleagues Sh. G. Thirumurthy, Assistant Environmental Engineer, Sh. Paritosh Kumar, Senior Environmental Engineer and Ms. Gayithri H.V, Junior Research Fellow carried out data compilation, evaluation and finalization of this Report under the guidance of Sh. P.M. Ansari, Additional Director, and the overall supervision of Dr. B. Sengupta, Ex. Member Secretary.

I hope that the information contained in this Report will be useful to various Central Ministries and State Departments, Regulatory Bodies, Emergency Authorities, Chief Inspector of Dock Safety and others who are concerned with Hazardous Chemicals.

September 24, 2008

**(J. M. Mauskar)**

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## **EXECUTIVE SUMMARY**

Govt. of India has promulgated "Manufacture, Storage, and Import of Hazardous Chemicals (MSIHC) Rules, 1989" under the Environment (Protection) Act, 1986. According to this rules, any person responsible for importing hazardous chemicals in India shall provide the date of import to the concerned authorities as identified in Column 2 of Schedule 5. The Central Pollution Control Board (CPCB) has also been identified as one of the Authority relating to Import of Hazardous Chemicals.

In order to know the inventory of Hazardous Chemicals being imported by various categories of industrial units in India, the information provided by the industrial units to the Central Pollution Control Board (CPCB) have been compiled. The report, entails information on various chemicals imported, quantity of import, ports used for import, name of industries importing, etc.

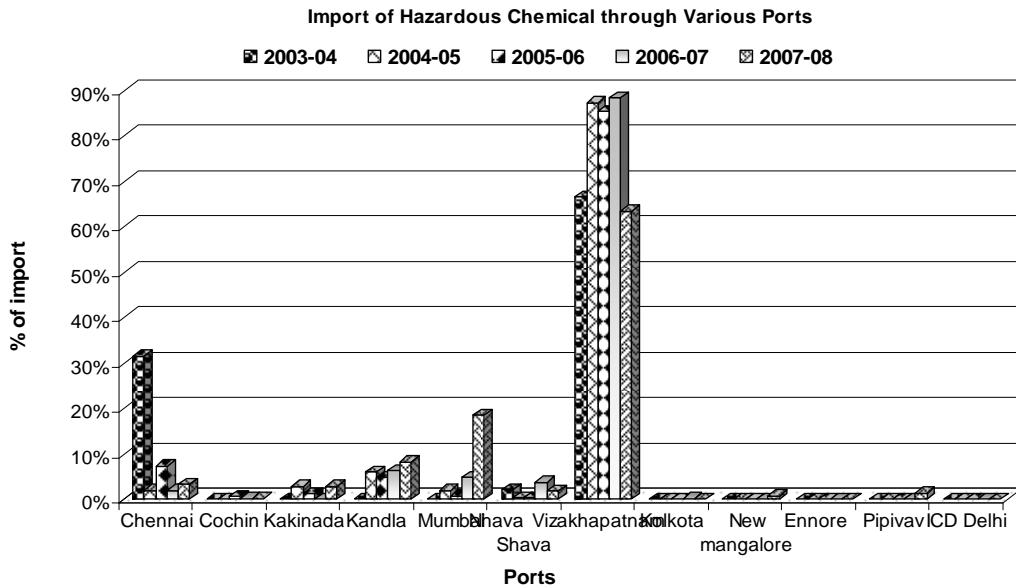
- CPCB has started getting information from May 2003. Accordingly, the information on Import of Hazardous Chemicals from May 2003 to April 2008 (Year wise) is summarized below along with other relevant information like number of chemicals being imported; number of Industries furnished the details of import and mode of transportation etc.

### **Quantity of Hazardous Chemicals Imported**

Sl. No	Year	Quantity ( MT)	No. of Industries	Ports of Entry		No. of Chemicals
				By Sea	By Air	
1	2003-04	4217*	13	3	-	25
2	2004-05	306584	28	6	-	46
3	2005-06	386740	34	7	-	54
4	2006-07	423939	63	8	-	90
5	2007-08	325396	82	12	2	117

Note : \* - from May 2003 to March 2004

- In India, the major sea ports used for the importing of chemicals are Vizakhapatnam (Vizag), Kakkinada, Chennai, Cochin, Kandla, Mumbai and Nhava Shava. The total quantity of chemicals imported through various ports and the percentage of chemicals import at various ports are given below. It is observed that the import of chemicals is being done through airways too, but the quantity of import is very less i.e. 3.263 MTs.



- Based on the past four years import data, it is observed that the Hazardous chemicals import quantity is increasing year by year. But in this year i.e. 2007-08, the total quantity of import is 3.25 lacs MT which is 23.24% lesser than the previous year quantity. From the last three consecutive years, it is observed that Ammonia is imported at a higher quantity. In 2007-08 also, it stood first by contributing 31.2% of total import quantity followed by Styrene 15.67%, Phosphoric acid 13.58 %, Methanol 12.95 %.
- It is observed that 117 nos of Hazardous chemicals were imported through 12 sea ports and 2 air ports. Quantity-wise, Vizakhapatnam port has received 2.022 lacs MT of chemicals which is equivalent to 62.14% of overall import quantity during 2007- 08. Mumbai port has received highest number of chemicals i.e. 30 nos, followed by Chennai (26 nos)
- It is observed that information furnished by many industries is not sufficient as per the MSIHC Rules. Many industries are not furnishing information on product specification and Material safety data sheet.
- There are 121 industries furnishing the details of their import. Response from industries is increasing year by year. Quantity wise, M/S Coromandel Fertilizers Ltd has imported 1.45 lacs MT of chemicals during 2007 – 08, but M/S Pon Pure Chem (P) Ltd. has imported highest number of chemicals i.e 37 nos.

## **1.0 BACKGROUND**

Govt. of India has promulgated “Manufacture, Storage, and Import of Hazardous Chemicals (MSIHC) Rules, 1989” under the Environment (Protection) Act, 1986. Under Section 18 (2) of the said rule, it is stated that any person responsible for importing hazardous chemicals in India shall provide the time of import or within thirty days from the date of import to the concerned authorities as identified in Column 2 of Schedule 5 the information pertaining to,

- ❖ Name and Address of the person receiving the consignment in India;
- ❖ The port of entry in India;
- ❖ Mode of transport from the exporting country to India;
- ❖ The quantity of chemical(s) being imported; and
- ❖ Complete product safety information.

Under Section 18 (1), the Hazardous Chemicals being identified, which satisfies any of criteria laid down in part I of Schedule I in Column 2 of Part II of this schedule.

In respect of concerned authority under the Schedule 5, the Central Pollution Control Board (CPCB) or State Pollution Control Boards / Pollution Control Committees have been identified as the Authority for enforcement of directions and procedures in respect of isolated storage of hazardous chemicals and Import of hazardous Chemicals and enforcement of directions and procedures on import of hazardous chemicals as per Rule 18.

In view of above, CPCB is receiving information about import of hazardous chemicals from various categories of industries. The information received, has been summarised on the following heads:

- Types of chemicals imported
- Quantity of hazardous chemicals imported
- Ports of Importance
- Status of information, etc.

## **2.0 IMPORT OF HAZARDOUS CHEMICALS - YEAR WISE**

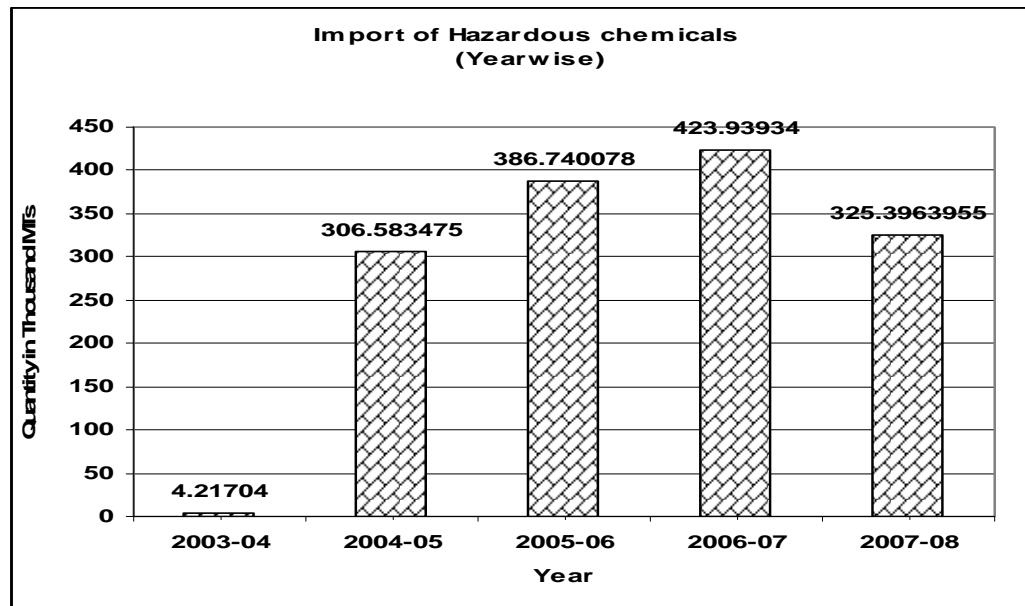
CPCB has started receiving information from the industries importing hazardous chemicals, since May 2003, as per the MSIHC Rules. Information on Import of Hazardous Chemicals from May 2003 to April 2008 (Year wise) is summarised in **Table 1 and Fig1** along with other relevant information like number of chemicals being imported, number of Industries furnished the details of import and mode of

transportation etc. Close examination to Table 1 reveals that the difference in import quantity of hazardous chemicals over the year was increasing up to year 2006-07, but on subsequent year the import is reduced by 23.24%. On the other hand response from industries towards import of Hazardous chemicals is comparatively increased. From the table it is evident that the response from industries is increasing year by year with number of hazardous chemicals being imported as well. In the year 2007-08, it is a maximum of 82 industries submitted information of their import.

**Table 1: Quantity of Hazardous Chemicals Imported**

Sl. No	Year	Quantity ( MT)	No. of Industries	Mode of Transport		No. of Chemicals
				By Sea	By Air	
1	2003-04	4217*	13	3	-	25
2	2004-05	306584	28	6	-	46
3	2005-06	386740	34	7	-	54
4	2006-07	423939	63	8	-	90
5	2007-08	325396	82	12	2	117

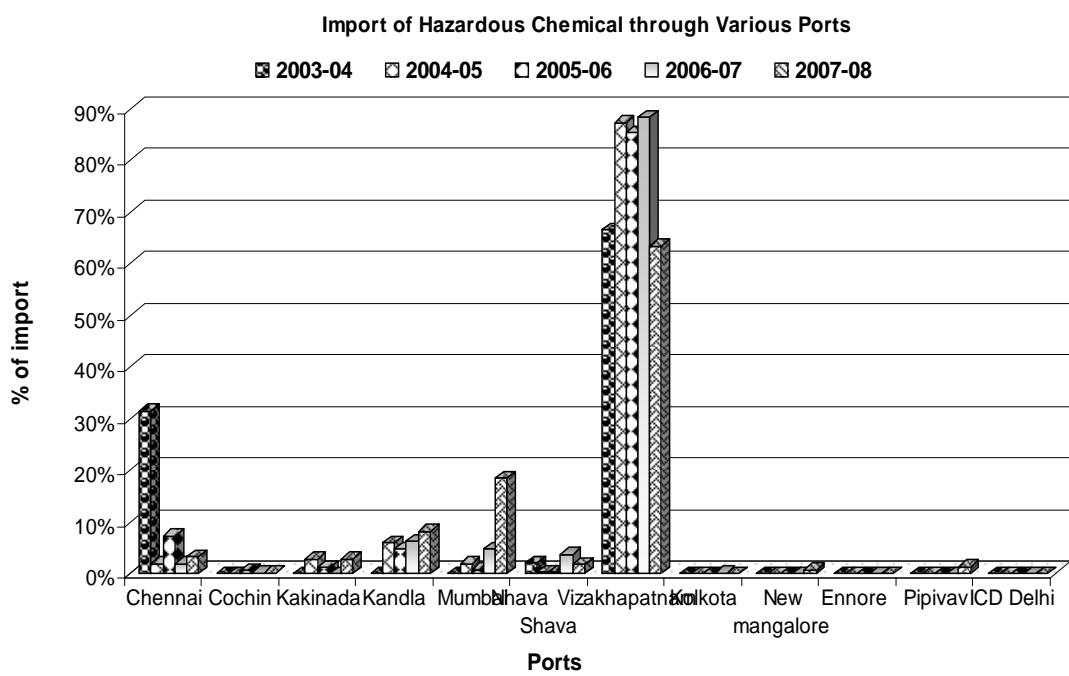
Note : \* - from May 2003 to March 2004



**Fig. 1: Quantity of Hazardous Chemicals Imported**

### 3.0 PORTS OF IMPORTANCE

In India, the major sea ports used for the importing of chemicals are Visakhapatnam (Vizag), Kakinada, Chennai, Cochin, Kandla, Mumbai and Nava Shava. The total quantity of chemicals imported through various ports and the percentage of chemicals import at various ports are given at **Fig 2 and Table 2**. The said table reveals that major import of chemicals are through Vizakhapatnam, followed by Mumbai, Kandla, Kakinada, Chennai and Nava Shava. In year 2007-08, it is reported that import of Hazardous chemicals through sea ports like New Mangalore, Pipivav, Ennore were also reported. It is observed that the import of chemicals is being done through airways too, but the quantity of import is very less i.e. 3.263 MTs.



**Fig. 2: Hazardous chemicals imported at various ports in percentage**

Table 2: Chemicals Imported through various ports & Air ports

Year	Mode of Transportation														
	By Sea													By Air	
	Chennai	Cochin	Kakkinada	Kandla	Mumbai	Nhava Shava	Vizag	Kolkata	New Mangalore	Pipivav	Ennore	ICD Delhi	Delhi	Chennai	
2003-04	1,324.54 (31.41%)	-	-	-	-	88.5 (2.10%)	2,804.00 (66.49%)	-	-	-	-	-	-	-	-
2004-05	5,866.09 (1.91%)	-	8,500.00 (2.77%)	18,427.51 (6.01%)	5,803.44 (1.89%)	866.7 (0.28%)	267,119.73 (87.13%)	-	-	-	-	-	-	-	-
2005-06	67360.57 (17.42%)	1795.2 (0.46%)	4200 (1.09%)	16188.47 (4.19%)	3034.1 (0.78%)	852.06 (0.22%)	293309.73 (75.84%)	-	-	-	-	-	-	-	-
2006-07	8156.21 (1.92%)	442.63 (0.10%)	120 (0.03%)	27473.84 (6.48%)	19606.8 (4.63%)	14795.05 (3.49%)	352864.81 (83.23%)	480 (0.11%)	-	-	-	-	-	-	-
2007-08	11282.25 (3.47%)	319.6 (0.10%)	12500 (3.84%)	26590 (8.17%)	59174.5 (18.19%)	6788.126 (2.09%)	202213.3 (62.14%)	125 (0.04%)	2100 (0.65%)	160 (0.05%)	4135 (1.27%)	5 (0.0%)	3.25 (0.0%)	0.01269 (0.0%)	

**Note:** All quantities in MTs, ( ) - percentage of import

## 4.0 HAZARDOUS AND TOXIC CHEMICALS

There are 684 hazardous and toxic chemicals are listed in the part II of the MSIHC Rules. The details of chemicals being imported in the last five consecutive years 2003-04, 2004-05, 2005-06 2006-07 and 2007-2008 are listed in **Table 3**. There are 129 hazardous and toxic chemicals are being imported by the industries. Based on the information furnished, chemicals inventory is prepared and observed as below:

- ✓ In Year 2003 - 04, out of 4217 MT of chemicals imported, Methanol import was maximum 58.64%, followed by Tetrahydrofuran (12.29%), Hydrobromic acid (5.92%) and other chemicals. The same are depicted in **Fig 3**.
- ✓ The total quantity of chemicals import in year 2004 - 05 was about 3.07 lacs MT, which is about 60 times more than year 2003 - 04. Import of Ammonia was maximum (42%), followed by Phosphoric Acid (27%), Methanol (11%), Sulphuric acid (8%) and other chemicals. The same are depicted in **Fig 4**.
- ✓ In year 2005-06, about 3.44 lacs MT chemicals were imported. Import of Ammonia was maximum (35%), followed by phosphoric acid (29%), Tertiary Butyl Acetate (11%), Methanol (11%, formic acid (5.75%) and other chemicals, which are depicted in **Fig 5**.
- ✓ During the year 2006-07, total quantity of chemicals imported is about 4.24 lacs MT. It is observed that the import of chemicals is about 23.5% more than the last year Import of Ammonia was maximum (55%) of total import of chemicals, followed by Phosphoric acid (13.32%), Methanol (1.3%), Styrene (5.12%) and other chemicals contributes around 15.4 %, which are depicted in **Fig 6**.
- ✓ It is observed that the quantity of import of Hazardous chemicals increased from the year 2003 – 04 while in year 2007-08, the total quantity of import was decreased by 23.24% than the previous year. It is also observed that import of Ammonia is increased during last three consecutive years. However, the import of Ammonia has sharply declined in the year 2007 – 08. The total quantity of chemicals imported during the year 2007 -08 was 3.25 Lacs MT. Import of Ammonia was the maximum i.e. 31.2% followed by Styrene 15.67%, Phosphoric acid 13.58 %, Methanol 12.95 %, as shown in **Fig 7**.

**Table 3: Year wise import of Hazardous & Toxic Chemicals**

Sl. No	Hazardous Chemicals	2003-2004		2004-2005		2005-2006		2006-2007		2007-2008	
		Qty. (MT)	%	Qty. (MT)	%	Qty. (MT)	%	Qty. (MT)	%	Qty. (MT)	%
1	1,2 Dimethoxyl ethane (Monoglylme)	X	X	X	X	X	X	X	X	100.8	0.03098
2	1,3 Dioxolane	52.8	1.25	17.6	0.01	X	X	X	X	X	X
3	1,3- propoanediol	X	X	1,400.27	0.46	X	X	X	X	X	X
4	1,4 bromo butane	2	0.05	X	X	X	X	X	X	X	X
5	2 Amino 4,6 dimethoxy pyrimidine	X	X	X	X	X	X	X	X	0.2	6.1E-05
6	2 Ethyl anthraquinone	X	X	X	X	X	X	X	X	4	0.00123
7	2 ethyl hexyl acrylate	X	X	187	0.06	X	X	X	X	X	X
8	2 Methylfuran	X	X	X	X	X	X	X	X	0.002	6.1E-07
9	2,6 dichlorobenzoothiazole	X	X	X	X	X	X	X	X	1	0.00031
10	2,6 difluorobenzene sulfonamide	X	X	X	X	X	X	X	X	0.00035	1.1E-07
11	2-Aminosulfonyl N-dimethylnicotinamide	X	X	X	X	X	X	X	X	1	0.00031
12	2-methyl pentanol	X	X	X	X	1.98	0	X	X	X	X
13	2-methyl sulfonyl 4,6 dimethoxy pyrimidine	X	X	X	X	X	X	X	X	0.05	1.5E-05
14	3 chlorobenzyl bromide	X	X	X	X	X	X	X	X	0.001	3.1E-07
15	Acetic acid	X	X	1,800.00	0.59	X	X	X	X	X	X
16	Acetone	210	4.98	2,775.94	0.91	3,995.73	1.03	5,382.23	1.27	3402.4	1.04562
17	Acetonitrile	37.6	0.89	404.6	0.13	239.8	0.06	248.9	0.059	507.6	0.15599
18	Acroliene	X	X	2.4	0	3	0	26.8	0.006	15.75	0.00484
19	Acryamide	X	X	X	X	X	X	252	0.059	X	X
20	Acrylic Acid	32	0.76	8	0	X	X	25.8	0.006	X	X
21	Ammonia	X	X	130,064.20	42.42	136,405.64	35.27	233,151.32	55	101400	31.162
22	Ammonium Nitrate	X	X	X	X	X	X	X	X	731	0.22465
23	Aniline oil (Aniline)	X	X	190	0.06	X	X	X	X	0.00034	1E-07
24	Arcol Polyol 5613	X	X	X	X	X	X	116.55	0.027	420.4	0.1292
25	Aromatic hydrocarban mixture	X	X	X	X	X	X	X	X	570.13	0.17521

Sl. No	Hazardous Chemicals	2003-2004		2004-2005		2005-2006		2006-2007		2007-2008	
		Qty. (MT)	%	Qty. (MT)	%	Qty. (MT)	%	Qty. (MT)	%	Qty. (MT)	%
26	Asbestos fiber	72	1.71	X	X	X	X	X	X	X	X
27	Barium Chloride	X	X	X	X	X	X	20.08	0.005	X	X
28	Benzyl chloroformate	X	X	X	X	X	X	X	X	6.1713	0.0019
29	beta Naphthol	X	X	X	X	X	X	X	X	102	0.03135
30	Bisphenol A	X	X	X	X	X	X	6	0.001	X	X
31	Borane DMS complex	X	X	0.13	0	X	X	X	X	X	X
32	Butyl acetate	X	X	X	X	43.2	0.01	65.4	0.015	74	0.02274
33	Butyl acrylate	19.8	0.47	206.5	0.07	X	X	X	X	153.6	0.0472
34	Butyl meyhylacrylate	X	X	X	X	X	X	7.4	0.002	X	X
35	Calcium carbide	X	X	X	X	404	0.1	740.46	0.175	1568.22	0.48194
36	Caradol	X	X	X	X	X	X	X	X	120	0.03688
37	Chloro di isopeno Camphyl borane	X	X	0.14	0	X	X	X	X	X	X
38	Chloroform	X	X	X	X	X	X	X	X	349.52	0.10741
39	Chloroform	X	X	X	X	X	X	22.04	0.005	X	X
40	Cyclo Hexane	X	X	28.8	0.01	85.4	0.02	28.8	0.007	120.96	0.03717
41	Cyclo Hexanone	X	X	X	X	X	X	X	X	250	0.07683
42	DEG	X	X	X	X	X	X	X	X	18	0.00553
43	DETA	X	X	X	X	X	X	X	X	X	X
44	Diacetone	X	X	X	X	X	X	X	X	15.6	0.00479
45	Diacetone alcohol	X	X	X	X	X	X	25.74	0.006	71.76	0.02205
46	Diethanolamine	X	X	X	X	X	X	25.08	0.006	X	X
47	Diethyl acetamide	X	X	X	X	X	X	X	X	30.4	0.00934
48	Di-iso propyl ether	X	X	X	X	11.44	0	23.2	0.005	X	X
49	Dimethoxy ethane	2.2	0.05	X	X	X	X	X	X	X	X
50	Dimethyl benzyl carbinal butrate solution	X	X	X	X	X	X	X	X	0.2446	7.5E-05
51	Dimethyl Carbonate	16	0.38	X	X	16	0	X	X	X	X
52	Dimethyl Formamide	X	X	288	0.09	344	0.09	123.2	0.029	45.6	0.01401
53	Dimethyl sulfoxide	X	X	36.8	0.01	310.24	0.08	X	X	90.4	0.02778

Sl. No	Hazardous Chemicals	2003-2004		2004-2005		2005-2006		2006-2007		2007-2008	
		Qty. (MT)	%	Qty. (MT)	%	Qty. (MT)	%	Qty. (MT)	%	Qty. (MT)	%
54	Diphenyl methane - 4,4' diisocyanate (MDI)	X	X	X	X	X	X	542.22	0.128	3030.8061	0.93142
55	Diphenyl phosphine	X	X	X	X	X	X	X	X	0.006	1.8E-06
56	Ditertiary butyl dicarbonate (DIBOC)	X	X	X	X	X	X	X	X	16	0.00492
57	EPF S20	X	X	X	X	X	X	617	0.146	664	0.20406
58	Epichlorohydrine	X	X	X	X	36.8	0.01	165.44	0.039	110.4	0.03393
59	Ethyl 1 propenyl ether	X	X	X	X	X	X	X	X	6	0.00184
60	Ethyl acrylate	9	0.21	4.5	0	X	X	X	X	X	X
61	Ethyl Chloroformate	X	X	X	X	X	X	16.848	0.004	X	X
62	Ethyl Propiolate	X	X	X	X	X	X	X	X	0.003	9.2E-07
63	Ethylene diamine	14.4	0.34	14.64	0	X	X	X	X	14.612	0.00449
64	Ethylene dichloride	X	X	450	0.15	150	0.04	X	X	X	X
65	Exxsol D110	X	X	X	X	X	X	X	X	400	0.12293
66	Exxsol D130	X	X	X	X	X	X	48	0.011	48	0.01475
67	Exxsol D40	X	X	X	X	16.5	0	X	X	X	X
68	Exxsol D80	X	X	X	X	800	0.21	4,653.34	1.098	3195.2	0.98194
69	Exxsol Heptane	X	X	X	X	X	X	39.36	0.009	96	0.0295
70	Exxsol hexane	X	X	X	X	3,550	0.92	2,300	0.543	10980	3.37435
71	Formaldehyde	X	X	X	X	X	X	10	0.002	X	X
72	Formic Acid	X	X	1,984.19	0.65	22,252.55	5.75	2,988.74	0.705	2190.952	0.67332
73	Glycol ether	X	X	X	X	X	X	X	X	14.8	0.00455
74	Glyoxylic Acid	X	X	X	X	X	X	19.5	0.005	X	X
75	Hexamethylene tetramine	52.5	1.24	X	X	X	X	X	X	X	X
76	Hexane	X	X	X	X	1,812.20	0.47	9,978.62	2.354	4411.12	1.35562
77	Hydrazine hydrate	X	X	X	X	X	X	X	X	16	0.00492
78	Hydrobromic acid	249.6	5.92	X	X	X	X	X	X	X	X
79	Hydrofluric acid	X	X	X	X	X	X	X	X	104.874	0.03223
80	Hydrogen Peroxide	X	X	306	0.1	712.32	0.18	1,516.22	0.358	1562.863	0.4803
81	Hydroxy Ammonium sulfate	X	X	60	0.02	10.07	0	X	X	X	X

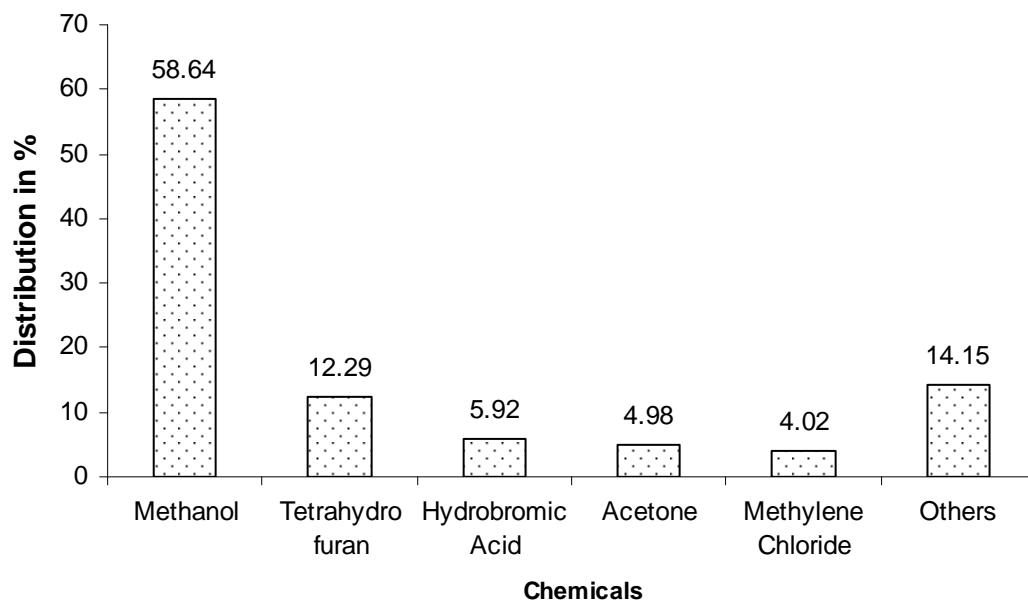
Sl. No	Hazardous Chemicals	2003-2004		2004-2005		2005-2006		2006-2007		2007-2008	
		Qty. (MT)	%	Qty. (MT)	%						
82	Indene	X	X	X	X	X	X	10.07	0.002	11.97	0.00368
83	Iodine	X	X	4	0	X	X	X	X	12.5	0.00384
84	Iso Cyanate	X	X	X	X	14.1	0	1,081.20	0.255	3409.6701	1.04785
85	ISO PMDI	X	X	X	X	X	X	5.29	0.001	31.74	0.00975
86	Iso Propyl Alcohol	157.5	3.73	13,673.77	4.46	10,101.60	2.61	14,324.98	3.379	7310.2	2.24655
87	Iso Propyl Ether	X	X	X	X	34	0.01	32	0.008	352.96	0.10847
88	Isoborneol	X	X	X	X	16	0	48.9	0.012	X	X
89	Isobutanol / isobutyl alcohol	X	X	X	X	X	X	125	0.029	240	0.07376
90	Isobutyl ketone	X	X	X	X	X	X	X	X	52.8	0.01623
91	Isopar H	X	X	X	X	X	X	673.98	0.159	48	0.01475
92	Isophorone	X	X	X	X	X	X	7.8	0.002	5.46	0.00168
93	Isophthalic acid	X	X	X	X	X	X	X	X	39	0.01199
94	Leather Chemicals	X	X	X	X	X	X	20.16	0.005	60.691	0.01865
95	Lupranate M20	X	X	X	X	X	X	X	X	280	0.08605
96	Lupranate T-80 (isocyanate)	X	X	X	X	X	X	897.74	0.212	1100	0.33805
97	Magnesium based desulphurising compound	X	X	X	X	X	X	X	X	100	0.03073
98	Maleic Anhydride (China)	X	X	42	0.01	X	X	140	0.033	122.5	0.03765
99	Malonitrile	X	X	X	X	X	X	19	0.004	16	0.00492
100	Meta xylene	X	X	X	X	X	X	X	X	19	0.00584
101	Methacryloyl Chloride	X	X	X	X	X	X	X	X	0.2	6.1E-05
102	Methane Di Isocynate (Desmodur 44V20L)	X	X	X	X	X	X	280.4	0.066	X	X
103	Methane sulfonic acid	X	X	X	X	X	X	X	X	20	0.00615
104	Methanol	2,472.85	58.64	33,311.35	10.87	41,587.49	10.75	47,871.32	11.29	42133.349	12.9483
105	Methyl 2-amino sulfonyl benzoate (MDI)	X	X	X	X	X	X	X	X	6	0.00184
106	Methyl bis-4,4' (2- chloroaniline)	X	X	0.24	0	X	X	X	X	X	X
107	Methyl bromide	15.17	0.36	X	X	X	X	X	X	X	X

Sl. No	Hazardous Chemicals	2003-2004		2004-2005		2005-2006		2006-2007		2007-2008	
		Qty. (MT)	%	Qty. (MT)	%	Qty. (MT)	%	Qty. (MT)	%	Qty. (MT)	%
108	Methyl cyclo hexane	4.5	0.11	X	X	X	X	X	X	X	X
109	Methyl Ethyl Ketone	X	X	13.2	0	316.66	0.08	1,316.50	0.311	1351.76	0.41542
110	Methyl Isobutyl ketone (MIBK)	13.44	0.32	1,187.36	0.39	781.2	0.2	675.8	0.159	524.56	0.16121
111	Methyl Methacrylate	X	X	X	X	X	X	15.2	0.004	X	X
112	Methyl tertiary butyl ether	X	X	23.2	0.01	11.86	0	X	X	X	X
113	Methyl-3-methoxyacrylate	X	X	X	X	1	0	16.2	0.004	X	X
114	Methylene Chloride	169.6	4.03	3,296.58	1.08	1,309.80	0.34	673.296	0.159	2320.4	0.7131
115	Methylene dichloride	X	X	X	X	X	X	X	X	20	0.00615
116	Methylene dichloride	X	X	300	0.1	X	X	X	X	X	X
117	Mixture glycol	X	X	X	X	X	X	X	X	48	0.01475
118	Monoethanolamine	X	X	X	X	X	X	18.9	0.004	50.052	0.01538
119	Monopropylene glycol	X	X	X	X	X	X	X	X	120.4	0.037
120	N Butanol	X	X	X	X	X	X	300	0.071	X	X
121	N Heptane	X	X	26.13	0.01	54.49	0.01	11.12	0.003	54.8	0.01684
123	N Pentane	5.28	0.13	X	X	X	X	X	X	X	X
124	Naphta-H Fluid (Solvesso 200)	X	X	X	X	X	X	16	0.004	96	0.0295
125	Naphtha D80	X	X	X	X	100	0.03	X	X	X	X
126	Naphthalene	X	X	X	X	X	X	1,661	0.392	1790.6	0.55028
127	Naptha	X	X	X	X	100	0.03	950	0.224	X	X
128	Naptha L	X	X	X	X	X	X	1,000	0.236	X	X
129	Neostann	X	X	X	X	0.4	0	1	2.00E-04	3055	0.93886
130	Normal butyl alcohol	X	X	100	0.03	X	X	X	X	X	X
131	O cresol	16	0.38	X	X	X	X	X	X	X	X
132	Palatinol	X	X	X	X	X	X	X	X	16	0.00492
133	Paramonochloro phenol	X	X	X	X	X	X	X	X	20	0.00615
134	Perchloro Ethylene	26.4	0.63	26.4	0.01	X	X	57.768	0.014	X	X
135	Phenol	36	0.85	3,700	1.21	3,686.87	0.95	2,603.45	0.614	3325.7	1.02205
136	Phosphoric acid	X	X	83,151.59	27.12	112,785	29.16	56,464.40	13.32	44185.828	13.5791

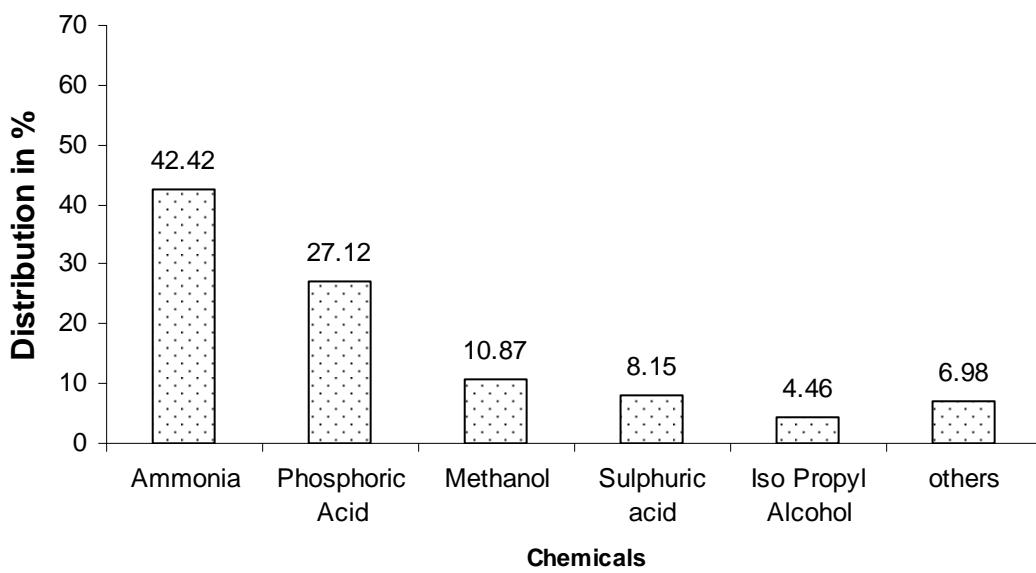
Sl. No	Hazardous Chemicals	2003-2004		2004-2005		2005-2006		2006-2007		2007-2008	
		Qty. (MT)	%	Qty. (MT)	%	Qty. (MT)	%	Qty. (MT)	%	Qty. (MT)	%
137	Phthalic Anhydride	X	X	18.5	0.01	18.75	0	80	0.019	X	X
138	Pivaloyl Chloride	X	X	X	X	X	X	15.39	0.004	X	X
139	Poly Ether Polycol	X	X	X	X	X	X	34.8	0.008	X	X
140	Poly ethyl polyol	X	X	X	X	34.8	0.01	X	X	X	X
141	Polymer MDI	X	X	X	X	X	X	X	X	408.4	0.12551
142	Polymethane Polyphenyl Isocyanate (PM200)	X	X	X	X	40	0.01	20	0.005	X	X
143	Polyol	X	X	X	X	33.6	0.01	33.6	0.008	X	X
144	Potassium Cyanide	X	X	X	X	X	X	X	X	16.2	0.00498
145	Potassium Hydroxide	X	X	X	X	X	X	20.82	0.005	142	0.04364
146	Potassium Metal	X	X	X	X	X	X	X	X	3.3	0.00101
147	Propylene Glycol	X	X	X	X	X	X	32	0.008	138.8	0.04266
148	Pthaleic anhydride	X	X	X	X	40	0.01	X	X	X	X
149	Shellsol A100	X	X	850	0.28	X	X	X	X	200	0.06146
150	Silicone	X	X	X	X	5	0	7	0.002	24.52	0.00754
151	Sodium boro hydride	X	X	X	X	15	0	28	0.007	11	0.00338
152	Sodium Cyanide	X	X	X	X	X	X	X	X	355.4	0.10922
153	Sodium Metal	12	0.28	60	0.02	109.92	0.03	96	0.023	72.16	0.02218
154	Sodium Sulphide	X	X	X	X	X	X	124.5	0.029	146	0.04487
155	Solvent C9	X	X	X	X	X	X	150	0.035	400	0.12293
156	Solvesso 150	X	X	X	X	17	0	71.36	0.017	X	X
157	Solvesso100	X	X	500	0.16	X	X	X	X	X	X
158	Somentor	X	X	X	X	X	X	64	0.015	X	X
159	Styrene	X	X	X	X	X	X	21,718.46	5.123	51005.39	15.6749
160	Sulphuric acid	X	X	25,000	8.15	1,100	0.28	X	X	11300	3.47269
161	Suprasec	X	X	X	X	X	X	X	X	1198.36	0.36828
162	Synthetic Camphor	X	X	X	X	X	X	30	0.007	15.5	0.00476
163	TDI Cosmonate T-80	X	X	X	X	X	X	254	0.06	300	0.0922
164	TDI Desmodur T-80	X	X	320	0.1	460	0.12	1,386.42	0.327	1128.25	0.34673
165	Tert Butyl Chloroacetate	X	X	X	X	X	X	X	X	0.315	9.7E-05

Sl. No	Hazardous Chemicals	2003-2004		2004-2005		2005-2006		2006-2007		2007-2008	
		Qty. (MT)	%	Qty. (MT)	%						
166	Tertiary butyl acetate	X	X	X	X	42,133.90	10.89	13.86	0.003	X	X
167	Tertiary butyl alcohol	X	X	24.8	0.01	62.08	0.02	24.8	0.006	X	X
168	Tetrahydrofuran	518.4	12.29	681.43	0.22	565.52	0.15	748.8	0.177	878.4	0.26995
169	Therminol	X	X	X	X	X	X	X	X	4.65	0.00143
170	Thionyl chloride	X	X	X	X	X	X	X	X	96	0.0295
171	Toluene	X	X	X	X	X	X	4,276.56	1.009	7400	2.27415
172	Toyocat	X	X	X	X	0.29	0	0.475	1.00E-04	0.285	8.8E-05
173	Toyocat DT	X	X	X	X	0.03	0	X	X	X	X
174	Triethanolamine	X	X	X	X	X	X	114.4	0.027	209.076	0.06425
175	Trimethyl acetyl chloride	X	X	43.2	0.01	X	X	X	X	X	X
176	Triphosgene	X	X	X	X	X	X	X	X	X	X
177	Varanol 3010 (polyether Polyol)	X	X	X	X	X	X	16.8	0.004	X	X
178	Voranate T-80 (TDI)	X	X	X	X	X	X	39	0.009	58.5	0.01798
179	Water roofing material (EP fastner & Insualtion fastner)	X	X	X	X	X	X	15.558	0.004	X	X
180	Xylene	X	X	X	X	X	X	X	X	500	0.15366
<b>TOTAL QUANTITY ( in MT )</b>		<b>4217.04</b>	<b>100</b>	<b>306583.46</b>	<b>100</b>	<b>386740.08</b>	<b>100</b>	<b>423939.36</b>	<b>100</b>	<b>325396.09</b>	<b>100</b>

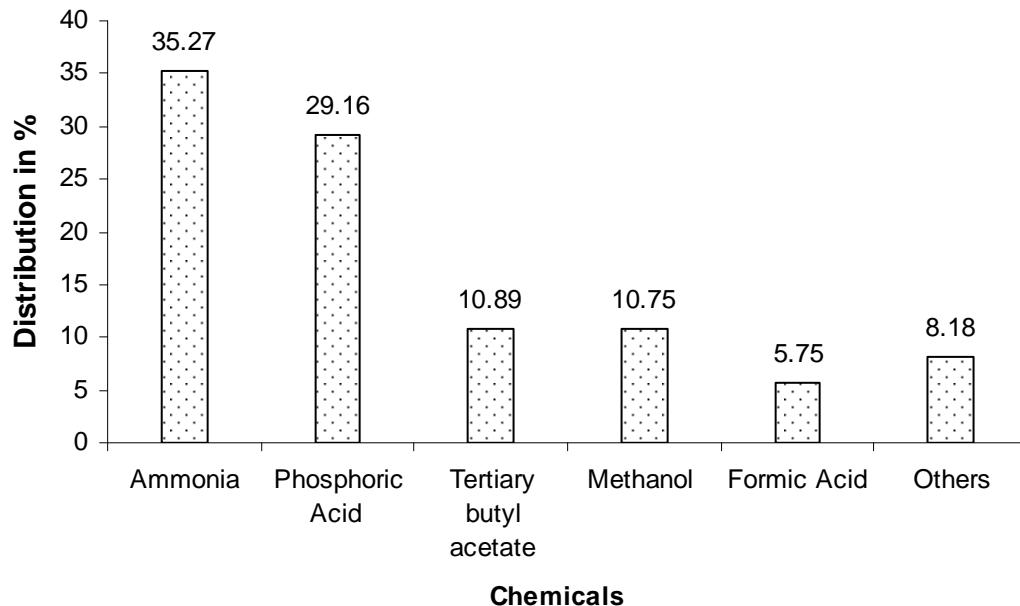
**Fig - 3**  
**Chemicals Imported (2003-04)**



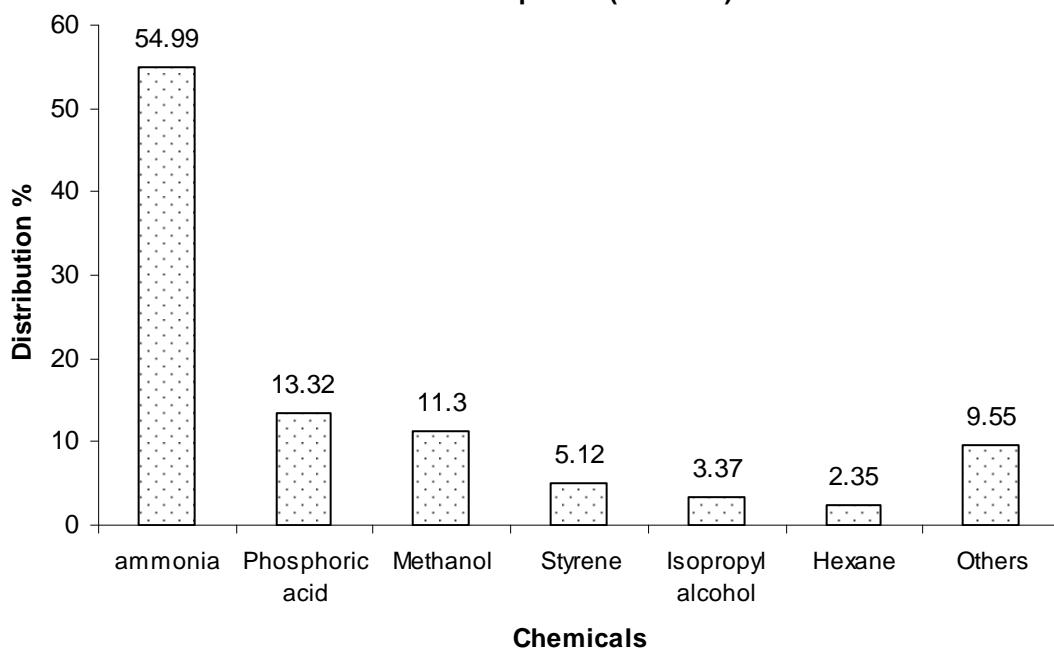
**Fig - 4**  
**Chemicals Imported (2004-05)**



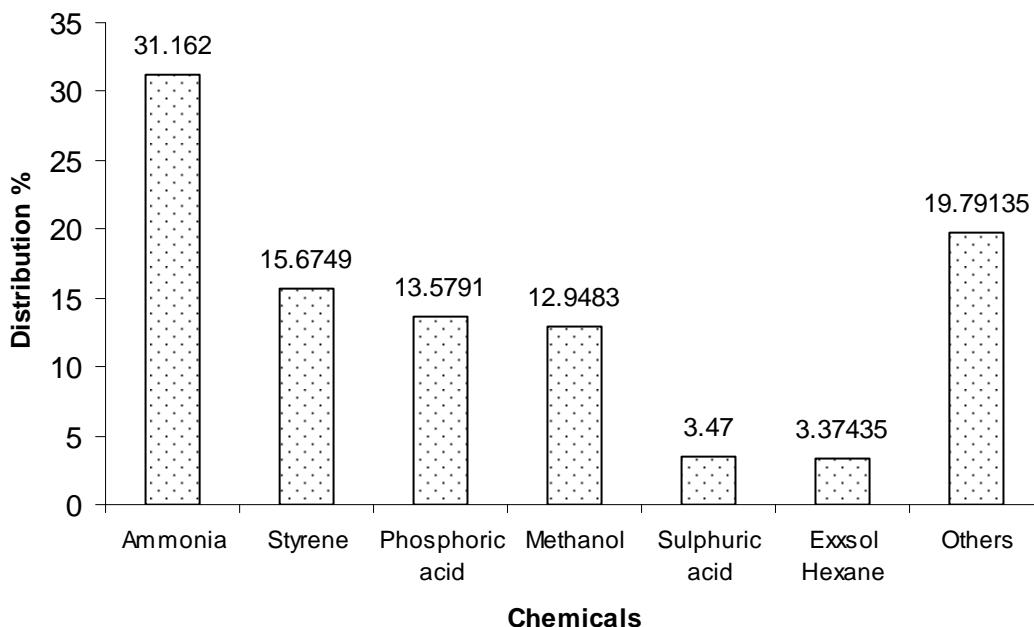
**Fig - 5**  
**Chemicals Imported (2005-06)**



**Fig 6**  
**Chemicals Imported (2006 - 07)**



**Fig - 7**  
**Chemicals Imported (2007-08)**



## 5.0 ANALYSIS OF IMPORT OF HAZARDOUS CHEMICALS AND PORTS OF ENTRY

Analysis of import of hazardous chemicals and port of entry is summarised in **Table 4 to 8** for the years 2003-04, 2004-05, 2005-06, 2006-07 and 2007-08. Close examination to these tables brings the following information:

### Year 2003 – 04 (refer Table 4)

- 25 types of chemicals were imported
- Chemicals were imported through Chennai, Nhava Shava and Vizakhapatnam ports
- Most of the time, specific chemicals are imported through specific ports only
- Maximum quantity of chemicals were imported through Vizakhapatnam followed by Chennai and Nhava Shava, whereas the maximum variety of chemicals were imported through Chennai port i.e. 21 type of Chemicals
- Methanol was imported only through Vizakhapatnam port i.e. 2,473 MTs (58.64% of total import quantity)

### **Year 2004 – 05 (refer Table 5)**

- Six ports were used by the industries for importing 46 types of hazardous chemicals
- As observed earlier, Vizakhapatnam port imports the maximum quantity of chemicals followed by Kandla, Kakinada, Chennai and Nhava Shava. However maximum types of chemicals were imported through Chennai followed by Kandla.
- Ammonia was imported in the order of about 1,30,064 MT (42.24% of total import quantity), through Vizakhapatnam port

### **Year 2005 – 06 (refer Table 6)**

- 55 varieties of chemicals were imported through various ports.
- Vizakhapatnam port imports the maximum quantity of chemical (mainly Ammonia), which contributes to 35.3% of total import.
- Maximum quantity of chemicals were imported through Vizakhapatnam followed by Chennai, Kandla, Kakinada, Mumbai, Cochin and Nhava Shava, whereas maximum types of chemicals were imported through Chennai port i.e. 39 Chemicals, followed by Kakinada port.
- Chennai port though receiving maximum variety of chemicals i.e 39 nos, but percentage of import in quantity is about 17.5% only.

### **Year 2006-07 (refer Table 7)**

- It is observed that 90 types of chemicals were imported through 08 different ports in India.
- Vizakhapatnam port has received 3.5 lacs MT of chemicals i.e. 83.23% of the total import. It is also observed that Ammonia was imported only through Vizakhapatnam port which consists of 55% of total chemicals import.
- Chennai port has received maximum types of chemicals i.e. 53 nos, but the overall % of import was 1.92, which is comparatively lesser than the previous year.
- Kakinada port has received 120 MT of only one chemical i.e naphthalene, which is the maximum quantity of hazardous chemical imported at a port.

### **Year 2007-08 (refer Table 8)**

- It is observed that, 117 nos of Hazardous chemicals were imported through 12 sea ports and 2 air ports. The quantity of chemicals imported by airways is very less i.e. around 3.26 MTs
- Vizakhapatnam port has received 2.022 lacs MT of chemicals which is equivalent to 62.14% of overall import quantity.
- It is observed that Ammonia was imported only through Vizag port during the last three year, but the same has been imported through Kakinada port also during the year.
- It is observed that Mumbai port f has received highest number of chemicals i.e. 30 nos, followed by Chennai (26 nos).
- Kakinada port has received 12500 MTs of chemicals and accounts for 3.84 % of overall import quantity. New ports like New Mangalore and Ennore have received 2100 MTs and 4135 MTs of chemicals respetively.
- Quantity of import through the remaining ports namely Kolkata,Cochin, Pipivav and ICD Delhi were not much.

**Table 4: Port-wise Distribution of chemicals for year 2003-04**

Sl. No	Name of the Chemical	Quantity of Chemicals Imported (MT)			<i>Total</i>
		Chennai	Nhava Shava	Vizag	
1	1,3- Dioxolane	52.8	X	X	<b>52.8</b>
2	1,4 Bromo Butane	2	X	X	<b>2</b>
3	Acetone	X	X	210	<b>210</b>
4	Acetonitrile	37.6	X	X	<b>37.6</b>
5	Acrylic acid	32	X	X	<b>32</b>
6	Butyl Acrylate	19.8	X	X	<b>19.8</b>
7	Chrysotile Asbestos Fibre	72	X	X	<b>72</b>
8	Dimethoxy Ethane	2.2	X	X	<b>2.2</b>
9	Dimethyl Carbonate	16	X	X	<b>16</b>
10	Ethyl acrylate	9	X	X	<b>9</b>
11	Ethylene diamene	14.4	X	X	<b>14.4</b>
12	Hexamethylene Tetramine	X	52.5	X	<b>52.5</b>
13	Hydrobromic acid	249.6	X	X	<b>249.6</b>
14	Iso Propyl Alcohol	78.75	X	78.75	<b>157.5</b>
15	Methanol	X	X	2472.851	<b>2472.851</b>
16	Methyl bromide	15.167	X	X	<b>15.167</b>
17	Methyl Cyclo hexane	4.5	X	X	<b>4.5</b>
18	Methyl Isobutyl ketone	13.44	X	X	<b>13.44</b>
19	Methylene Chloride	127.2	X	42.4	<b>169.6</b>
20	N-pentane	5.28	X	X	<b>5.28</b>
21	o-Cresol	16	X	X	<b>16</b>
22	Perchloroethylene	26.4	X	X	<b>26.4</b>
23	Phenol	X	36	X	<b>36</b>
24	Sodium Metal	12	X	X	<b>12</b>
25	Tetrahydrofuran	518.4	X	X	<b>518.4</b>
<b>Total (MT)</b>		<b>1324.537</b>	<b>88.5</b>	<b>2804.001</b>	<b>4217.038</b>

**Table – 5: Port-wise Distribution of chemicals for year 2004-05**

Sl. No	Name of Chemical	Quantity of Chemicals Imported (MT)						<b>Total</b>
		Chennai	Kakinada	Kandla	Nhava Shava	Mumbai	Vizag	
1	1,3- Dioxolane	17.60	X	X	X	X	X	<b>17.60</b>
2	1,3- propoanediol	1400.27	X	X	X	X	X	<b>1400.27</b>
3	2 ethyl hexyl acrylate	X	X	187.00	X	X	X	<b>187.00</b>
4	Acelonitrile	149.60	X	255.00	X	X	X	<b>404.60</b>
5	Acetic acid	300.00	X	350.00	350.00	800.00	X	<b>1800.00</b>
6	Acetone	X	X	400.00	X	288.44	2087.50	<b>2775.94</b>
7	Acrolien	2.40	X	X	X	X	X	<b>2.40</b>
8	Acrylic acid	8.00	X	X	X	X	X	<b>8.00</b>
9	Ammonia	X	X	X	X	X	130064.2	<b>130064.20</b>
10	Aniline Oil	X	X	190.00	X	X	X	<b>190.00</b>
11	Borane DMS Complex	0.13	X	X	X	X	X	<b>0.13</b>
12	Butyl Acrylate	31.50	X	175.00	X	X	X	<b>206.50</b>
13	Chloro di isopeno Camphyl borane	0.14	X	X	X	X	X	<b>0.14</b>
14	Cyclo Hexane	28.80	X	X	X	X	X	<b>28.80</b>
15	Dimethyl Formamide	288.00	X	X	X	X	X	<b>288.00</b>
16	Diomethyl sulfoxide	36.80	X	X	X	X	X	<b>36.80</b>
17	Ethyl acrylate	4.50	X	X	X	X	X	<b>4.50</b>
18	Ethylene diamene	14.64	X	X	X	X	X	<b>14.64</b>
19	Ethylenedichloride	X	X	450.00	X	X	X	<b>450.00</b>
20	Formic Acid	1984.19	X	X	X	X	X	<b>1984.19</b>
21	Hydrogen Peroxide	X	X	X	306.00	X	X	<b>306.00</b>
22	Hydroxyl Ammonium sulfate	X	X	X	X	X	60.00	<b>60.00</b>
23	Iodine	X	X	X	4.00	X		<b>4.00</b>
24	Iso Propyl Alcohol	25.76	X	3951.13	X	3395.00	6301.88	<b>13673.77</b>
25	Maleic anhydride	X	X	X	42.00	X	X	<b>42.00</b>
26	Methanol	400.00	X	3000.0 0	X	1000.00	28911.35	<b>33311.35</b>
27	Methyl Ethyl Ketone	13.20	X	X	X	X	X	<b>13.20</b>
28	Methyl Isobutyl ketone	212.36	X	850.00	125.00	X	X	<b>1187.36</b>
29	Methyl Tertiary Butyl Ether	23.20	X	X	X	X	X	<b>23.20</b>
30	Methylene bis -4,4'(2- chloroaniline)	0.24	X	X	X	X	X	<b>0.24</b>
31	Methylene Chloride	106.00	X	3169.3 8	21.20	X	X	<b>3296.58</b>
32	Methylene Dichloride		X	300.00	X	X	X	<b>300.00</b>
33	N-Heptane	26.13	X	X	X	X	X	<b>26.13</b>
34	Normal butyl alcohol		X	100.00	X	X	X	<b>100.00</b>
35	Perchloroethylene	26.40	X	X	X	X	X	<b>26.40</b>
36	Phenol	X	X	3700.0	X	X	X	<b>3700.00</b>
37	Phosphoric Acid	X	8500.00	X	X	X	74651.59	<b>83151.59</b>
38	Phthalic anhydride	X	X	X	18.50	X	X	<b>18.50</b>
39	Shellsol A100	X	X	850.00	X	X	X	<b>850.00</b>
40	Sodium Metal	60.00	X	X	X	X	X	<b>60.00</b>
41	Solvesso 100	X	X	500.00	X	X	X	<b>500.00</b>

Sl. No	Name of Chemical	Quantity of Chemicals Imported (MT)						<i>Total</i>
		Chennai	Kakinada	Kandla	Nhava Shava	Mumbai	Vizag	
42	Sulphuric acid	X	X	X	X	X	25000.00	<b>25000.00</b>
43	TDI	X	X	X	X	320.00	X	<b>320.00</b>
44	Tertiary butanol	24.80	X	X	X	X	X	<b>24.80</b>
45	Tetrahydrofuran	681.43	X	X	X	X	X	<b>681.43</b>
46	Trimethyl acetyl Chloride	X	X	X	X	X	43.20	<b>43.20</b>
<b>Total (MT)</b>		<b>5866.10</b>	<b>8500</b>	<b>18428</b>	<b>866.70</b>	<b>5803.40</b>	<b>267120</b>	<b>306583.46</b>

**Table 6: Port-wise Distribution of chemicals for year 2005-06**

Sl. No.	Name of Chemical	Quantity of Chemicals Imported (MT)						
		Chennai	Cochin	Kakinada	Kandla	Nhava Shava	Mumbai	Vizag
1	2-methyl pentanal	1.98	X	X	X	X	X	X
2	Acetone	100.73	X	X	550.00	X	700.00	2,645.00
3	Acroliene	3.00	X	X	X	X	X	X
4	Actonitrile	239.80	X	X	X	X	X	X
5	Ammonia		X	X	X	X	X	136,405.64
6	Butyl acetate	43.20	X	X	X	X	X	X
7	Calcium carbide	404.00	X	X	X	X	X	X
8	Cyclo Hexane	85.40	X	X	X	X	X	X
9	DETA	2.85	X	X	X	X	X	X
10	Di-iso propyl ether	11.44	X	X	X	X	X	X
11	Dimethyl Carbonate	16.00	X	X	X	X	X	X
12	Dimethyl Formamide	344.00	X	X	X	X	X	X
13	Diomethyl sulfoxide	301.24	X	X	X	X	X	X
14	Epichlorohydrine	36.80	X	X	X	X	X	X
15	Ethylenedichloride		X	X	150.00	X	X	X
16	Exxsol D40	16.50	X	X		X	X	X
17	Exxsol D80		X	X	800.00	X	X	X
18	Exxsol hexane		X	X	3,550.00	X	X	X
19	Formic Acid	22,157.35	95.20	X		X	X	X
20	Hexane	11.20		X	1,050.00	X	X	751.00
21	Hydrogen Peroxide	40.32	X	X	X	672.00	X	X
22	Indene	10.07	X	X	X		X	X
23	Iso Propyl Alcohol	55.90	X	X	4,250.20	X	1,860.00	3,935.50
24	Iso Propyl Ether		X	X	X	X	X	X
25	Isoborneol		X	X	X	16.00	X	
26	Methanol		X	1,700.00	X	X		39,887.49
27	Methyl Ethyl Ketone	82.00	X	X	176.40	58.26	X	X
28	Methyl Isobutyl ketone	131.20	X	X	650.00	X	X	X
29	Methyl Tertiary Butyl Ether	11.86	X	X	X	X	X	X
30	Methyl-3-methoxyacrylate		X	X	X	1.00	X	X
31	Methylene Chloride	120.00	X	X	1,125.00	64.80	X	X
32	Naptha 100		X	X	100.00	X	X	X
33	Naptha D80		X	X	100.00	X	X	X
34	Neostann U28	0.40	X	X	X	X	X	X
35	N-Heptane	54.49	X	X	X	X	X	X
36	Phenol		X	X	3,686.87	X	X	X
37	Phosphoric Acid		X	X	4,200.00	X	X	108,585.10
38	phthalic anhydride	58.75	X	X	X	X	X	X
39	Poly ethyl polyol	34.80	X	X	X	X	X	X
40	Poly methyl (PM200) Polyphenyl Isocyanate		X	X	X	40.00	X	X

Sl. No.	Name of Chemical	Quantity of Chemicals Imported (MT)						
		Chennai	Cochin	Kakinada	Kandla	Nhava Shava	Mumbai	Vizag
42	Raypol 3003 (Polyol)	33.60	X	X	X	X	X	X
43	Silicone F628	5.00	X	X	X	X	X	X
44	Sodium boro hydride	15.00	X	X	X	X	X	X
45	Sodium Metal	109.92	X	X	X	X	X	X
46	Solvesso150	17.00	X	X	X	X	X	X
47	Specflex NE 134 Iso cyanate		X	X	X	X	<b>14.10</b>	X
48	sulfuric acid		X	X	X	X	X	1,100.00
49	TDI		X	X	X	X	460.00	X
50	Tertiary butyl acetate	42,133.86	X	X	X	X	X	X
51	Tertiary butyl alcohol	62.08	X	X	X	X	X	X
52	Tetrahydrofuran	565.52	X	X	X	X	X	X
53	Toyocat DT	0.03	X	X	X	X	X	X
54	Toyocat W60	0.29	X	X	X	X	X	X
<b>Total (MT)</b>		<b>67317.58</b>	<b>1795.2</b>	<b>4200</b>	<b>16188.47</b>	<b>852.06</b>	<b>3034.1</b>	<b>293309.73</b>

**Table 7: Port-wise distribution of Hazardous Chemicals for year 2006-07**

S. No.	Name of Chemical	Quantity of Chemicals Imported (MT)								<b>Total</b>
		Vizag	Chennai	Mumbai	Nhava Shava	Kandla	Cochin	Kolkota	Kakinad a	
1	Acetone	4831.63	25.6	*	*	525	*	*	*	5382.23
2	Acetonitrile	*	248.9	*	*	*	*	*	*	248.9
3	Acroliene	*	26.8	*	*	*	*	*	*	26.8
4	Acryamide	*	*	*	*	*	252	*	*	252
5	Acrylic Acid	*	*	*	8.6	*	*	17.2	*	25.8
6	Ammonia	233151.32	*	*	*	*	*	*	*	233151.32
7	Arcol Polyol 5613	*	116.55	*	*	*	*	*	*	116.55
8	Barium Chloride	*	*	*	20.08	*	*	*	*	20.08
9	Bisphenol A	*	*	*	6	*	*	*	*	6
10	Butyl acetate	*	65.4	*	*	*	*	*	*	65.4
11	Butyl methylacrylate	*	*	*	7.4	*	*	*	*	7.4
12	Calcium carbide	*	740.46	*	*	*	*	*	*	740.46
13	Chloroform	*	*	*	22.04	*	*	*	*	22.04
14	Cyclo Hexane	*	28.8	*	*	*	*	*	*	28.8
15	Diacetone alcohol	*	17.94	*	*	*	*	7.8	*	25.74
16	Diethanolamine	*	25.08	*	*	*	*	*	*	25.08
17	Di-iso propyl ether	*	*	*	23.2	*	*	*	*	23.2
18	Dimethyl Formamide	*	92.8	*	30.4	*	*	*	*	123.2
19	Diphenyl methane - 4,4' diisocyanate (MDI)	*	*	0.1	542.12	*	*	*	*	542.22
20	EPF S20	*	17	*	*	600	*	*	*	617
21	Epichlorohydrine	*	165.44	*	*	*	*	*	*	165.44
22	Ethyl Chloroformate	*	16.848	*	*	*	*	*	*	16.848
23	Exxsol D130	*	48	*	*	*	*	*	*	48
24	Exxsol D80	*	3.34	*	*	4650	*	*	*	4653.34
25	Exxsol Heptane	*	39.36	*	*	*	*	*	*	39.36
26	Exxsol hexane	*	*	*	*	2300	*	*	*	2300
27	Formaldehyde	*	10	*	*	*	*	*	*	10
28	Formic Acid	*	2823.946	*	67.92	*	96.87	*	*	2988.736
29	Glyoxylic Acid	*	19.5	*	*	*	*	*	*	19.5
30	Hexane	3737.5	811.12	*	*	5130	*	300	*	9978.62
31	Hydrogen Peroxide	*	64.455	*	1431.6	*	20.16	*	*	1516.215
32	Indene	*	10.07	*	*	*	*	*	*	10.07
33	Iso Cyanate	*	*	434.6577	646.547	*	*	*	*	1081.2047
34	ISO PMDI	*	*	5.29	*	*	*	*	*	5.29
35	Iso Propyl Alcohol	6170	344.38	1685	*	6100	*	25.6	*	14324.98
36	Iso Propyl Ether	*	32	*	*	*	*	*	*	32
37	Isoborneol	*	*	*	48.9	*	*	*	*	48.9

S. No.	Name of Chemical	Quantity of Chemicals Imported (MT)								Total
		Vizag	Chennai	Mumbai	Nhava Shava	Kandla	Cochin	Kolkota	Kakinada	
38	Isobutanol	*	*	*	*	125	*	*	*	125
39	Isopar H	*	42.48	*	31.5	600	*	*	*	673.98
40	Isophorone	*	*	*	*	*	*	7.8	*	7.8
41	Leather Chemicals	*	20.16	*	*	*	*	*	*	20.16
42	Lupranate T-80 (isocyanate)	*	*	897.74	*	*	*	*	*	897.74
43	Maleic Anhydride (China)	*	120	*	20	*	*	*	*	140
44	Malonitrile	*	19	*	*	*	*	*	*	19
45	Methane Di Isocynate (Desmodur 44V20L)	*	*	18.5	261.9	*	*	*	*	280.4
46	Methanol	47084.793	*	786.527	*	*	*	*	*	47871.32
47	Methyl Ethyl Ketone	*	66.5	*	*	1250	*	*	*	1316.5
48	Methyl Isobutyl ketone (MIBK)	*	132	*	13.2	425	*	105.6	*	675.8
49	Methyl Methacrylate	*	*	*	*	*	15.2	*	*	15.2
50	Methyl-3-methoxyacrylate	*	*	*	1	*	15.2	*	*	16.2
51	Methylene Chloride	*	397.52	.	232.576	*	43.2	*	*	673.296
52	Monoethanolamine	*	18.9	*	*	*	*	*	*	18.9
53	N Butanol	*	*	*	*	300	*	*	*	300
54	N Heptane	*	11.12	*	*	*	*	*	*	11.12
55	Naphta-H Fluid (Solvesso 200)	*	*	*	16	*	*	*	*	16
56	Naphthalene	*	*	*	1541	*	*	*	120	1661
57	Naptha	*	*	*	*	950	*	*	*	950
58	Naptha L	*	*	*	*	1000	*	*	*	1000
59	Neostann	*	1	*	*	*	*	*	*	1
60	Paramonochloro phenol	*	18	*	*	*	*	*	*	18
61	Perchloro Ethylene	*	*	*	57.768	*	*	*	*	57.768
62	Phthalic Anhydride	*	80	*	*	*	*	*	*	80
63	Phenol	448.61	86	*	300	1768.842	*	*	*	2603.452
64	Phosphoric acid	56464.4		*	*	*	*	*	*	56464.4
65	Pivaloyl Chloride	*	15.39	*	*	*	*	*	*	15.39
66	Poly Ether Polycol	*	34.8	*	*	*	*	*	*	34.8

S. No.	Name of Chemical	Quantity of Chemicals Imported (MT)								Total
		Vizag	Chennai	Mumbai	Nhava Shava	Kandla	Cochin	Kolkota	Kakinada	
67	Polymethane Polyphenyl Isocyanate (PM200)	*	*	*	20	*	*	*	*	20
68	polyol	*	*	33.6	*	*	*	*	*	33.6
69	Potassium Hydroxide	*	*	*	20.82	*	*	*	*	20.82
70	Propylene Glycol	*	16	*	*	*	*	16	*	32
71	Silicone	*	7	*	*	*	*	*	*	7
72	Sodium boro hydride	*	28	*	*	*	*	*	*	28
73	Sodium Metal	*	96	*	*	*	*	*	*	96
74	Sodium Sulphide	*	42.5	*	82	*	*	*	*	124.5
75	Solvent C9	*	*	*	*	150	*	*	*	150
76	Solvesso 150	*	71.36	*	*	*	*	*	*	71.36
77	Somentor	*	64	*	*	*	*	*	*	64
78	Styrene	*	*	12503.48	9214.98	*	*	*	*	21718.46
79	Synthetic Camphor	*	*	*	30	*	*	*	*	30
80	TDI Cosmonate T-80	*	*	235.25	18.75	*	*	*	*	254
81	TDI Desmodur T-80	*	*	1367.67	18.75	*	*	*	*	1386.42
82	Tertiary butyl acetate	*	13.86	*	*	*	*	*	*	13.86
83	Tertiary butyl alcohol	*	24.8	*	*	*	*	*	*	24.8
84	Tetrahydrofuran	*	705.6	*	43.2	*	*	*	*	748.8
85	Toluene	976.56	100	1600	*	1600	*	*	*	4276.56
86	Toyocat	*	0.475	*	*	*	*	*	*	0.475
87	Triethanolamine	*	114.4	*	*	*	*	*	*	114.4
88	Varanol 3010 (polyether Polyol)	*	*	*	16.8	*	*	*	*	16.8
89	Voranate T-80 (TDI)	*	*	39	*	*	*	*	*	39
90	Water roofing material (EP fastner & Insualtion fastner)	*	15.558	*	*	*	*	*	*	15.558
<b>TOTAL (MT)</b>		<b>352864.813</b>	<b>8156.212</b>	<b>19606.8147</b>	<b>14795.051</b>	<b>27473.842</b>	<b>442.63</b>	<b>480</b>	<b>120</b>	<b>423939.36</b>
<b>%</b>		<b>83.234</b>	<b>1.923</b>	<b>4.62</b>	<b>3.489</b>	<b>6.480</b>	<b>0.104</b>	<b>0.113</b>	<b>0.028</b>	<b>100</b>

**Table 8: Port-wise distribution of Hazardous chemicals for year 2007-08**

Sl. No.	Name of Chemical	Quantity of Chemicals Imported (MT)													Total	
		By sea											By air			
		Vizag	Chennai	Mumbai	Nhava Shava	Kandla	Cochin	Kolkata	Kakinada	New Mangalore	Pipavav	Ennore	ICD Delhi	Delhi	Chennai	
1	1,2 Dimethoxyl ethane (Monogylme)	100.8	X	X	X	X	X	X	X	X	X	X	X	X	X	<b>100.8</b>
2	2 Amino 4,6 dimethoxy pyrimidine	X	X	X	X	X	X	X	X	X	X	X	X	0.2	X	<b>0.2</b>
3	2 Ethyl anthraquinone	X	4	X	X	X	X	X	X	X	X	X	X	X	X	<b>4</b>
4	2 Methylfuran	X	X	X	X	X	X	X	X	X	X	X	X	X	0.002	<b>0.002</b>
5	2,6 dichlorobenzoo thiazole	X	X	X	X	X	X	X	X	X	X	X	X	1	X	<b>1</b>
6	2,6 difluorobenzen e sulfonamide	X	X	X	X	X	X	X	X	X	X	X	X	X	0.000 35	<b>0.000 35</b>
7	2- Aminosulfonyl N- dimethylnicotonic amide	X	X	X	X	X	X	X	X	X	X	X	X	1	X	<b>1</b>
8	2-methyl sulfonyl 4,6 dimethoxy pyrimidine	X	X	X	X	X	X	X	X	X	X	X	X	0.05	X	<b>0.05</b>
9	3 chlorobenzyl bromide	X	X	X	X	X	X	X	X	X	X	X	X	X	0.001	<b>0.001</b>
10	Acetone	3300	76.8	X	25.6	X	X	X	X	X	X	X	X	X	X	<b>3402. 4</b>
11	Acetonitrile	X	507.6	X	X	X	X	X	X	X	X	X	X	X	X	<b>507.6</b>

Sl. No.	Name of Chemical	Quantity of Chemicals Imported (MT)												Total	
		By sea										By air			
		Vizag	Chennai	Mumbai	Nhava Shava	Kandla	Cochin	Kolkata	Kakinada	New Mangalore	Pipivav	Ennore	ICD Delhi	Delhi	Chennai
12	Acroliene	X	15.75	X	X	X	X	X	X	X	X	X	X	X	15.75
13	Ammonia	96400	X	X	X	X	X	X	5000	X	X	X	X	X	10140 0
14	Ammonium Nitrate	731	X	X	X	X	X	X	X	X	X	X	X	X	731
15	Aniline	X	X	X	X	X	X	X	X	X	X	X	X	0.000 34	0.000 34
16	Arcol Polyol 5613	X	370	X	16.8	X	X	33.6	X	X	X	X	X	X	420.4
17	Aromatic hydrocarban mixture	X	570.13	X	X	X	X	X	X	X	X	X	X	X	570.1 3
18	Benzyl chloroformate	6.171	X	X	X	X	X	X	X	X	X	X	X	X	6.171
19	beta Naphthol	102	X	X	X	X	X	X	X	X	X	X	X	X	102
20	Butyl acetate	X	74	X	X	X	X	X	X	X	X	X	X	X	74
21	Butyl acrylate	X	38.4	X	115.2	X	X	X	X	X	X	X	X	X	153.6
22	Calcium carbide	X	1568.2 2	X	X	X	X	X	X	X	X	X	X	X	1568. 22
23	Caradol	X	120	X	X	X	X	X	X	X	X	X	X	X	120
25	Chloroform	X	349.52	X	X	X	X	X	X	X	X	X	X	X	349.5 2
26	Cyclo Hexane	X	120.96	X	X	X	X	X	X	X	X	X	X	X	120.9 6
27	Cyclo Hexanone	X	X	X	X	250	X	X	X	X	X	X	X	X	250
28	DEG	X	18	X	X	X	X	X	X	X	X	X	X	X	18
29	Diacetone	X	15.6	X	X	X	X	X	X	X	X	X	X	X	15.6
30	Diacetone alcohol	X	38.22	X	X	X	X	33.54	X	X	X	X	X	X	71.76
31	Dimethyl	30.4	X	X	X	X	X	X	X	X	X	X	X	X	30.4

Sl. No.	Name of Chemical	Quantity of Chemicals Imported (MT)												Total	
		By sea										By air			
		Vizag	Chennai	Mumbai	Nhava Shava	Kandla	Cochin	Kolkata	Kakinada	New Mangalore	Pipivav	Ennore	ICD Delhi	Delhi	Chennai
	acetamide														
32	Dimethyl benzyl carbonyl butrate solution	X	0.2446	X	X	X	X	X	X	X	X	X	X	X	0.244 6
33	Dimethyl Formamide	X	X	X	45.6	X	X	X	X	X	X	X	X	X	45.6
34	Dimethyl sulfoxide	X	90.4	X	X	X	X	X	X	X	X	X	X	X	90.4
35	Diphenyl methane - 4,4' diisocyanate (MDI)	X	X	X	3030.8 06	X	X	X	X	X	X	X	X	X	3030. 8061
36	Diphenyl phosphine	X	X	X	X	X	X	X	X	X	X	X	X	0.006	0.006
37	Ditertiary butyl dicarbonate	16	X	X	X	X	X	X	X	X	X	X	X	X	16
38	EPF S20	X	32	X	32	600	X	X	X	X	X	X	X	X	664
39	Epichlorohydrin e	X	110.4	X	X	X	X	X	X	X	X	X	X	X	110.4
40	Ethyl 1 propenyl ether	6	X	X	X	X	X	X	X	X	X	X	X	X	6
41	Ethyl Propiolate	X	X	X	X	X	X	X	X	X	X	X	X	0.003	0.003
42	Ethylen Diamine	X	14.612	X	X	X	X	X	X	X	X	X	X	X	14.61 2
43	Exxsol D110	X	X	X	X	200	200	X	X	X	X	X	X	X	400
44	Exxsol D130	X	X	X	48	X	X	X	X	X	X	X	X	X	48
45	Exxsol D80	X	X	X	15.2	3180	X	X	X	X	X	X	X	X	3195. 2
46	Exxsol Heptane	X	96	X	X	X	X	X	X	X	X	X	X	X	96
47	Exxsol hexane	X	X	X	X	9200	X	X	X	X	X	1780	X	X	10980

Sl. No.	Name of Chemical	Quantity of Chemicals Imported (MT)												Total		
		By sea										By air				
		Vizag	Chennai	Mumbai	Nhava Shava	Kandla	Cochin	Kolkata	Kakinada	New Mangalore	Pipivav	Ennore	ICD Delhi	Delhi	Chennai	
48	Formic Acid	X	2153.9 92	X	20.16	X	16.8	X	X	X	X	X	X	X	X	2190. 952
49	Glycol ether	X	14.8	X	X	X	X	X	X	X	X	X	X	X	X	14.8
50	Hexane	3720	11.12	X	X	680	X	X	X	X	X	X	X	X	X	4411. 12
51	Hydrazine hydrate	X	X	X	16	X	X	X	X	X	X	X	X	X	X	16
52	Hydrofluric acid	X	X	104.874	X	X	X	X	X	X	X	X	X	X	X	104.8 74
53	Hydrogen Peroxide	X	1562.8 63	X	X	X	X	X	X	X	X	X	X	X	X	1562. 863
54	Indene	X	11.97	X	X	X	X	X	X	X	X	X	X	X	X	11.97
55	Iodine	12.5	X	X	X	X	X	X	X	X	X	X	X	X	X	12.5
56	Iso Cyanate	X	X	2942.63	307.04	X	X	X	X	X	160	X	X	X	X	3409. 6701
57	ISO PMDI	X	X	31.74	X	X	X	X	X	X	X	X	X	X	X	31.74
58	Iso Propyl Alcohol	3275	76.8	X	12.8	2720	12.8	12.8	X	700	X	500	X	X	X	7310. 2
59	Iso Propyl Ether	X	320.96	X	32	X	X	X	X	X	X	X	X	X	X	352.9 6
60	Isobutyl alcohol	X	X	X	X	240	X	X	X	X	X	X	X	X	X	240
61	Isobutyl ketone	X	52.8	X	X	X	X	X	X	X	X	X	X	X	X	52.8
62	Isopar H	X	48	X	X	X	X	X	X	X	X	X	X	X	X	48
63	Isophorone	X	X	X	X	X	X	5.46	X	X	X	X	X	X	X	5.46
64	Isophthalic acid	19	X	X	20	X	X	X	X	X	X	X	X	X	X	39
65	Leather Chemicals	0.98	59.711	X	X	X	X	X	X	X	X	X	X	X	X	60.69 1
66	Lupranate M20	X	X	280	X	X	X	X	X	X	X	X	X	X	X	280
67	Lupranate T-80 (isocyanate)	X	20	1080	X	X	X	X	X	X	X	X	X	X	X	1100

Sl. No.	Name of Chemical	Quantity of Chemicals Imported (MT)												Total	
		By sea										By air			
		Vizag	Chennai	Mumbai	Nhava Shava	Kandla	Cochin	Kolkata	Kakinada	New Mangalore	Pipavav	Ennore	ICD Delhi	Delhi	Chennai
68	Magnesium based desulphurising compound	X	100	X	X	X	X	X	X	X	X	X	X	X	100
69	Maleic Anhydride	X	40	X	82.5	X	X	X	X	X	X	X	X	X	122.5
70	Malonitrile	X	16	X	X	X	X	X	X	X	X	X	X	X	16
71	Meta xylene	X	19	X	X	X	X	X	X	X	X	X	X	X	19
72	Methacryloyl Chloride	X	0.2	X	X	X	X	X	X	X	X	X	X	X	0.2
73	Methane sulfonic acid	20	X	X	X	X	X	X	X	X	X	X	X	X	20
74	Methanol	34633.3 49	X	X	X	X	X	X	7500	X	X	X	X	X	42133 .349
75	Methyl 2-aminosulfonyl benzoate (MDI)	X	X	X	X	X	X	X	X	X	X	5	1	X	6
76	Methyl Ethyl Ketone	X	125.76	X	26	1200	X	X	X	X	X	X	X	X	1351. 76
77	Methyl Isobutyl ketone (MIBK)	X	184.96	X	X	300	X	39.6	X	X	X	X	X	X	524.5 6
78	Methylene Chloride	265	641.8	X	63.6	1350	X	X	X	X	X	X	X	X	2320. 4
79	Methylene dichloride	X	20	X	X	X	X	X	X	X	X	X	X	X	20
80	Mixture glycol	X	X	X	48	X	X	X	X	X	X	X	X	X	48
81	Monoethanolamine	X	50.052	X	X	X	X	X	X	X	X	X	X	X	50.05 2
82	Monopropylene glycol	X	120.4	X	X	X	X	X	X	X	X	X	X	X	120.4
83	N Heptane	54.8	X	X	X	X	X	X	X	X	X	X	X	X	54.8

Sl. No.	Name of Chemical	Quantity of Chemicals Imported (MT)												Total	
		By sea										By air			
		Vizag	Chennai	Mumbai	Nhava Shava	Kandla	Cochin	Kolkata	Kakinada	New Mangalore	Pipivav	Ennore	ICD Delhi	Delhi	Chennai
84	Naphta-H Fluid (Solvesso 200)	X	X	X	96	X	X	X	X	X	X	X	X	X	96
85	Naphthalene	X	X	X	1790.6	X	X	X	X	X	X	X	X	X	1790.6
86	Naptha L	X	X	X	X	800	X	X	X	400	X	1855	X	X	3055
87	Palatinol	X	16	X	X	X	X	X	X	X	X	X	X	X	16
88	Paramonochloro phenol	X	20	X	X	X	X	X	X	X	X	X	X	X	20
89	Phenol	X	55.7	X	X	3270	X	X	X	X	X	X	X	X	3325.7
90	Phosphoric acid	44131.2 28	X	X	54.6	X	X	X	X	X	X	X	X	X	44185.828
91	Polymer MDI	X	X	408.4	X	X	X	X	X	X	X	X	X	X	408.4
92	Potassium Cyanide	X	X	16.2	X	X	X	X	X	X	X	X	X	X	16.2
93	Potassium Hydroxide	X	142	X	X	X	X	X	X	X	X	X	X	X	142
94	Potassium Metal	X	3.3	X	X	X	X	X	X	X	X	X	X	X	3.3
95	Propylene Glycol	X	121.2	X	17.6	X	X	X	X	X	X	X	X	X	138.8
96	Shell sol A100	X	X	X	X	200	X	X	X	X	X	X	X	X	200
97	Silicone	X	8	X	16.52	X	X	X	X	X	X	X	X	X	24.52
98	Sodium boro hydride	X	11	X	X	X	X	X	X	X	X	X	X	X	11
99	Sodium Cyanide	X	X	355.4	X	X	X	X	X	X	X	X	X	X	355.4
100	Sodium Metal	X	72.16	X	X	X	X	X	X	X	X	X	X	X	72.16
101	Sodium Sulphide	X	X	X	146	X	X	X	X	X	X	X	X	X	146
102	Solvent C9	X	X	X	X	400	X	X	X	X	X	X	X	X	400

Sl. No.	Name of Chemical	Quantity of Chemicals Imported (MT)												Total		
		By sea										By air				
		Vizag	Chennai	Mumbai	Nhava Shava	Kandla	Cochin	Kolkata	Kakinada	New Mangalore	Pipivav	Ennore	ICD Delhi	Delhi	Chennai	
103	Styrene	X	X	50744.39	171	X	90	X	X	X	X	X	X	X	51005.39	
104	Sulfuric acid	11300	X	X	X	X	X	X	X	X	X	X	X	X	11300	
105	Suprasec	X	X	1170.16	28.2	X	X	X	X	X	X	X	X	X	1198.36	
106	Synthetic Camphor	X	X	X	15.5	X	X	X	X	X	X	X	X	X	15.5	
107	TDI Cosmonate T-80	X	X	187.5	112.5	X	X	X	X	X	X	X	X	X	300	
108	TDI Desmodur T-80	X	X	774.75	353.5	X	X	X	X	X	X	X	X	X	1128.25	
109	Tert Butyl Chloroacetate	X	0.315	X	X	X	X	X	X	X	X	X	X	X	0.315	
110	Tetrahydrofuran	X	849.6	X	28.8	X	X	X	X	X	X	X	X	X	878.4	
111	Therminol	X	4.65	X	X	X	X	X	X	X	X	X	X	X	4.65	
112	Thionyl chloride	X	96	X	X	X	X	X	X	X	X	X	X	X	96	
113	Toluene	3880	X	1020	X	1500	X	X	X	1000	X	X	X	X	7400	
114	Toyocat	X	0.285	X	X	X	X	X	X	X	X	X	X	X	0.285	
115	Triphosgene	209.076	X	X	X	X	X	X	X	X	X	X	X	X	209.076	
116	Voranate T-80 (TDI)	X	X	58.5	X	X	X	X	X	X	X	X	X	X	58.5	
117	Xylene	X	X	X	X	500	X	X	X	X	X	X	X	X	500	
<b>TOTAL(MT)</b>		<b>202213.304</b>	<b>11282.255</b>	<b>59174.54</b>	<b>6788.126</b>	<b>26590</b>	<b>319.6</b>	<b>125</b>	<b>12500</b>	<b>2100</b>	<b>160</b>	<b>4135</b>	<b>5</b>	<b>3.25</b>	<b>0.01269</b>	<b>325396.091</b>
%		<b>62.1437401</b>	<b>3.4672372</b>	<b>18.18539</b>	<b>2.086112</b>	<b>8.171579</b>	<b>0.09822</b>	<b>0.0384</b>	<b>3.841472</b>	<b>0.645367</b>	<b>0.04917</b>	<b>1.2708</b>	<b>0.00154</b>	<b>0.001</b>	<b>3.9E-06</b>	<b>99.999988</b>

## 6.0 ANALYSIS OF IMPORTERS AND ENTRY PORTS

The information of import of hazardous chemicals furnished was mainly by fertilizer, pharmaceuticals, and pesticide manufacturers in India. **Table 9** shows the list of importers along with their import quantity from year 2003 to 2008.

**Tables 10 to 14** shows the importers and quantity of hazardous chemicals being imported through various firms in different years. In year 2003-04, M/s APL Chemi Natura Ltd, has imported about 2473 MT of Chemicals, which is the highest quantity of import in that year. Quantity wise, M/S Coromandel Fertilizers Limited occupied first position by importing 2.287 lacs MT, 2.457 lacs MT and 2.775 lacs MT of chemicals during the year 2004-05, 2005-06 and 2006-07 respectively. M/s Coromandel Fertilizers had imported maximum quantity 1.447 lacs MT of chemicals only through Vizag port.

**Table 9: Importers and Their Quantity of Import**

Sl. No.	Name of the Industry	Quantity of Chemicals Imported (MTs)				
		2003-04	2004-05	2005-06	2006-07	2007-08
1	Aastrid International Pvt.Ltd	X	X	X	20	X
2	Agarwal Chemicals	X	X	X	145.21	X
3	Alpha Technocon Pvt.Ltd.	15.17	X	X	X	X
4	APL Chemi Natura Ltd	2472.85	14341.81	17130.68	25738.12	5417.604
5	APL Peroxy Chemicals Ltd	X	X	X	X	1460.863
6	Arctic Super Chemi	X	X	20736	X	X
7	Arinits sales Pvt. Limited	X	X	X	X	73.6
8	Asian Peroxides Limited	X	X	X	X	676.13
9	Asoka PU Foam (India) P Ltd.	X	X	60	373.22	330
10	Astrix Laboratories Limited	X	X	X	X	4.65
11	ATC Chemicals India Pvt. Ltd	X	X	X	X	7.97
12	Auctus Pharma Limied	X	X	X	X	72.8
13	Aurobindo Pharma Ltd.	X	2122.58	X	X	2519.636
14	Banmore Foam Pvt Ltd.	X	X	20	138.925	18.75
15	Bansali Associates	X	20.74	X	X	X
16	BASF Coatings (India) P Ltd	X	X	X	2119.47	X
17	BASF India Ltd	X	X	X	9674.73	2278.56
18	BASF Polyurethans	X	X	X	1122.355	2990.8061
19	BASF Styrenics	X	X	X	12503.48	50744.394
20	Bhansali Chemicals (Madras) Limited	X	1857.6	1516.55	4219.028	2112.8
21	Bharat Foam Udyog Pvt. Ltd.	X	X	20	100	20
22	Bharath Solvent & Chemical Corporation	X	X	X	X	20.5
23	Bharathiya Nabhikiya Vidyuth Nigam Limited	X	X	X	X	37.72
24	Bharathiya Rasayan udyog (p) Ltd	X	X	X	99.144	X

Sl. No.	Name of the Industry	Quantity of Chemicals Imported ( MTs)				
		2003-04	2004-05	2005-06	2006-07	2007-08
25	BOC India Ltd.	X	X	189	82.84	X
26	Century Plyboards India P Ltd	X	X	X	223.4	X
27	Chemical de Enterprises	X	X	X	230.4	X
28	Chemplus international	115.2	X	X	X	X
29	Chemstar marketing Pvt Ltd	X	X	25.92	X	X
30	Cirex Pharmaceuticals Ltd.	X	X	11.07	24.47	131.97
31	Coromandel Fertilizers Ltd.	X	228715.8	245740.7	277565.7	144731.228
32	Devh Foam Pvt. Ltd. (Libra International Ltd)	X	X	60	18.75	18.5
33	Dharnendra Chemicals P.Ltd	X	85.12	X	X	X
34	Divi's Laboratories Limited	X	10700	6550	11750	11401.449
35	Dow Chemical International Pvt.Ltd	X	X	X	156.588	3373.62665
36	Dr. Reddy's Laboratories Ltd.	X	2401.64	4163.46	4481.81	4043.7077
37	Elke Enterprises	X	X	X	13.03	X
38	Enkay Foam Pvt. Ltd	X	X	X	80	18.5
39	Fashion Club Global	X	X	X	61.788	61.788
40	Flexipol Foams Pvt.Ltd	X	X	X	80	117
41	Flexo foam Private Limited	X	X	X	X	57.36
42	Futura Polymers	X	1400.27	X	X	X
43	Gian Chand Ramji dass	X	X	X	38.4	X
44	Glair Industries	X	X	X	X	60
45	Harsh International (Importers & Exporters)	X	X	X	X	57.6
46	Hazel Mercantile Ltd	X	X	X	X	7500
47	Hermes chemical company Private Ltd	X	X	X	X	13.74
48	Hetero Drugs Limited	325.35	455.4	702.22	2265.86	386.96
49	Hetero Labs Limited	270.15	279.8	42464.04	680.3	533.15
50	Hifzan International	X	X	X	40.16	38.845
51	J.J Foams Pvt.Ltd	X	X	X	37.5	56.25
52	J.T Polymer	X	X	X	X	60
53	Jaiswal Industries	X	X	X	28.862	58.5017
54	Jalaram Agencies	X	X	X	X	22.5
55	Jalaram Enterprises	X	X	X	X	21
56	Jamshedpur Injection Powder Ltd. JAMIPOL	X	X	X	X	1480.03
57	Jindal Mectec Pvt Ltd	X	X	X	477.35	869.25
58	Jindal Stainless Limited	X	X	X	X	104.874
59	Jubilant Organosys Ltd.	X	295	X	X	X
60	Jumax Foam Pvt.Ltd	X	X	X	68.75	115.5
61	Kartikay impex Pvt. Limited	X	X	X	X	172.62
62	Khandelwal laminates Limited	X	X	X	X	75
63	M.H.Polymers Pvt. Ltd.	X	X	120	438.5	659
64	M.K Organics Pvt. Ltd.	X	X	X	X	X
65	Mahendra Dye Chem	X	X	40.32	164.085	X

Sl. No.	Name of the Industry	Quantity of Chemicals Imported ( MTs)				
		2003-04	2004-05	2005-06	2006-07	2007-08
66	Mangal Pharma Chem Industries Pvt.Ltd	X	X	X	20.08	X
67	MATRIX Laborataries Limited	670.22	6751.86	5873.32	10155.66	2395.164
68	Meena & Co.	84.8	127.2	X	X	X
69	Modulus Pre-Fab Solutions	X	X	X	X	480
70	MRPS Logistics care	X	X	X	X	103.35
71	Nakoda chemicals Ltd.	26.4	26.4	X	X	X
72	Nectar Lifesciences Ltd	X	150	X	X	X
73	Neeraj Rasayan Udyog	X	X	428.4	623	172.6
74	Neeru Marketting Pvt. Ltd.	X	366.5	X	X	62
75	Neo Medichem Pvt. Limited	X	X	X	X	12.8
76	Nova Overseas Pvt.Ltd	X	X	X	158.5	221.5
77	Oceanload Services	X	X	215	563.178	84.84
78	Orchid chemicals & Pharmaceuticals Ltd.	X	250	189.74	72.038	X
79	Overseas Polymers Pvt. Ltd.	X	23782	28883.83	15246.4	18425
80	Panama Poly Products (p) Ltd.	X	320	180	377.675	271.25
81	Perfect Polyurethane (P) Ltd.	X	0.24	X	X	X
82	Pon Pure Chem (p) Ltd.,	X	X	2444.12	18488.55	20096.557
83	Prism Enterprises	30.4	57.2	X	X	X
84	PUF Tech Industries	X	X	X	5.29	67.46
85	Pure Chem (p) Ltd.,	X	X	3503	6594.32	10411.52
86	R.A.R overseas	X	X	X	X	40
87	R.P Foam Home Pvt.Ltd	X	X	X	20	97
88	Rajindra Mattresses	X	X	X	X	18.75
89	Restora foam	X	X	X	8.75	X
90	Roto Printing Ink (Madras) Pvt. Ltd.	X	12.96	X	12.96	X
91	S.V International Importers & Exporters	X	X	X	37.5	78.75
92	Saan Global	X	X	14.1	235.428	256.04
93	Sakthi Chemicals	X	X	X	X	731
94	Saraca Laboratories Limited	X	705	200	300	X
95	Sathyam Overseas importers & Exporters	X	X	X	41	X
96	Satwik Drugs Ltd.,	12	24	60	72	24
97	Satwik Pesticides Limited	X	X	X	X	8.25
98	Saviton Metplast Private Ltd	X	X	X	193.3267	7.5717
99	SCCI India Pvt.Ltd	X	X	X	20.82	X
100	Shakthi coir Products Pvt. Ltd	X	X	X	X	17.5
101	Shasun Chemicals and Drugs Ltd.,	X	1813.63	250	2375	2800
102	Sheela Foam Home Pvt. Ltd	X	X	X	X	140
103	Shubham Chemicals & Solvents Ltd.	88.5	X	X	X	X
104	Smartchem Technologies Limited,	X	9500	4550	12050	12100

Sl. No.	Name of the Industry	Quantity of Chemicals Imported ( MTs)				
		2003-04	2004-05	2005-06	2006-07	2007-08
105	Sri Krishna Polyurethanes Industries (SKPI)	X	X	X	X	173.36
106	Sri venkateswara Pipes Ltd.	72	X		X	X
107	SunPharmaceuticals Industries Ltd	X	X	X	105	X
108	Sweet Concepts	X	X	X	76.8	X
109	Synthokem Labs Pvt. Ltd.	34	X	52.8	183.44	130.4
110	T. Abdul Wahid & Company	X	X	0.73	X	X
111	Tagros Chemicals India Ltd	X	X	X	X	305
112	Tandon Solvents and chemicals	X	X	X	X	48
113	Tata International Limited	X	X	X	X	0.98
114	Techno- Commercial traders	X	X	X	X	371.6
115	Trident Chemphar Limited	X	X	X	X	9711.355
116	Universal Trading Company Importers & Exporters	X	X	X	57.5	60
117	Vardhman Corporation	X	X	259.6	582.9	X
118	Vasudha Pharma Chem	X	X	X	X	445.52
119	Vinarom Pvt. Limited	X	X	X	X	0.2446
120	Wanbury Limited	X	X	85.5	X	X
121	Yans Impex Overseas Leather Chemicals	X	20.74	X	X	X
<b>Total</b>		<b>4,217.04</b>	<b>306,583.48</b>	<b>386740.1</b>	<b>423939.3407</b>	<b>325396.0955</b>

**Table 10: Importers & Route of import with distribution for year 2003-04**

Sl. No.	Name of the Industry	Quantity of Chemicals Imported (MTs)			
		Chennai	Nhava Shava	Vizag	Total
1	APL Chemi Natura Ltd	X	X	2472.85	<b>2472.85</b>
2	Alpha technocn Pvt. Limited	15.17	X	X	<b>15.17</b>
3	Chemplus International	115.20	X	X	<b>115.20</b>
4	Hetero Drugs Limited	141.60	X	183.75	<b>325.35</b>
5	Hetero Labs Limited	165.15	X	105.00	<b>270.15</b>
6	MATRIX Laboratories Limited	670.22	X		<b>670.22</b>
7	Meena & Co.	42.40	X	42.40	<b>84.80</b>
8	Nakoda Chemicals Limited	26.40	X	X	<b>26.40</b>
9	Prism Enterprises	30.40	X	X	<b>30.40</b>
10	Satwik Drugs Limited	12.00	X	X	<b>12.00</b>
11	Shubham Chemicals & Solvents Limited	X	88.50	X	<b>88.5</b>
12	Sri venkateswara Pipes Limited	72.00	X	X	<b>72.00</b>
13	Synthokem Labs Pvt. Limited	34.00	X	X	<b>34.00</b>
<b>Total (MTs)</b>		<b>1324.5</b>	<b>88.50</b>	<b>2804.0</b>	<b>4217.04</b>

**Table 11: Importers & Route of import with distribution for year 2004-05**

Sl. No.	Name of the Industry	Quantity of Chemicals Imported (MTs)					<i>Total</i>	
		Chennai	Kakin ada	Kandla	Nhava Shava	Mumbai		
1	APL Chemi Natura Ltd	36.00	X	X	4.00	288.44	14,013.3 <b>14,341.81</b>	
2	Aurobindo Pharma Ltd.,	X	X	2,019.3 8	X	X	103.20 <b>2,122.58</b>	
3	Bansali Associates	20.74	X	X	X	X	X <b>20.74</b>	
4	Bhansali Chemicals (Madras) Limited,	1,857.6	X	X	X	X	X <b>1,857.60</b>	
5	Coromandel Fertilizers Limited	X	8,500	X	X	X	220,215. 8 <b>228,715.8</b>	
6	Dharnendra Chemicals P.Ltd	85.12	X	X	X	X	X <b>85.12</b>	
7	Divi's Laboratories Limited	X	X	150.00	X	400.00	10,150.0 <b>10,700.00</b>	
8	Dr. Reddy's Laboratories Ltd.,	1,074.76	X	X	X	700.00	626.88 <b>2,401.64</b>	
9	Futura Polymers	1,400.27	X	X	X	X	X <b>1,400.27</b>	
10	Hetero Drugs Limited	170.40	X	X	X	X	285.00 <b>455.40</b>	
11	Hetero Labs Limited	184.80	X	X	X	X	95.00 <b>279.80</b>	
12	Jubilant Organosys Ltd.	X	X	X	X	95.00	200.00 <b>295.00</b>	
13	MATRIX Laborataries Limited	788.87	X	100.00	X	X	5,862.99 <b>6,751.86</b>	
14	Meena & Co.	106.00	X	X	21.20.0	X	X <b>127.20</b>	
15	Nakoda chemicals Ltd.,	26.40	X	X	X	X	X <b>26.40</b>	
16	Nectar Lifesciences Ltd,	X	X	150.00	X	X	X <b>150.00</b>	
17	Neeru Marketting Pvt. Ltd.,	X	X	X	366.50	X	X <b>366.50</b>	
18	Orchid chemicals & Pharmaceuticals Ltd.,	X	X	X	X	X	250.00 <b>250.00</b>	
19	Overseas Polymers Pvt. Ltd.,	X	X	15,007. 0	475.00	3,600.0	4,700.00 <b>23,782.00</b>	
20	Panama Poly Products (p) Ltd.,	X	X	X	X	320.00	X <b>320.00</b>	
21	Perfect Polyurethane (P) Ltd.,	0.24	X	X	X	X	X <b>0.24</b>	
22	Prism Enterprises	57.20	X	X	X	X	X <b>57.20</b>	
23	Roto Printing Ink (Madras) Pvt. Ltd.,	12.96	X	X	X	X	X <b>12.96</b>	
24	Saraca Laboratories Limited,	X	X	X	X	300.00	405.00 <b>705.00</b>	
25	Satwik Drugs Ltd.,	24.00	X	X	X	X	X <b>24.00</b>	
26	Shasun Chemicals and Drugs Ltd.,	X	X	1,001.1 3	X	100.00	712.50 <b>1,813.63</b>	
27	Smartchem Technologies Limited,	X	X	X	X	X	9,500.00 <b>9,500.00</b>	
28	Yans Impex Overseas Leather Chemicals	20.74	X	X	X	X	X <b>20.74</b>	
<b>Total (MTs)</b>		<b>5,866</b>	<b>8,500</b>	<b>18,427</b>	<b>866</b>	<b>5,803</b>	<b>267,119</b>	<b>306,583</b>

**Table 12: Importers & Route of import with distribution for year 2005-06**

Sl. No.	Name of the Importer	Ports of Import (MTs) & Quantity of Chemicals Import (MTs)							Total (MTs)
		Chennai	Cochin	Kakinada	Kandla	Mumbai	Nhava Shava	Vizakhap atnam	
1	APL Chemi Natura Ltd	24.00	X	X	X	X	X	17106.68	<b>17130.68</b>
2	Arctic Super Chemi	20736.00	X	X	X	X	X	X	<b>20736.00</b>
3	Asoka PU Foam (India) Pvt. Ltd.	X	X	X	X	60.00	X	X	<b>60.00</b>
4	Banmore Foam P Ltd.	X	X	X	X	20.00	X	X	<b>20.00</b>
5	Bhansali Chemicals (Madras) Limited,	1421.35	95.20	X	X	X	X	X	<b>1516.55</b>
6	BOC India Ltd.	189.00	X	X	X	X	X	X	<b>189.00</b>
7	Bharat Foam Udyog Pvt. Ltd.	X	X	X	X	20.00	X	X	<b>20.00</b>
8	Cirex Pharmaceuticals Ltd.	11.07	X	X	X	X	X	X	<b>11.07</b>
9	Chemstar marketing ltd	25.92	X	X	X	X	X	X	<b>25.92</b>
10	Coromandel Fertilizers Ltd.	X	X	4200.00	X	X	X	241540.74	<b>245740.74</b>
11	Devh Foam Pvt. Ltd.	X	X	X	X	60.00	X	X	<b>60.00</b>
12	Dr. Reddy's Laboratories	1612.46	X	X	200.00	250.00	X	2101.00	<b>4163.46</b>
13	Divi's Laboratories Limited	X	X	X	150.00	X	X	6400.00	<b>6550.00</b>
14	Hetero Drugs Limited	252.22	X	X	X	150.00	X	300.00	<b>702.22</b>
15	Hetero Labs Limited	42321.54	X	X	X	X	X	142.50	<b>42464.04</b>
16	Mahendra Dye Chem	40.32	X	X	X	X	X	X	<b>40.32</b>
17	MATRIX Laborataries Ltd	X	X	X	X	X	X	5873.32	<b>5873.32</b>
18	M.H.Polymers Pvt. Ltd.	X	X	X	X	120.00	X	X	<b>120.00</b>
19	Neeraj Rasayan Udyog	X	X	X	X	X	428.40	X	<b>428.40</b>
20	Oceanload Services	215.00	X	X	X	X	X	X	<b>215.00</b>
21	Orchid chemicals & Pharmaceuticals Ltd.,	32.24	X	X	X	X	X	157.50	<b>189.74</b>
22	Overseas Polymers P. Ltd.	X	1700.00	X	10162.07	2160.00	59.26	14802.50	<b>28883.83</b>
23	Panama Poly Products (p) ltd.,	X	X	X	X	180.00	X	X	<b>180.00</b>
24	Pon Pure Chem (p) Ltd.,	139.32	X	X	2200.00	X	104.80	X	<b>2444.12</b>
25	Pure Chem (p) Ltd.,	226.60	X	X	3276.40	X	X	X	<b>3503.00</b>
26	Saaan Global	X	X	X	X	14.10	X	X	<b>14.10</b>
27	Satwik Drugs Ltd.,	60.00	X	X	X	X	X	X	<b>60.00</b>
28	Saraca Laboratories Ltd,	X	X	X	100.00	X	X	100.00	<b>200.00</b>
29	Shasun Chemicals and Drugs Ltd.,	X	X	X	100.00	X	X	150.00	<b>250.00</b>
30	Smartchem Technologies Limited,	X	X	X	X	X	X	4550.00	<b>4550.00</b>
31	Synthokem Labs Pvt Ltd.	52.80	X	X	X	X	X	X	<b>52.80</b>
32	T.Abdul Wahid & Company	0.73	X	X	X	X	X	X	<b>0.73</b>
33	Vardhman Corporation	X	X	X	X	X	259.60	X	<b>259.60</b>
34	Wanbury Limited	X	X	X	X	X	X	85.50	<b>85.50</b>
<b>Total (MTs)</b>		<b>67360.57</b>	<b>1795.20</b>	<b>4200.00</b>	<b>16188.47</b>	<b>3034.10</b>	<b>852.06</b>	<b>293309.73</b>	<b>386740.13</b>

**Table 13: Importers & Route of import with distribution for year 2006-07**

No.	Name of Industry	Quantity of Chemicals Imported (MTs)								
		Vizag	Chennai	Mumbai	Nhava Shava	Kandla	Cochin	Kolkota	Kakinada	Total
1	Aastrid International Pvt.Ltd	X	X	X	20	X	X	X	X	20
2	Agarwal Chemicals	145.21	X	X	X	X	X	X	X	145.21
3	APL Chemi Natura Ltd	24927.59	24	786.527	X	X	X	X	X	25738.117
4	Asoka PU Foam (India) Pvt. Ltd.	X	X	373.22	X	X	X	X	XX	373.22
5	Banmore Foam P) Ltd.	X	X	138.925	X	X	X	X	X	138.925
6	BASF Coartings (India) Pvt. Ltd	X	X	X	1981.07	X	138.4	X	X	2119.47
7	BASF India Ltd	X	X	X	9410.73	X	144	X	120	9674.73
8	BASF Polyurethans	X	X	40.24	1082.115	X	X	X	X	1122.355
9	BASF Styrenics	X	X	12503.48	X	X	X	X	X	12503.48
10	Bhansali Chemicals (Madras) Limited	1250	2872.1584	X	X	X	96.87	X	X	4219.0284
11	Bharat Foam Udyog Pvt. Ltd.	X	X	100	X	X	X	X	X	100
12	Bharathiya Rasayan udyog (p) Ltd	X	X	X	99.144	X	X	X	X	99.144
13	BOC India Ltd.	X	82.84	X	X	X	X	X	X	82.84
14	Century Plyboards India Pvt/ Ltd	223.4	X	X	X	X	X	X	X	223.4
15	Chemical de Enterprises	X	X	X	230.4	X	X	X	X	230.4
16	Cirex Pharmaceuticals Ltd.	X	24.47	X	X	X	X	X	X	24.47
17	Coromandel Fertilizers Limited	277565.7	X	X	X	X	X	X	X	277565.7
18	Devh Foam Pvt. Ltd. (Libra International Ltd)	X	X	18.75	X	X	X	X	X	18.75
19	Divi's Laboratories Limited	11300	X	X	X	450	X	X	X	11750
20	Dow Chemical International Pvt.Ltd	X	X	156.588	X	X	X	X	X	156.588
21	Dr. Reddy's Laboratories Ltd.	4233.17	248.64	X	X	X	X	X	X	4481.81
22	Elke Enterprises	X	13.03	X	X	X	X	X	X	13.03
23	Enkay Foam Pvt. Ltd	X	X	80	X	X	X	X	X	80
24	Fashion Club Global	X	61.788	X	X	X	X	X	X	61.788
25	Flexipol Foams Pvt.Ltd	X	X	80	X	X	X	X	X	80
26	Gian Chand Ramji dass	X	X	X	38.4	X	X	X	X	38.4
27	Hetero Drugs Limited	1597.5	668.36	X	X	X	X	X	X	2265.86
28	Hetero Labs Limited	450	230.3	X	X	X	X	X	X	680.3
29	Hifzan International	X	40.16	X	X	X	X	X	X	40.16
30	J.J Foams Pvt.Ltd	X	X	X	37.5	X	X	X	X	37.5
31	Jaiswal Industries	X	X	28.862	X	X	X	X	X	28.862
32	Jindal Mectec Pvt Ltd	X	X	477.35	X	X	X	X	X	477.35
33	Jumax Foam Pvt.Ltd	X	X	68.75	X	X	X	X	X	68.75
34	M.H.Polymers Pvt. Ltd.	X	X	438.5	X	X	X	X	X	438.5

No.	Name of Industry	Quantity of Chemicals Imported (MTs)								
		Vizag	Chennai	Mumbai	Nhava Shava	Kandla	Cochin	Kolkata	Kakinada	Total
35	Mahendra Dye Chem	X	83.925	60	X	X	20.16	X	X	164.085
36	Mangal Pharma Chem Industries Pvt.Ltd	X	X	X	20.08	X	X	X	X	20.08
37	MATRIX Laborataries Limited	10155.66	X	X	X	X	X	X	X	10155.66
38	Neeraj Rasayan Udyog	X	X	X	623	X	X	X	X	623
39	Nova Overseas Pvt.Ltd	X	X	158.5	X	X	X	X	X	158.5
40	Oceanload Services	X	563.178	X	X	X	X	X	X	563.178
41	Orchid chemicals & Pharmaceuticals Ltd.	X	72.038	X	X	X	X	X	X	72.038
42	Overseas Polymers Pvt. Ltd.	6736.56	X	3085	1	5423.842	X	X	X	15246.402
43	Panama Poly Products (p) Ltd.	X	X	377.675	X	X	X	X	X	377.675
44	Pon Pure Chem (p) Ltd.,	X	2272.805	X	363.54	15350	43.2	459	X	18488.545
45	PUF Tech Industries	X	X	5.29	X	X	X	X	X	5.29
46	Pure Chem (p) Ltd.,	X	630.12	X	43.2	5900	X	21	X	6594.32
47	R.P Foam Home Pvt.Ltd	X	X	20	X	X	X	X	X	20
48	Restora foam	X	X	8.75	X	X	X	X	X	8.75
49	Roto Printing Ink (Madras) Pvt Ltd.	X	12.96	X	X	X	X	X	X	12.96
50	S.V International Importers & Exporters	X	X	37.5	X	X	X	X	X	37.5
51	Saan Global	X	X	112.081	123.347	X	X	X	X	235.428
52	Saraca Laboratories Limited	200	X	100	X	X	X	X	X	300
53	Sathyam Overseas importers & Exporters	X	X	X	41	X	X	X	X	41
54	Satwik Drugs Ltd.,	X	72	X	X	X	X	X	X	72
55	Saviton Metplast Private Limited	X	X	193.3267	X	X	X	X	X	193.3267
56	SCCI India Pvt.Ltd	X	X	X	20.82	X	X	X	X	20.82
57	Shasun Chemicals and Drugs Ltd.,	1925	X	100	X	350	X	X	X	2375
58	Smartchem Technologies Limited,	12050	X	X	X	X	X	X	X	12050
59	SunPharmaceuticals Industries Ltd	105	X	X	X	X	X	X	X	105
60	Sweet Concepts	X	X	X	76.8	X	X	X	X	76.8
61	Synthokem Labs Pvt. Ltd.	X	183.44	X	X	X	X	X	X	183.44
62	Universal Trading Company Importers & Exporters	X	X	57.5	X	X	X	X	X	57.5
63	Vardhman Corporation	X	X	X	582.9	X	X	X	X	582.9
	<b>Total (MTs)</b>	<b>352864.8</b>	<b>8156.2124</b>	<b>19606.81</b>	<b>14795.05</b>	<b>27473.84</b>	<b>442.63</b>	<b>480</b>	<b>120</b>	<b>423939.34</b>

**Table 14: Importers & Route of import with distribution for year 2007-08**

Sl. No	Name of Industry	Quantity of Chemicals Imported (MTs)												Total	
		By Sea													
		Vizag	Chennai	Mumbai	Nhava Shava	Kandla	Cochin	Kolkata	Kakinada	New Mangalore	Pipivav	Ennore	ICD Delhi	Delhi	Chennai
1	APL Chemi Natura Ltd	5417.6	X	X	X	X	X	X	X	X	X	X	X	X	5417.60
2	APL Peroxy Chemicals Limited	X	1460.9	X	X	X	X	X	X	X	X	X	X	X	1460.86
3	Arinits sales pvt. Limited	X	X	X	73.6	X	X	X	X	X	X	X	X	X	73.6
4	Asian Peroxides Limited	X	676.13	X	X	X	X	X	X	X	X	X	X	X	676.13
5	Asoka PU Foam (India) Pvt. Ltd.	X	20	310	X	X	X	X	X	X	X	X	X	X	330
6	Astrix Laboratories Limited	X	4.65	X	X	X	X	X	X	X	X	X	X	X	4.65
7	ATC Chemicals India Pvt. Limited	X	7.97	X	X	X	X	X	X	X	X	X	X	X	7.97
8	Auctus Pharma Limied	X	72.8	X	X	X	X	X	X	X	X	X	X	X	72.8
9	Aurobindo Pharma Ltd.	2519.6	X	X	X	X	X	X	X	X	X	X	X	X	2519.62
10	Banmore Foam (P) Ltd.	X	X	18.75	X	X	X	X	X	X	X	X	X	X	18.75
11	BASF India Ltd	X	X	X	2021.7	150	106.8	X	X	X	X	X	X	X	2278.56
12	BASF Polyurethans	X	X	X	2990.8	X	X	X	X	X	X	X	X	X	2990.81
13	BASF Styrenics	X	X	50744	X	X	X	X	X	X	X	X	X	X	50744.39
14	Bhansali Chemicals (Madras) Limited	X	2112.8	X	X	X	X	X	X	X	X	X	X	X	2112.8
15	Bharat Foam Udyog Pvt. Ltd.	X	X	20	X	X	X	X	X	X	X	X	X	X	20

Sl. No	Name of Industry	Quantity of Chemicals Imported (MTs)												Total	
		By Sea										By Air			
		Vizag	Chennai	Mumbai	Nhava Shava	Kandla	Cochin	Kolkata	Kakinada	New Mangalore	Pipivav	Ennore	ICD Delhi	Delhi	Chennai
16	Bharath Solvent & Chemical Corporation	X	X	X	20.5	X	X	X	X	X	X	X	X	X	20.5
17	Bharathiya Nabhikiye Vidyuth Nigam Limited	X	37.72	X	X	X	X	X	X	X	X	X	X	X	37.72
18	Cirex Pharmaceuticals Ltd.	X	131.97	X	X	X	X	X	X	X	X	X	X	X	131.97
19	Coromandel Fertilizers Limited	144731	X	X	X	X	X	X	X	X	X	X	X	X	144731.28
20	Devh Foam Pvt. Ltd. (Libra International Ltd)	X	X	18.5	X	X	X	X	X	X	X	X	X	X	18.5
21	Divi's Laboratories Limited	11401	X	X	X	X	X	X	X	X	X	X	X	X	11401.45
22	Dow Chemical International Pvt.Ltd	X	X	3194.4	19.2	X	X	X	X	X	160	X	X	X	3373.63
23	Dr. Reddy's Laboratories Ltd.	3112.5	931.20	X	X	X	X	X	X	X	X	X	X	X	0.01269 4043.71
24	Enkay Foam Pvt. Ltd	X	X	18.5	X	X	X	X	X	X	X	X	X	X	18.5
25	Fashion Club Global	X	61.788	X	X	X	X	X	X	X	X	X	X	X	61.79
26	Flexipol Foams Pvt.Ltd	X	X	117	X	X	X	X	X	X	X	X	X	X	117
27	Flexo foam Private Limited	X	X	57.36	X	X	X	X	X	X	X	X	X	X	57.36
28	Glair Industries	X	X	60	X	X	X	X	X	X	X	X	X	X	60
29	Harsh International (Importers & Exporters)	X	X	X	57.6	X	X	X	X	X	X	X	X	X	57.6

Sl. No	Name of Industry	Quantity of Chemicals Imported (MTs)												Total	
		By Sea										By Air			
		Vizag	Chennai	Mumbai	Nhava Shava	Kandla	Cochin	Kolkata	Kakinada	New Mangalore	Pipivav	Ennore	ICD Delhi	Delhi	Chennai
30	Hazel Mercantile Ltd	X	X	X	X	X	X	X	7500	X	X	X	X	X	7500
31	Hermes chemical company Private Ltd	X	13.74	X	X	X	X	X	X	X	X	X	X	X	13.74
32	Hetero Drugs Limited	X	386.96	X	X	X	X	X	X	X	X	X	X	X	386.96
33	Hetero Labs Limited	X	533.15	X	X	X	X	X	X	X	X	X	X	X	533.15
34	Hifzan International	X	38.845	X	X	X	X	X	X	X	X	X	X	X	38.845
35	J.J Foams Pvt.Ltd	X	X	18.75	37.5	X	X	X	X	X	X	X	X	X	56.25
36	J.T Polymer	X	X	60	X	X	X	X	X	X	X	X	X	X	60
37	Jaiswal Industries	X	X	58.501 7	X	X	X	X	X	X	X	X	X	X	58.5017
38	Jalaram Agencies	X	X	X	22.5	X	X	X	X	X	X	X	X	X	22.5
39	Jalaram Enterprises	X	X	X	21	X	X	X	X	X	X	X	X	X	21
40	Jamshedpur Injection Powder Ltd. JAMIPOL	X	1480.0 3	X	X	X	X	X	X	X	X	X	X	X	1480.03
41	Jindal Mectec Pvt Ltd	X	X	849.25	20	X	X	X	X	X	X	X	X	X	869.25
42	Jindal Stainless Limited	X	X	104.87 4	X	X	X	X	X	X	X	X	X	X	104.874
43	Jumax Foam Pvt.Ltd	X	X	115.5	X	X	X	X	X	X	X	X	X	X	115.5
44	Kartikay impex Pvt. Limited	X	X	X	172.62	X	X	X	X	X	X	X	X	X	172.62
45	Khandelwal laminates Limited	X	X	X	75	X	X	X	X	X	X	X	X	X	75
46	M.H.Polymers Pvt. Ltd.	X	X	659	X	X	X	X	X	X	X	X	X	X	659
47	MATRIX Laborataries	2272.5 52	122.61 2	X	X	X	X	X	X	X	X	X	X	X	2395.16

Sl. No	Name of Industry	Quantity of Chemicals Imported (MTs)												Total	
		By Sea										By Air			
		Vizag	Chennai	Mumbai	Nhava Shava	Kandla	Cochin	Kolkata	Kakinada	New Mangalore	Pipivav	Ennore	ICD Delhi	Delhi	Chennai
	Limited														
48	Modulus Pre-Fab Solutions	X	X	480	X	X	X	X	X	X	X	X	X	X	480
49	MRPS Logistics care	X	103.35	X	X	X	X	X	X	X	X	X	X	X	103.35
50	Neeraj Rasayan Udyog	X	X	X	172.6	X	X	X	X	X	X	X	X	X	172.6
51	Neeru Marketting Pvt. Ltd.	X	X	X	62	X	X	X	X	X	X	X	X	X	62
52	Neo Medicchem pvt. Limited	X	12.8	X	X	X	X	X	X	X	X	X	X	X	12.8
53	Nova Overseas Pvt.Ltd	X	X	184	37.5	X	X	X	X	X	X	X	X	X	221.5
54	Oceanload Services	X	84.84	X	X	X	X	X	X	X	X	X	X	X	84.84
55	Overseas Polymers Pvt. Ltd.	12865	X	X	X	5560	X	X	X	X	X	X	X	X	18425
56	Panama Poly Products (p) Ltd.	X	X	171.25	100	X	X	X	X	X	X	X	X	X	271.25
57	Pon Pure Chem (p) Ltd.,	X	1572.3 57	500	406.4	1493 0	212.8	125	X	1000	X	1350	X	X	20096.5
58	PUF Tech Industries	X	X	67.46	X	X	X	X	X	X	X	X	X	X	67.46
59	Pure Chem (p) Ltd.,	X	815.52	500	16	5600	X	X	X	1000	X	2480	X	X	10411.5
60	R.A.R overseas	X	X	40	X	X	X	X	X	X	X	X	X	X	40
61	R.P Foam Home Pvt.Ltd	X	X	97	X	X	X	X	X	X	X	X	X	X	97
62	Rajindra Mattresses	X	X	X	18.75	X	X	X	X	X	X	X	X	X	18.75
63	S.V International Importers & Exporters	X	X	X	78.75	X	X	X	X	X	X	X	X	X	78.75
64	Saan Global	X	X	X	256.04	X	X	X	X	X	X	X	X	X	256.04
65	Sakthi Chemicals	731	X	X	X	X	X	X	X	X	X	X	X	X	731

Sl. No	Name of Industry	Quantity of Chemicals Imported (MTs)												Total		
		By Sea										By Air				
		Vizag	Chennai	Mumbai	Nhava Shava	Kandla	Cochin	Kolkata	Kakinada	New Mangalore	Pipivav	Ennore	ICD Delhi	Delhi	Chennai	
66	Satwik Drugs Ltd.,	X	24	X	X	X	X	X	X	X	X	X	X	X	X	24
67	Satwik Pesticides Limited	X	X	X	X	X	X	X	X	X	X	X	5	3.25	X	8.25
68	Saviton Metplast Private Limited	X	X	7.5717	X	X	X	X	X	X	X	X	X	X	X	7.5717
69	Shakthi coir Products Pvt. Limited	X	X	17.5	X	X	X	X	X	X	X	X	X	X	X	17.5
70	Shasun Chemicals and Drugs Ltd.,	2350	X	X	X	350	X	X	X	100	X	X	X	X	X	2800
71	Sheela Foam Home Pvt. Ltd	X	X	140	X	X	X	X	X	X	X	X	X	X	X	140
72	Smartchem Technologies Limited,	7100	X	X	X	X	X	X	5000	X	X	X	X	X	X	12100
73	Sri Krishna Polyurethanes Industries (SKPI)	X	X	173.36	X	X	X	X	X	X	X	X	X	X	X	173.36
74	Synthokem Labs Pvt. Ltd.	X	130.4	X	X	X	X	X	X	X	X	X	X	X	X	130.4
75	Tagros Chemicals India Ltd	X	X	X	X	X	X	X	X	X	X	305	X	X	X	305
76	Tandon Solvents and chemicals	X	X	X	48	X	X	X	X	X	X	X	X	X	X	48
77	Tata International Limited	0.98	X	X	X	X	X	X	X	X	X	X	X	X	X	0.98
78	Techno-Commercial traders	X	X	371.6	X	X	X	X	X	X	X	X	X	X	X	371.6
79	Trident Chemphar Limited	9711.3 55	X	X	X	X	X	X	X	X	X	X	X	X	X	9711.35
80	Univeersal Trading Company Importers & Exporters	X	X	X	60	X	X	X	X	X	X	X	X	X	X	60

Sl. No	Name of Industry	Quantity of Chemicals Imported (MTs)												Total		
		By Sea										By Air				
		Vizag	Chennai	Mumbai	Nhava Shava	Kandla	Cochin	Kolkata	Kakinada	New Mangalore	Pipivav	Ennore	ICD Delhi	Delhi	Chennai	
81	Vasudha Pharma Chem	X	445.52	X	X	X	X	X	X	X	X	X	X	X	445.52	
82	Vinarom Pvt. Limited	X	0.2446	X	X	X	X	X	X	X	X	X	X	X	0.2446	
Total		202213. 304	11282.2 545	59174.5 48	6788.12 614	26590	319.6	125	12500	2100	160	4135	5	3.25	0.012	325396.
%		62.14	3.46	18.18	2.08	8.17	0.09	0.03	3.84	0.64	0.049	1.27	0.001	0.001	3.9E- 06	100

## 7.0 INFORMATIONS TO THE AUTHORITY

Industries are required to provide the details of import of hazardous chemicals to the concerned authorities in prescribed format. Some industries are regularly furnishing the information about their import of hazardous chemicals, but, the information furnished is not complete in all respect as per format: It has been observed that one or the other information was missing. The details of the import chemicals submitted by the respective industries are compiled in **Table 15**. The details of the industries are given at **Annexure I**.

**Table 15: Data Submitted By the Industries**

Sl. No	Name of the Industry	Chemical name	Quantity Imported	Port	MSDS	Country of Origin	Product spec.
1	APL Chemi Natura Ltd	Y	Y	Y	Y	N	N
2	APL Peroxy Chemicals Limited	Y	Y	Y	Y	N	Y
3	Arinits sales Pvt. Limited	Y	Y	Y	N	Y	Y
4	Asian Peroxides Limited	Y	Y	Y	N	N	Y
5	Asoka PU Foam (India) Pvt. Ltd.	Y	Y	Y	N	N	N
6	Astrix Laboratories Limited	Y	Y	Y	N	N	Y
7	ATC Chemicals India Pvt. Limited	Y	Y	Y	N	N	N
8	Auctus Pharma Limied	Y	Y	Y	N	Y	Y
9	Aurobindo Pharma Ltd	Y	Y	Y	Y	Y	N
10	Banmore Foam Pvt Ltd.	Y	Y	Y	N	N	N
11	BASF India Ltd	Y	Y	Y	Y	Y	Y
12	BASF Polyurethans	Y	Y	Y	Y	Y	Y
13	BASF Styrenics	Y	Y	Y	Y	Y	Y
14	Bhansali Chemicals Madras Ltd	Y	Y	Y	Y	Y	N
15	Bharat Foam Udyog Pvt. Ltd.	Y	Y	Y	N	N	N
16	Bharath Solvent & Chemical Corporation	Y	Y	Y	N	Y	Y
17	Bharathiya Nabhikiye Vidyuth Nigam	Y	Y	Y	Y	N	Y
18	Cirex Pharmaceuticals Ltd.	Y	Y	Y	Y	Y	Y
19	Coromandel Fertilizers Ltd	Y	Y	Y	N	N	N
20	Devh Foam Pvt. Ltd. (Libra International Ltd)	Y	Y	Y	N	N	Y
21	Divi's Lab Ltd	Y	Y	Y	Y	Y	N
22	Dow Chemical International Pvt. Ltd	Y	Y	Y	N	N	Y
23	Dr. Reddy's Laboratories Ltd.	Y	Y	Y	N	Y	N
24	Enkay Foam Pvt. Ltd	Y	Y	Y	N	N	N
25	Fashion Club Global	Y	Y	Y	N	N	N
26	Flexipol Foams Pvt.Ltd	Y	Y	Y	N	N	Y
27	Flexo foam Private Limited	Y	Y	Y	N	Y	N
28	Glair Industries	Y	Y	Y	N	N	Y
29	Harsh International	Y	Y	Y	N	Y	Y
30	Hazel Mercantile Ltd	Y	Y	Y	N	Y	Y

Sl. No	Name of the Industry	Chemical name	Quantity Imported	Port	MSDS	Country of Origin	Product spec.
31	Hermes chemical company Private Ltd	Y	Y	Y	N	N	N
32	Hetero Drugs Limited	Y	Y	Y	Y	Y	N
33	Hetero labs Ltd	Y	Y	Y	Y	Y	N
34	Hifzan International	Y	Y	Y	N	N	N
35	J.J Foams Pvt.Ltd	Y	Y	Y	N	N	N
36	J.T Polymer	Y	Y	Y	N	N	Y
37	Jaiswal Industries	Y	Y	Y	N	N	Y
38	Jalaram Agencies	Y	Y	Y	Y	N	Y
39	Jalaram Enterprises	Y	Y	Y	N	Y	N
40	Jamshedpur Injection Powder Ltd. JAMIPOL	Y	Y	Y	Y	N	N
41	Jindal Mectec Pvt Ltd	Y	Y	Y	N	N	N
42	Jindal Stainless Limited	Y	Y	Y	N	N	Y
43	Jumax Foam Pvt.Ltd	Y	Y	Y	N	N	N
44	Kartikay impex Pvt. Limited	Y	Y	Y	N	N	Y
45	Khandelwal laminates Limited	Y	Y	Y	N	N	Y
46	M.H.Polymers Pvt. Ltd.	Y	Y	Y	N	N	Y
47	Matrix Laboratories Ltd.	Y	Y	Y	Y	N	N
48	Modulus Pre-Fab Solutions	Y	Y	Y	N	N	Y
49	MRPS Logistics care	Y	Y	Y	N	N	Y
50	Neeraj Rasayan Udyog	Y	Y	Y	N	N	N
51	Neeru Marketing Pvt Ltd	Y	Y	Y	N	N	N
52	Neo Medichem Pvt. Limited	Y	Y	Y	N	Y	Y
53	Nova Overseas Pvt.Ltd	Y	Y	Y	N	N	N
54	Oceanload Services	Y	Y	Y	Y	Y	Y
55	Overseas polymers Pvt. Ltd	Y	Y	Y	Y	Y	N
56	Panama Poly Products Pvt.Ltd.	Y	Y	Y	N	N	N
57	Pon Pure chemicals Pvt Ltd	Y	Y	Y	N	Y	Y
58	PUF Tech Industries	Y	Y	Y	N	N	Y
59	Pure Chemicals and solvents Pvt Ltd	Y	Y	Y	N	Y	Y
60	R.A.R Overseas	Y	Y	Y	N	N	Y
61	R.P Foam Home Pvt.Ltd	Y	Y	Y	N	N	Y
62	Rajindra Mattresses	Y	Y	N	N	N	Y
63	S.V International Importers & Exporters	Y	Y	Y	N	N	Y
64	Saan Global	Y	Y	Y	N	N	N
65	Sakthi Chemicals	Y	Y	Y	Y	N	N
66	Satwik Drugs Ltd	Y	Y	Y	N	Y	N
67	Satwik Pesticides Limited	Y	Y	Y	Y	Y	N
68	Saviton Metplast Private Limited	Y	Y	Y	N	N	Y
69	Shakthi Coir Products Pvt. Ltd	Y	Y	Y	N	Y	Y
70	Shasun Chemicals & Drugs Ltd	Y	Y	Y	Y	Y	N
71	Sheela Foam Home Pvt. Ltd	Y	Y	Y	N	Y	Y
72	Shubham Chemicals & Solvents Ltd.	Y	Y	Y	Y	N	N
73	Smartchem technologies Ltd	Y	Y	Y	Y	N	Y

Sl. No	Name of the Industry	Chemical name	Quantity Imported	Port	MSDS	Country of Origin	Product spec.
74	Synthokem Labs Pvt Ltd	Y	Y	Y	Y	Y	N
75	Tagros Chemicals India Ltd	Y	Y	Y	N	N	Y
76	Tandon Solvents and chemicals	Y	Y	Y	N	N	Y
77	Tata International Limited	Y	Y	Y	N	Y	Y
78	Techno- Commercial traders	Y	Y	Y	N	N	Y
79	Trident Chemphar Limited	Y	Y	Y	Y	N	Y
80	Universal Trading Company Importers & Exporters	Y	Y	Y	N	Y	Y
81	Vardhaman Corporation	Y	Y	Y	Y	N	Y
82	Vinarom Pvt. Limited	Y	Y	Y	Y	N	Y

Note: Y-Submitted N-Not Submitted

From the above table, it is observed that information furnished by many industries is not sufficient as per the MSIHC Rules. Many industries are not furnishing information on product specification and Material safety data sheet. It is advised that the industries should furnish all the information as per above mentioned rules.

## 8.0 ANALYSIS OF INDUSTRY Vs HAZARDOUS CHEMICALS

Analysis of industry Vs hazardous chemicals are summarised in **Table 16** for the last five years i.e.2003-04,2004-05,2005-06, 2006-07 and 2007-08. Close examination to the table reveals that M/S Pon Pure Chem Pvt. Ltd has imported highest number of chemicals i.e 54 nos, followed by M/S Pure Chem Pvt Ltd. by importing 258nos of chemicals and then by M/S Overseas Polymer Ltd by importing 22 nos of chemicals over past 5 years.

Industries like Dr. Reddy's Lab Ltd, Matrix lab Ltd, Hetero Drugs Ltd, Hetero labs Ltd are importing more than 10 chemicals and less than 20 chemicals. BASF (coatings) India Pvt. Ltd, BASF India Ltd and Saviton metplast Pvt. Ltd imports more than 5 & less than 10 chemicals and the rest of industries are importing less than 5 numbers of chemicals.

**Table 16: Industry Vs Hazardous chemicals**

S. No	Name of Industry	Name of the Chemical
1	Aastrid International Pvt. Ltd	Maleic anhydride
2	Agarwal Chemicals	Phenol
3	Alpha technology Pvt.Ltd	Methyl Bromibe
4	APL Chemi Natura Ltd	Methanol, Sodium metal
5	APL Peroxy Chemicals Ltd	Hydrogen Peroxide
6	Arctic Super chemi	Formic acid
7	Arinities Sales Pvt. Ltd	Acetone,Methylene Chloride,Methyl ethyl ketone
8	Asian Peroxide Ltd	2-ethyl anthraquinone, Aromatic hydrocarbon mixture, Hydrogen Peroxide
9	Asoka PU Foam (India) Pvt. Ltd.	Lupranate T-80, TDI/Desmodur & Cosmonate)
10	Astrix Laboratories Ltd	Therminol D12
11	ATC Chemicals India Pvt. Ltd	Leather chemicals, Phenol
12	Auctus Pharma Ltd	Acetonitrile, Methylene Chloride. Methylene dichloride
13	Aurbindo Pharma Limited	Hydroxyl Ammonium Sulfate, Methanol Methylene chloride, Trimethyl acetyl chloride
14	Banmore Foam Udyog Pvt Ltd.	Lupranate T-80, TDI (Desmodur)
15	Bansali Assosciates	Formic acid
16	BASF Coatings (India) Pvt. Ltd	Acryamide, Bisphenol-A., Formic acid, Methyl methacrylate, Methyl-3-Methoxyacrylate Naphthalene, Styrene
17	BASF India Ltd	Acryamide, Formic acid, MDI (Desmodur 44v20L), Naphthalene, Phenol, Styrene
18	BASF Polyurethans	Diphenyl methane 44 diisocyanate(MDI), Iso Cyanate, Lupranate T-80,
19	BASF Styrenics	Styrene
20	Bhansali Chemicals Madras Ltd	Calcium Carbide, Formic acid, Methanol
21	Bharath Solvents & Chemicals	Maleic anhydride
22	Bharathiya Foam udyog	Lupranate T-80, TDI
23	Bharathiya nabhiKaran Vidyut Nigam Limited (GOI Enterprises)	Sodium metal
24	Bharathiya Rasayan udyog (p) LtdBharath Foam Udyog	Methylene Chloride, Perchloro ethylene
25	BOC India Ltd.	Calcium Carbide
26	Century Plyboards India Pvt/ Ltd	Phenol
27	Chemical de Enterprises	Hydrogen Peroxide
28	Chemplus International	Acrylic acid, Butyl acetate, Ethyl acetate, Methyl chloride
29	Chemstar Marketing Pvt Ltd	Sodium Metal
30	Cirex Pharmaceuticals Ltd.	Acetonitrile, Indene, Tetra hydrofuran
31	Coromandel Fertilizers Limited	Ammonia, Phosphoric acid, Sulfuric acid
32	Devh Foam Pvt. Ltd. (Libra International Ltd)	TDI(Desmodur)
33	Dharnendra Chemicals Pvt. Ltd	Formic acid
34	Divi's Laboratories Limited	1,2 Dimethoxyl ethane(Monoglyme), Acetone, Benzyl chloroformate, beta Naphthalol, Dimethyl acetamide, Ditert Butyl Dicarbonate, Ethyl 1 Propenyl ether, Ethylene dichloride, Iodene, Iso Propyl alcohol, Isophthalic acid,

<b>S. No</b>	<b>Name of Industry</b>	<b>Name of the Chemical</b>
		Methane sulfonic acid, Methanol, N Heptane, Toulene, Triphogene
35	Dow Chemical International Pvt. Ltd	Iso Cyanate, Polymeric MDI, Voranate T-80
36	Dr. Reddy's Laboratories Ltd.	2 Methylfuran, 2,6 difluorobenzene sulfonamide, 3 chlorobenzyl bromide, Acetic acid, Acetone, Acetonitrile, Acrolein, Borane DMS complex, Caustic potash flakes, Chloro di isopeno camphyl, Cyclo hexane, Di-iso propyl ether, Dimethyl formamide, Dimethyl sulfoxide, Diphenyl phosphine, Ethyl propiolate, Hexane, Iso Propyl alcohol, Iso propyl ether, Methacryloyl Chloride, Methanol, Methyl isobutyl ketone, Methyl tertiary butyl ether, methylene Chloride, N-heptane, Potassium Hydroxide, Tert Butyl Chloroacetate, Tertiary butyl alcohol, Tetra hydrofuran, Toluene
37	Elke Enterprises	Formaldehyde, Hydrogen Peroxide
38	Enkay Foam Pvt. Ltd	TDI
39	Fashion Club Global	Formic acid, Leather chemicals
40	Flexi foam Pvt Ltd	Lupranate T-80, Isocyanate, Suprasec
41	Flexipol Foams Pvt.Ltd	TDI (Desmodut & Voranate)
42	Futura polymer	1,3- propoanediol
43	Gian Chand Ramji dass	Hydrogen Peroxide
44	Glair Industries Ltd	Lupranate M20
45	Harsh International (Importer & Exporter)	Butyl acrylate
46	Hazen Mercantile Ltd	Methanol
47	Hermes chemical company Pvt. Ltd	Potassium metal, Sodium metal
48	Hetero Drugs Limited	Acetone, Acetonitrile, Acrolein, Cyclo hexane Iso Propyl alcohol, Malonitrile, Methanol Sodium borohydried, Tertiary butyl acetate, Tetra hydrofuran
49	Hetero Labs Limited	2-methyl pentanal, Acetone, Acetonitrile Acrolein, Glyoxylic acid, Iso propyl alcohol Malonitrile, Methanol, Sodium borohydried Tertiary butyl acetate, Tetra hydrofuran
50	Hifzan International	Leather chemicals, Sodium sulphide
51	J.J Foams Pvt.Ltd	TDI (Desmodur & cosmonate)
52	J.T Polymers	Lupranate M20, Suprasec,
53	Jaiswal Industries	Iso Cyanate
54	Jalaram Agencies	Sodium sulphide
55	Jalaram Enterprises	Sodium sulphide
56	Jamshedpur Injection Powder Ltd. JAMIPOL	Calcium Carbide, Magnesium based desul phurising Compound
57	Jindal Mectec Pvt Ltd	Iso Cyanate, Methane diisocyanate (Desmodur 44v20l), Lupranate T-80, Suprasec, TDI(Desmodur,cosmonate & Voranate)
58	Jindal Stainless Ltd	Hydrofluric Acid
59	Jublian Organosys Limited	Iso propyl alcohol
60	Jumax Foam Pvt.Ltd	TDI(Desmodur & cosmonate)
61	Kartikay impex Pvt. Limited	Butyl acrylate, Silicone, TDI Desmodur
62	Khandelwal laminates Limited	TDI Cosmonate
63	M.H.Polymers Pvt. Ltd.	Lupranate T-80, TDI (Desmodur)
64	M.K Organics Pvt.Ltd	Thinner

S. No	Name of Industry	Name of the Chemical
65	Mahendra Dye Chem	Hydrogen Peroxide, Lupranate T-80, Sodium sulphide
66	Mangal Pharma Chem Industries Pvt. Ltd	Barium Chloride
67	Matrix Laborataries Limited	1,3 Dioxolane, Acetone, Acetonitrile, Chrysotile Asbestos fiber, Ethylene diamene, Hexane Hydrobromic acid, Iso Propyl alcohol, Methanol Methyl cyclohexane, Methyl isobutyl ketone N-Pentane, Tetrahydrofuran
68	Meena & Co	Methylene chloride
69	Modulus Pre-Fab Solutions	Suprasec
70	MRPS Logistics care	Calcium Carbide
71	Nakoda Chemicals Limited	Perchloro ethylene
72	Nectar Life Sciences Limited	Iso Propyl alcohol
73	Neeraj Rasayan Udyog	Hydrogen Peroxide, Sodium sulphide
74	Neeru Marketing Pvt. Limited	Hydrogen Peroxide, Maleic anhydride, Phthalic anhydride
75	Neo Medicem pvt. Limited	Acetonitrile
76	Nova Overseas Pvt.Ltd	TDI(Desmodur)
77	Oceanload Services	Calcium Carbide, Water roofing material
78	Orchid chemicals & Pharmaceuticals Ltd.	Acetone, Acetonitrile, Ethyl Chloroformate, Pivaloyl Chloride, Tetra hydrofuran
79	Overseas Polymers Pvt. Ltd.	2 ethyl hexyl acrylate, Acetic acid, Acetone, Acetonitrile, Aniline oil, Butyl acrylate, Ethylene dichloride, Hexane, Iso butanol, Iso Propyl alcohol, Methanol, Methyl ethyl ketone, Methyl Isobutyl ketone (MIBK), Methyl-3-Methoxyacrylate, Methylene chloride, Methylene dichloride, N-butanol, Phenol, Phosphoric acid, Shellsol A 100, Solvesso 100, Toulene
80	Panama Poly Products (p) Ltd.	Isocyanate, TDI(Desmodur & cosmonate)
81	Perfect polyurethane (P) Limited	Methylene bis- 4,4'(2-chloroaniline)
82	Pon Pure Chem (p) Ltd.,	Acetone, Acrylic acid, Arcol polyol 5613 Butyl acetate, Butyl acrylate, Butyl methacrylate, Chloroform, Cyclo hexanone, DEG, DETA, Diacetone, Diacetone alcohol, Diehanol amine, Diiso propyl ether, Dimethyl formamide, EPF S20, Exxsol D110, Exxsol D130, Exxsol D80, Exxsol heptanes, Exxsol hexane, Glycol ether, Hexane, Hydrazine Hydried, Iso Propyl alcohol, Iso propyl ether, Isopar-H, Isophthalic acid, Maleic anhydride Meta Xylene, Methyl ethyl ketone, Methyl isobutyl Ketone, methylene Chloride, Monoethanol amine, Naphtha-H fluid, Naptha, Naptha L, Neostann, Norpar-13, Palatinol, Phenol, Poly ether polyol, Poly ethyl polyol, Polymethyl Polyphenyl Isocyanate (PM200), Propylene glycol, Pthalic anhydride, Shellsol A 100, Silicone, Solvent C9, Solvesso 200, Tetra hydrofuran Toulene, Toyocat (DT & W60), Triethanol amine
83	Prism Enterprises	Acrylic acid, Butyl acrylate, Ethyl acrylate
84	PUF Tech Industries	ISO PMDI, Isocyanate

S. No	Name of Industry	Name of the Chemical
85	Pure Chem (p) Ltd.,	Butyl acetate, Caradol, EPF S20, Exxsol-D130, Exxsol-D40, Exxsol-D80, Exxsol-heptane, Exxsol-Hexane, Iso Propyl alcohol, Iso Propyl ether, Isopar-H, Isophorone, Maleic anhydride, Manoethanolamine, Methyl ethyl ketone, Methyl Isobutyl ketone (MIBK), Methylene Chloride, Naptha, Naptha-L, Phenol, Poly ether polyol, Polyol-raypol 3003, Propylene glycol, Solvent C9, Solvesso 150, Somentor, Toulene, Xylene
86	R.A.R Overseas	Lupranate M20
87	R.P Foam Home Pvt. Ltd	Lupranate T-80, TDI(Desmodur), Toluene
88	Rajindra Mattresses P. Ltd	TDI(Desmodur)
89	Restora foam	TDI(Desmodur)
90	Roto Printing Ink (Madras) Pvt. Ltd.	Iso Propyl alcohol
91	S.V International Importers & Exporters	Isocyanate, TDI(Desmodur)
92	Saan Global	Iso Cyanate, Suprasec, Voranol (Polyether polyol)
93	Sakthi Chemicals	Ammonium nitrate
94	Saraca Laboratories Limited	Iso Propyl alcohol
95	Sathyam Overseas importers & Exporters	Sodium sulphide
96	Swasthik Drugs Ltd	Sodium metal, Sodium sulphide
97	Satwik Pesticides Limited	2,6 dichlorobenzothiazole, 2-Amino,4-,6-dimethoxy pyrimidine (MDI), 2-amino sulfonyl, N-Dimethyl nicotinamide, 2-methyl sulfonyl, 4,6,Dimethoxypyrimidine (MDI), Methyl 2-amino sulfonyl benzoate (MDI)
98	Saviton Metplast Private Limited	Diphenyl methane 44 diisocyanate(MDI), Iso Cyanate, Polyol, TDI(Desmodur)]
99	SCCI India Pvt.Ltd	Potassium Hydroxide
100	Shakthi Coir Products Pvt. Ltd	TDI Desmodur
101	Shasun Chemicals and Drugs Ltd.,	Exxsol-Hexane, Hexane, Iso Propyl alcohol
102	Sheela Foam Ltd	Lupranate T-80
103	Shubham Chemicals & Solvents Limited	Hexamethylene tetramine, Phenol
104	Smartchem Technologies Limited,	Ammonia
105	Sri Krishna Polyurethane Industries Itd	Suprasec
106	Sri Venkateswara pipes Limited	Chrysotile Asbestos fibre
107	SunPharmaceuticals Industries Ltd	Iso Propyl alcohol
108	Sweet Concepts	Hydrogen Peroxide
109	Synthokem Labs Pvt. Ltd.	1,4 bromo butane, Dimethyl carbonate, Epichloro hydrine, O-cresol, Paramono chloro phenol, Sodium sulphide
110	T.Abdul Wahid & Company	Acetone
111	Tagros Chemicals India Ltd	Exxsol Hexane, Naphtha L
112	Tandon Chemicals Ltd	Mixture Glycol
113	Tata International Limited	Leather chemicals
114	Techno-commercial Traders	Potassium Cyanide Sodium Cyanide
115	Trident Chemphar Ltd	Methanol
116	Universal Trading Company Importers & Exporters	TDI(Desmodur & cosmonate)

<b>S. No</b>	<b>Name of Industry</b>	<b>Name of the Chemical</b>
117	Vardhaman Corporation	Hyderogen Peroxide, Isoborneol, Synthetic Camphor
118	Vasudha Pharma chem Ltd	Chloroform, Thionyl chloride
119	Vinarom Pvt. Limited	Dimethyl benzyl carbinyl butrate solution
120	Wanbury Limited	Iso propyl alcohol
121	Yans Impex Overseas Leather Chemicals	Formic acid

## **9.0 Conclusions and Recommendations**

- Import of hazardous chemicals increased from 4217 MT in 2003 – 04 to 4.24 Lacs MTs in 2006 – 07, but declined during the year 2007-08 to 3.25 lacs MT. However, this may not be to be real picture as many industries might have not informed to Central Pollution Control Board and might have informed to State Pollution Control Boards / Pollution Control Committees.
- Hazardous chemicals were imported through 12 sea ports namely Vizakhapatnam, Kakinada, Chennai, Cochin, Kandla, Mumbai, Nava Shava, Kolkata , Ennore, New Mangalore, Pipivav, ICD Delhi and 2 air ports i.e Delhi and Chennai.
- Vizag port has received maximum quantity of hazardous chemicals. The total quantity of import by airways is about 3.26 MTs only. Mumbai port has received maximum number of chemicals during the year 2007 -08 i.e. 30 nos and the overall % of import was 18.185.
- It is observed that many 121 industries furnished the details of their import. Response from industries is increasing year by year. Quantity wise, M/S Coromandel Fertilizers Ltd has imported the maximum quantity of chemicals i.e. 1.45 lacs MT, while M/S Pon Pure Chem (P) Ltd has imported highest number of chemicals i.e 37 nos during 2007 - 08.
- It is observed that 117 different types of chemicals were imported through above said ports. Import of Ammonia was highest, in terms of quantity of import; it contributes to 31.2% of overall import during 2007 - 08, followed by Styrene (15.675%), Phosphoric acid (13.58%), Methanol (12.95%), Sulphuric acid (3.47%), Exxsol Hexane (3.37%).
- Many of the industries are not furnishing complete information as per the prescribed format. At maximum time, product specifications are not given, even some industries does not furnish the quantity too. So it is very difficult to quantify the import.
- Among all ports, Vishakhapatnam port is importing high quantity of chemicals (i.e. Ammonia), Ammonia is very toxic gas, it is necessary to have disaster management plan and it should be periodically reviewed by the concern authority. It is very essential to have proper supervision during unloading operation, since there are high chances of leakage of ammonia during the operation.
- Authorities of Ennore, New Mangalore, Pipivav and ICD Delhi port have to plan for safe handling, storage and transport facilities. Similarly, remaining port authorities also have to work out the emergency preparedness plan according to quantum of import and handling in a time.

**ANNEXTURE**

**LIST OF INDUSTRIES**

<b>Sl. No.</b>	<b>Name of the Industry / Institution</b>	<b>Address</b>	<b>Phone No.</b>	<b>Fax. No.</b>	<b>e-mail / website</b>
1	Aastrid International Pvt.Ltd	247-248 Udyog Bhavan, Sonawala Road, Goregaon (E), Mumbai 400 063	022- 66914333	66914334	info@aastrid.com
2	Agarwal Chemicals	40, Strand Road, 4th Floor, Suit No, 22B, Kolkata	22433443	033- 22430893	agarchem@vsnl.net
3	Alpha technocn Pvt.Ltd.	No.1, Buddu street, 4th floor, chennai-600 001	25221241		
4	APL Chemi Natura Ltd	plot no.2, Maitrivihar , Ameerpet, Hyderabad - 500 038	55725000	23734358	cheminatura@aurobindo.com
5	APL Peroxy Chemicals Ltd	G.N.T. Road, M.M.Mudi(b.o),Kotapolur(p.o) District, Nellore-524123	25226559 25268803	41-25229600	
6	Arctic Super Chemi	113, Bye Pass Road, Ambur - 635 802	04174 241212		
7	Arinities Sales Pvt. Ltd	603,Nirmal Tower, 26 Barakhamba Road, New Delhi-110001	011-23351615 23350604	23710216	arinits@nde.vsnl.net.in
8	Asian Peroxides Ltd	Leelavathi Building,69,Armenia Street,Chennai-600001	44-2522-6559/2526 8803	44-2522 9600	www.apl.in
9	Asoka PU Foam (India) PVT. LTD	Civil Lines, Bareilly	25762032/567484	0581-2554891	
10	Astrix Laboratories Limited	1-1-151/1,IV Floor,Sairam Towers, Alexander Road,Secunderabad-500003	91-40-27700363, 66327722	27700343	
11	ATC Chemicals India Pvt. Limited	R.S.No.14/4-15/10-B kaviarasan road,Sedarpet-Pondicherry-6051110	141 32678729		
12	Auctus Pharma Limied	#102,1st floor,Aditya trade center,Ameerpet,Hyderabad-500038,AP	91-40-66361958/59	91-40-23757626	info@auctuspharma.com, auctus@sify.com, www.auctuspharma.com
13	Aurobindo Pharma Ltd.,	Plot No.2, Maitrivihar, Ameerper, Hyderabad – 500038	55725000	23746833	info@aurobindo.com
14	Banmore Foam (p) Limited	105-106, Industrial Area, Banmore - 476444 Distt. Morena (M.P.) India	07532-309755, 325999	07532-255591	
15	Bansali Associates	No.50 Rutherford road, vepery, chennai - 600 007	253836390	25381416	
16	BASF Coatings (India) Pvt. Ltd.	147, Mumbai-Pune Road, Pimpri, Pune - 411 018	020-27426200, 201, 202, 203	020-27426205	basf-india.com
17	BASF India Ltd.	Thane Belapur Road, Turbhe, Navi Mumbai - 400 705	022-55917400	022-55917306	basf-india.com
18	BASF Polyurethanes India Ltd	RBC Mahindra Towers, 1st Floor, A wing, Dr.G.M.Bhonsale Marg, Worli,Mumbai	91-22-5661-8000	91-22-2493-0653	
19	BASF Styrenics Pvt. Ltd	RBC Mahindra Towers, 1st Floor, A wing, Dr.G.M.Bhonsale Marg,	022-5661800	022-5660-4073	

<b>Sl. No.</b>	<b>Name of the Industry / Institution</b>	<b>Address</b>	<b>Phone No.</b>	<b>Fax. No.</b>	<b>e-mail / website</b>
		Worli, Mumbai			
20	Bhansali Chemicals (Madras) Limited,	No.26, Nyniappa Naick Street, Park town, Chennai-600 003	23353147, 25355211		
21	Bharat Foam Udyog private Limited	15/4 Mathura Road, Faridabad – 121003	2276364	0129-2277856	bharatfoam@mantraonline.com
22	Bharath Solvent & Chemical Corporation	273,Katra peran,Tilak Bazar,Delhi-06	23940177, 23954840	91-11- 23927328	
23	Bharathiya Nabhikiye Vidyuth Nigam Limited	No.51, 1st Floor, Montieth Road, Egmore, Chennai-600 008	91- 44 - 27480958 M: 94433 16402	91- 44- 27480970	Sethi@igcar.gov.in
24	Bhathiya Rasayan Udyog (p) Ltd.	855, welcome house G.T. Road Seelmpur Shahadara, delhi- 110053	32936299, 22821054	91-11- 22826199	bru855@yahoo mail.com , bru31@rediffmail.com
25	BOC India Ltd.,	Oxygen House, P43 Taratala Road, Kolkata - 700 088	033- 24014708		
26	Century Plyboards (india) Limited	6, Lyons Range, Kolkata - 700 001	033-22104321	22483539	kolkata@century.com
27	Chemical de Enterprises	180-A Tilak Bazar, Delhi - 110 006	011-23963059	23963201	gupta92@hotmail.com
28	Chemplus international	Plot No. 1,5 &6, sri Venkateswara Nagar Annexe, Perungudi Industrial Estate, chennai - 600 096	24964922	044 24962664	chemplus1@rediff.com
29	Chemstar marketing Pvt Ltd	7/24, Co-operative Colony, Alwarpet Chennai- 600 018	044 2499 6867	24990677	marketing@chemstar.in
30	Cirex Pharmaceuticals Ltd.	Hetero House, H.No. 8-3-166/7/1,Erragadda, Hyderabad-18	040 23704923/ 24/25	23704926	contact@heterodrugs.com
31	Coromandel Fertilizers Limited	P.Box. No.1116, Visakapatnam- 530 011	(0891) 2578400 - 19	2577665	
32	Libra International Limited, (Devh Foam Pvt. Ltd)	A-31, Sikandrabad, Industrial Area, Sikandrabad, Bulandashahar - 203205	05735-221611	9412744395	
33	Dharnendra Chemicals P.Ltd	26, Nyniappa Naik Street, 1 floor, Chennai-600003			
34	Divi's Laboratories Limited	Divi Towers, 7-1-77/E/1/303, Dharam Karan Road, Ameerpet, Hyderabad-16	(040) 3731318, 3731760/61	3733242	divis@hd1.vsnl.in
35	Dow Chemical International Pvt. Ltd.	Plot No. 8A/1,2 Kalwa Block, Thane Belapur Road, TTC, MIDC, Navi Mumbai - 400 708	27602504	27606899	
36	Dr. Reddy's Laboratories Ltd.,	8-2-120/76/1/B, 2nd floor, Ashoka Hitech Chambers, Road 2, Banjara Hills, Hyderabad - 500 034	23558900	23541224	
37	Elke Enterprises	11-A, Ramappa Nagar, II Cross Street Perungudi, Cleennai- 600096	45382215,16	044-42382215	elke_enter@yahoo.co.in
38	Enkay Foam Private Limited	Khekra Vil., Belhi-Baghpat Road, Tehsil Bagsat, Baghpat dist, UP	0121 - 2232405		enkayfoam@hotmail.com
39	Fashion Club Global	289, Chattarpur Pahari Road, Near Dhan Mill Chattarpur, New Delhi – 30	26301774	26301774	akj1@fashionclubglobal.com

<b>Sl. No.</b>	<b>Name of the Industry / Institution</b>	<b>Address</b>	<b>Phone No.</b>	<b>Fax. No.</b>	<b>e-mail / website</b>
40	Flexipol Foams Private limited	E-1162, Bhiwadi industrial Area, Phase-IV, Bhiwadi - 301 019 Rajasthan,India	222037/222071	222380	<a href="mailto:flexipol@rediffmail.com">flexipol@rediffmail.com</a>
41	Flexo Foam Private limited	R-838,New Rajender Nagar,New Delhi	91 11 25727255		<a href="http://www.pelicancrafts.com">www.pelicancrafts.com</a>
42	Futura Polymers	Futura Polyesters Limited, 1-a, Kamaraj salai, Manali, Chennai-68	25941313-17	25941054 & 1566	<a href="mailto:futurach@futurapolyesters.com">futurach@futurapolyesters.com</a>
43	Gian Chand Ramji Dass	2120, Bahadur Garh Road, Delhi	011-3612959	3622979	
44	Glair Industries	10/16, subhash gali,Vishwas nagar,shahdara, Delhi-032			
45	Harsh International (Importers & Exporters)	S-277,Greater Kailsh Part-II, New Delhi-48	011-29212002 9810194241	011-29222210	
46	Hazel Mercantile Ltd	181,Ashoka Centre, 2nd floor,G.T.Hospital Complex, L.T.Road,Mumbai	22 61 0282	91 22 2262 0553	<a href="mailto:corp@hmlindia.com">corp@hmlindia.com</a>
47	Hermes chemical company Private Ltd	A-25/26,Nacharam Industrial estate,Hyderabad-500076,AP	91-40-27171357	91-4027715336	<a href="mailto:sales@hermeaschem.com">sales@hermeaschem.com</a>
48	Hetero Drugs Limited	Hetero House, H.No. 8-3-166/7/1/,Erragadda,Hyderabad-18	23704923/24/25	23704926	<a href="mailto:contact@heterodrugs.com">contact@heterodrugs.com</a>
49	Hetero Labs Limited	Hetero House, H.No. 8-3-166/7/1/,Erragadda, Hyderabad 18	23704923/24/25	23704926	<a href="mailto:contact@heterodrugs.com">contact@heterodrugs.com</a>
50	Hifzan International	"SALMA HOUSE" New No. 334, Old No. 142, Purasawalkam High Road, Kellys ,Chennai -600 010 India	2642 1907, 2642 6063, 2642 7547	0091 44 2642 2239	<a href="mailto:info@salmagroup.com">info@salmagroup.com</a>
51	J.J. Foams Pvt.Ltd.	B- 12/2,Site-IV Industrial Area, Sahibaad , Ghaziabad- 201010	91-120-3295959/3295960	91-120-2895536	<a href="mailto:jjfoams@ndf.vsnl.net.in">jjfoams@ndf.vsnl.net.in</a>
52	J.T. Polymers	House No. 176,Peeragarhi,Delhi-110087			
53	Jaiswal Industries ®	70, Najafgarh Road, Rama Road, Moti Nagar, New Delhi - 110 015	25457984	25913849	<a href="mailto:Jaiswal@bol.net.in">Jaiswal@bol.net.in</a>
54	Jalaram Agencies	111E/2, DLF Industrial Estate, Phase-1, Faridabad (Haryana)	23538539 23552950	9810009723 9310009723	
55	Jalaram Enterprises	14-B,8738, 2nd floor,Shidipura, Karol Bagh, New Delhi-110005	23538539, 23552955	9810009723	
56	Jamshedpur Injection Powder Ltd. JAMIPOL	Namdihi Road,Burmamines, Jamshedpur-831007	91-657-2271720,2271966	91-657-2270876	<a href="mailto:admin@jamipol.com">admin@jamipol.com</a> <a href="mailto:works@jamipol.com">works@jamipol.com</a>
57	Jindal Mectec (p) Ltd.	B29, Sanjay Market, Pocket III. Sector 2, Rohini, Delhi 110 085	91 - 11 - 27514084, 3	91.11.2751404	<a href="mailto:jindalmectecno@jinbros.com">jindalmectecno@jinbros.com</a>
58	Jindal Stainless	Jindal centre,12,Bhikaji Cama Place,New Delhi 110066	91-11-26188340-50 91-11-26188360-80	41659169	<a href="mailto:jindalsp@del3.vsnl.net.in">jindalsp@del3.vsnl.net.in</a>
59	Jubilant Organosys Ltd.	56 Industrial Area, Nanjangud-571302 Mysore,India	08221-228402-08	228410/14	<a href="http://www.jUBL.com">www.jUBL.com</a>
60	Jumax Foam Pvt. Ltd	Jumax Foam Pvt. Ltd 35, K.M. Stone B.S Road Vill. Dhoom Manek pur tehsil Dadri. Distt. Gautam Budh Nagar (U.P.)	95120-2665174/9350048361		<a href="mailto:jumaxfoam@hotmail.com">jumaxfoam@hotmail.com</a>

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61	Kartikay Impex Private Ltd	4839/24, Govind Lane, Ansari Road, Darya Ganj, New Delhi-02	23257610 23267619 93122213802	29222210	
62	Khandelwal Laminates Ltd	324, Jagriti Enclave, Delhi-110092	011-22165298, 42427123		
63	M. H Polymers Private Limited	5267 kucha rehman, Chandni Chowk Delhi -11006	91-11-23941799, 23940465	91-11-23926851	<a href="mailto:info@mhpolymer.com">info@mhpolymer.com</a>
64	M.K. Organics Pvt. Ltd	Plot No.131, Sector- 25, Faridabad , Haryana - 121004	0129 2234971 5061131-32	5061133	
65	Mahendra Dye Chem	Gulab Mansions, 4/5, G.K., Temple Street, Chickpet Cross, Bangalore - 560 053	22872066	22875844	<a href="mailto:jainmdc@vsnl.net">jainmdc@vsnl.net</a>
66	Mangal Pharmachem Industries Pvt. Ltd	315-316, Gold Plaza, Gurudwara Road, Karol Bagh, New Delhi-05	25816404 25816405 25715954	25715954	
67	MATRIX Laboratories Limited	Matrix Laboratory Limited, 1-151/1, IV Floor , Sauram Towers, Alexander Road, Secunderabad-500003	04027700363, 55327722	27700343	<a href="mailto:matrix@matrixlabsindia.com">matrix@matrixlabsindia.com</a>
68	Meena & Co.	Plot No. 1, Sri Venkateswara nagar annexe, Industrial Estate, Perungaudi, Chennai- 600 096	24962053 24964921 24962647	044 24962664	<a href="mailto:meenachem@vsnl.com">meenachem@vsnl.com</a>
69	Modulus Pre-Fab Solutions	Khasra no.422,VIII-Naryal,Kasauli Road sector-4 Parwanoo	01792-651141,234125,232820	235220	<a href="mailto:rajandhir@sify.com">rajandhir@sify.com</a>
70	MRPL Logistics Care	Unit 124, 1st floor, Vaibhav building, 4 Lee Road, Kolkotta-7000020			
71	Nakoda chemicals Ltd.,	D-9 SMR Nirjan, Jupitor colony, Road no.2, Sikh Road, Secundrabad -500 009	27721665	23193033	<a href="mailto:info@nakrodachemical.com">info@nakrodachemical.com</a>
72	Nectar Lifesciences Ltd,	110 Industrial area, phase- 1, Chandigarh - 160 002	0172 - 2655166 2655438 2655775 2658317	2655377	<a href="mailto:sales@neclife.com">sales@neclife.com</a>
73	Neeraj Rasayan Udyog	289/22, Kara peran, Tilak Bazar, Delhi - 110006	23923100, 23963100, 55379102	011 23923100	<a href="mailto:Catsye@del3.vsnl.net.in">Catsye@del3.vsnl.net.in</a>
74	Neeru Marketting Pvt. Ltd.,	M-18, Munish Plaza, 20 Ansari Road, Darya Ganj, New Delhi-02	23272222 23279779, 23273355 23276655	23255346	<a href="mailto:ravichem@vsnl.com">ravichem@vsnl.com</a>
75	Neo Medichem Pvt. Ltd	#102, 1st floor, Aditya trade center, Ameerpet, Hyderabad-500038, AP	66361958 / 59	91-40-26757626	<a href="mailto:neomed@rediffmail.com">neomed@rediffmail.com</a>
76	Nova Overseas (p) Ltd	3576 Netaji subhash Marg, Darya ganj, New Delhi 110002	3279505, 3276928	11-3256513	
77	Oceanload Services	14, Sunkurama Street, 3rd Floor, Chennai - 600 001	25383920 25380277	044 25360076	<a href="mailto:admin@oenaload.com">admin@oenaload.com</a>
78	Orchid chemicals & Pharmaceuticals Ltd.,	Orchid towers, 313, valluvar kottam high road, Nungambakkam, Chennai-34	28211000	28211002	<a href="mailto:corporate@orchidpharma.com">corporate@orchidpharma.com</a>
79	Overseas Polymers Pvt. Ltd.,	5, Gajjar Chamber, 2nd floor, plot no. 241/12 B, Gandhidam-370201	02836-237104,	234749	

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80	Panama Poly Products (p) Ltd.,	B-8, UPSIDC Industrial area, site 1, Bulandshahar Road, Ghaziabad	2700828	0120-2703154	karefoam@yahoo.co.in
81	Perfect Polyurethane (P) Ltd.,	Plot no 13, Wariana Industrial Complex, Leather complex Road, Kapurthala Road, Jalandhar – 144 021	0181-2650714 2650715	2650715	
82	Pon Pure Chem (p) Ltd.,	No.32, H- Block, 15th main Road, Anna Nagar, Chennai - 600 040	26161803 to 11	26161813 /814	info@pure-chemical.com www.pure-chemical.com
83	Prism Enterprises	No. 609, Nehrujoi road, Villupuram, India.			<a href="http://www.skpi.com">www.skpi.com</a>
84	Puf Tech industries	E-813, DSIDC,Narela Ind. Estate, Narela, Delhi-40	27781346 27881501	011-27781061	
85	Pure Chemicals Co.	No.32, H- Block, 15th main Road, Anna Nagar, Chennai - 600 040	26161803 to 11	26161813 /814	info@pure-chemical.com www.pure-chemical.com
86	RAR Overseas	9/83, Shastri Gali,1st Floor, Vishwas Nagar, Shahdara, Delhi-32	9810160865 9810892808627295		
87	R.P Foam Home Pvt.Ltd	4415,Gali bahuji,Pahari Dhiraj,Sardar bazaar,Delhi	011-23614144	9111 23514144	<a href="mailto:dfpi@mantraonline.com">dfpi@mantraonline.com</a>
88	Rajindra Mattresses Pvt. Ltd	A-114,Mangolpuri Indl.area, Phase-II,Delhi-110034	27014490	27010134	<a href="mailto:rajindra_mattresses@yahoo.co.in">rajindra_mattresses@yahoo.co.in</a>
89	Restora foam	Plot no 46A, 46B,Visayakpur,Rania Ind. Area,Rana,Kanpur	0512 3292696		
90	Roto Printing Ink (Madras) Pvt. Ltd.	S.No.450/1, G.K. Industrial Estate, Arcot Road, Alappakkam, Porur, Chennai - 600 016	24767754	24767755	
91	S.V. International (Importers & Exporters)	2128/58, Gurudwara Road, Karol Bagh, New Delhi - 110 005	25762681	51546102	
92	Saan Global	2664, Lane No. 2& 3, 3rd Floor Bedon Pura, Karol Bagh, New Delhi – 11005	25731319,/5818348 /25818159/5154640 3/51546431	25766310	
93	Sakthi Chemicals	54,Andal Street,Shevapet,Salem-636002,Tamil Nadu	2212893	427-4020082	
94	Saraca Laboratories Limited,	plot no. 120, Flat No. 101, 1st floor, CK Classic, Srinagar colony, Hyderabad - 500 073	23737690/ 691	23737689 /693	<a href="mailto:info@saraca.com">info@saraca.com</a>
95	Sathyam Overseas importers & Exporters	A 103, Jamuna Apt Purushothtam Parik Marg, Virar vv, Thane 401303	9226588466		
96	Satwik Drugs Ltd.,	78 B, Kolkhar Industrial Area,Bidar - 585403	08482- 232133	232134	<a href="mailto:satwik_bidar@yahoo.com">satwik_bidar@yahoo.com</a>
97	Satwik Pesticides Ltd	Bhopa Road,Muzaffarnagar-251001 ,U.P.,	0131-2607652 2607492	0131-2605092	<a href="mailto:ravindra_singal1@rediffmail.com">ravindra_singal1@rediffmail.com</a>
98	Saviton Metplast Private Limited	D-12, D.S.I.D.C. Packaging Complex, Kirti Nagar, new Delhi-110015	25927255,2592764 4, 95124-2290977	51029344	<a href="mailto:saviton@bol.net.in">saviton@bol.net.in</a>
99	SCCI India Pvt. Ltd Functional & Speciality Chemicals	A-287-288, Ind. Area, Chpopanki,Alwar,Rajasthan-	1493- 260033,75,76,79	1493 260079	<a href="mailto:info@scci.co.in">info@scci.co.in</a> <a href="http://www.scci.com">www.scci.com</a>

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		3010119			
100	Shakthi Coir Products Pvt.Ltd	363/288/1,Hasanganj Bawli,Campwell Road,Lucknow-226017	2648290, 2648532	0522-2648232	scppi@rediffmail.com
101	Shasun Chemicals and Drugs Ltd.,	Shasun House 3, Doraiswamy road, T Nagar, Chennai - 17	24316700	44 24348924	shasun@shasun.com
102	Sheela Foam Pvt.Ltd	Plot no 51A, Udyog vihar,Greater noida dist, Gautam Budh nagar	0120-2569291, 2569196	0120-2569339	
103	Shubham Chemicals & Solvents Ltd.	1/26, Roop Nagar,Delhi - 110007	23843200/ 201/202	23844002	shubhcam@nda.vsnl.net.in
104	Smartchem Technologies Limited,	D.No. 15-8-6/2/5, Ocean Park Apartments, Flat 302, OPP. A.U. Womens Hostel, Maharanipeta, Visakapatnam-02	2509493	2731774	smartvsp@etg.net
105	Shri Krishna Polyurethane Industries (P) Ltd SKPI	1-B, Flag staff road,Civil Lines,Delhi-110054	27781346 , 27781500	011-27781061	
106	Sri venkateswara Pipes Ltd.	5th Floor, K.P.R.House, Near Anand Theatre, Sardar Patel Road,Secunderabad 500 003	040 27847121 27819868	27892076	svpl9@yahoo.com
107	Sun Pharmaceuticals Indsutries Ltd.,	Sathammai Village, Karunkuzhi, Maduranthakam, Tamil Nadu			
108	Sweet Concepts	1st Floor, No.6, 211/3 padam Nagar, Kishan Ganj, Delhi - 110 007	23694456	23694610	linindia@vsnl.com
109	Synthokem Labs Pvt.Ltd.	PB NO.1911, B-5, Industrial Estate, Sananthnagar, Hyderabad-500 018	(0091 40) 3702660, 3702061, 3707832, 3704809	3700621	syntokem@hd2.dot.net.in
110	T.Abdul Wahid & Company	53, Vepery High Road, Chennai-600 003	25610500, 5611136, 5610038,25610304	044 25611277	wahid@tawahid.com
111	Tagros Chemicals India Limited	Jhaver centre, Rajah Annamalai building, IV Floor, Marshalls road, Egmore, Chennai- 600 008	91-44-4200 7400, 7457	91-44-2851 7164	purchase@tagros.com , www.tagros.com
112	Tandon Solvents and Chemicals	43,HSIDC, Ind.Estate,Barhi Dist,Sonepat,Haryana-131128	91 11 27427437		
113	Tata International Ltd	Plot no47A, North Phase,Sidco thiru-vi-ka industrial estate Ekkaduthangal, Guindy, Chennai-600032	91-44-234 5032, 2345547, 2321537	91442346641	tichennai@tatainternational.com
114	Techno-Commercial Traders	9455,Sardar Thana Road,Multani Dhanda, New Delhi-110055	23681805 32957018	26175799	technocom1@rediffmail.com
115	Trident Chemphar Limited	Sy.No. 66 (part), and 67 (part) Miyapur,Serilingampally,Mandal, Hyderabad-500050,A.P	91-40-4040 8080	91-40-4040 8060	www.tridentlifesciences.com
116	Universal Trading Company (Importers & Exporters)	2127/58, Gurudwara Road, Karol Bagh, New Delhi 110 005	25762681, 41546102		
117	Vardhman Corporation	1/429/1-2, Friends Colony Industrial Area, Gali No.1, G.T.road, Shahdara, Delhi-110 095	2133 100, 2110555	011-3923100	
118	Vasudha Pharma Chem Limited	78-A, Vengalrao Nagar,Hyderabad- 500 038,AP, India	91-40-2371 1717, 2381	91-40-2370 6696	vasudha@vasudhapharma.com

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119	Vinarom Pvt. Ltd	Plot no 25/26, 2nd cross,Jigani industrial area, Jigni-562106 Anekal taluk	91-080-7826301-26309	080-7825343/25344	
120	Wanbury Limited	BSEL Techpark, B wing, Sector 30-A, Opp Vashi Rly station, Vashi, Navi Mumbai-400 705, India	91-22-6794 2222	91-22-6794 2111/ 333	<a href="mailto:info@wanbury.com">info@wanbury.com</a> , <a href="http://www.wanbury.com">www.wanbury.com</a>
121	Yans Impex Overseas Leather Chemicals	7,sampathy street, Nagalkeni, Chromepet, Chennai - 600 044	044-2388918	2212295	

