

GOVERNMENT OF INDIA
MINISTRY OF CHEMICALS & FERTILIZERS
DEPARTMENT OF CHEMICALS & PETROCHEMICALS

LOK SABHA

UNSTARRED QUESTION NO. 164
ANSWERED ON 02.02.2024

PRODUCTION CAPACITY OF MAJOR CHEMICAL INDUSTRIES

164. SHRIMATI RANJEETA KOLI:
SHRI CHANDRA PRAKASH JOSHI:
SHRIMATI RAKSHA NIKHIL KHADSE:
SHRI KANUMURU RAGHU RAMA KRISHNA RAJU:
SHRI SUMEDHANAND SARASWATI:
DR. MANOJ RAJORIA:
SHRI SUNIL BABURAO MENDHE:
SHRI DILESHWAR KAMAIT:

Will the Minister of CHEMICALS AND FERTILIZERS, be pleased to state:

- a. whether there has been an expansion in the production capacity of the major chemicals industry in the country during the last nine years and if so, the details thereof, year and State/UT-wise particularly in Rajasthan;
- b. whether the Government is actively pursuing strategies to enhance the global competitiveness of domestic manufacturing, fostering the emergence of leading chemical manufacturing companies, promoting export growth and stimulating job creation in the country, if so, the details thereof including the strategy formulated and initiatives taken by the Government in this regard;
- c. the status of the Chemical Industries in the State of Rajasthan at present; and
- d. the total amount of fund(s) allocated and utilized under the said scheme in the State of Bihar?

ANSWER

MINISTER OF STATE FOR CHEMICALS AND FERTILIZERS

(SHRI BHAGWANTH KHUBA)

(a) to (d): Department of Chemicals & Petrochemicals (DCPC) compiles data on production and installed capacity of selected chemical and petrochemical products from certain identified chemical and petrochemical units for assessing the trends of production in the sector. The data so collected is analysed on the basis of segments of chemical products and not geographically. The details of production capacity of the major chemicals in the country during 2014-15 to 2022-23 is given at **Annexure-I**. The production details of the major chemicals in the country during 2014-15 to 2022-23 is given at **Annexure-II**.

Department of Chemicals and Petrochemicals has notified Petroleum, Chemicals and Petrochemical Investment Regions (PCPIR) Policy, 2007 to boost manufacturing in chemicals and petrochemicals sector, augment exports and generate employment with co-development of downstream industry in cluster development approach. PCPIRs are dedicated investment regions equipped with necessary infrastructure for establishment of manufacturing facilities for domestic and export-led production of chemicals and petrochemicals. PCPIR Policy envisages to provide high-class infrastructure and competitive environment for setting up businesses. Under PCPIR Policy, 2007, Department has notified PCPIRs at Paradeep in Odisha, Dahej in Gujarat and Vishakhapatnam-Kakinada in Andhra Pradesh.

Installed Capacity of Chemical products from 2014-15 to 2022-23 (Product wise)

Figures in MT

Sl.No	NAME OF THE PRODUCT	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
A. ALKALI CHEMICALS										
1	SODA ASH	2951000	3031000	3086000	3464000	3489000	3614000	3614000	3614000	3714000
2	CAUSTIC SODA	3019419	3102019	3297219	3335940	3397340	3700340	3898200	4150825	4227395
3	LIQUID CHLORINE	2243373	2289262	2438508	2474199	2535254	2774726	2961232	3124413	3158153
	GROUP TOTAL	8213792	8422281	8821727	9274139	9421594	10089066	10473432	10889238	11099548
B. INORGANIC CHEMICALS										
1	ALUMINIUM FLOURIDE	25600	25600	25600	25600	25600	25600	25600	25600	25600
2	CALCIUM CARBIDE	112000	112000	112000	112000	112000	112000	112000	112000	112000
3	CARBON BLACK	583000	640000	640000	640000	696000	696000	696000	696000	696000
4	POTASSIUM CHLORATE	3000	3000	3000	4600	4600	28600	28600	28600	28600
5	SODIUM CHLORATE	0	0	0	0	0	0	22320	22320	22320
6	TITANIUM DIOXIDE	82500	82500	82500	82500	82500	82500	82500	82500	82500
7	RED PHOSPHORUS	1680	1680	1680	1680	1680	1680	1680	1680	1680
8	HYDROXEN PEROXIDE	168626	169226	165850	165850	145850	218626	218626	221766	221266
9	POTASSIUM IODATE	0	0	0	0	0	1200	1200	1200	1200
10	CALCIUM CARBONATE	282345	282345	282345	282345	231545	371545	371545	383545	383545
	GROUP TOTAL	1258751	1316351	1312975	1314575	1299775	1537751	1560071	1575211	1574711
C. ORGANIC CHEMICALS										
1	ACETIC ACID	177430	177430	177430	159616	141616	142048	142048	142048	165508

Sl.No	NAME OF THE PRODUCT	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
2	ACETIC ANHYDRIDE	148295	118295	115425	115425	113325	119175	119175	119175	124650
3	ACETONE	49459	47140	47140	47140	47140	47140	47140	47140	47140
4	PHENOL	79683	76750	76750	76750	76750	76750	76750	76750	76750
5	METHANOL	474300	474300	474300	474300	474300	474300	474300	474300	474300
6	FORMALDEHYDE	411300	411300	411300	411300	411300	411300	397800	451776	435276
7	NITROBENZENE	103800	91800	91800	112050	112050	129450	126450	126450	126450
8	MALEIC ANHYDRIDE	6400	6400	6400	6400	6400	7660	7660	7660	7660
9	PENTAERYTHRITOL	13720	13720	13720	13720	15760	15760	15760	17400	17400
10	ANILINE	60100	60100	54100	54100	54100	54100	54100	54100	54100
11	CHLORO METHANES	216750	221100	221100	219923	279250	279250	330990	345990	438450
12	ISOBUTYLBENZENE	12750	13800	13800	13800	13800	16800	16800	16800	16800
13	ONCB	30000	30000	30000	30000	30000	30000	30000	30000	30000
14	PNCB	30000	30000	30000	30000	48400	48400	48400	48400	48400
15	MEK	5000	5000	10000	10000	10000	10000	10000	10000	10000
16	ACETALDEHYDE	172010	189010	167010	163010	151010	151010	151010	151970	151970
17	ETHANOLAMINES	16000	17760	17760	17760	17760	17760	27000	27000	27000
18	ETHYL ACETATE	479834	545828	520628	526628	517828	562060	562060	575060	575060
19	MENTHOL	33650	33650	33650	33650	33650	33650	33650	33650	33650
20	ORTHO NITRO TOLUENE	16400	16400	16400	19000	20685	44800	44800	44800	44800
	GROUP TOTAL	2536881	2579783	2528713	2534572	2575124	2671413	2715893	2800469	2905364
D.	PESTICIDES AND INSECTICIDES									
1	D.D.T.	6344	6344	6344	6344	3144	6344	6344	6344	6344
2	MALATHION	2600	3800	3800	3800	3200	3800	3800	3800	3800
3	DIMETHOATE	1450	1450	1450	1450	1450	1450	1450	1450	1450
4	D.D.V.P.	33920	33920	33920	33620	33620	33620	33620	33620	33620
5	QUINALPHOS	2800	2800	2800	2200	2200	2200	3400	3400	3400
6	MONOCROTOPHOS	13180	13940	13940	13940	13840	13940	13940	13940	13940

Sl.No	NAME OF THE PRODUCT	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
7	PHOSPHAMIDON	2000	2000	2000	2000	2000	2000	2000	2000	2000
8	PHORATE	10125	10125	12400	12400	12400	12400	12400	6600	6600
9	ETHION	2500	2200	2200	2200	2200	2800	2800	2800	2800
10	FENVALERATE	3600	3600	3600	3600	3600	4960	4960	4960	4960
11	CYPERMETHRIN	27790	27790	24330	24426	25101	23826	23826	24726	26799
12	ACEPHATE	19250	19670	19670	18970	17500	20500	20500	20500	20500
13	CHLORPYRIPHOS	16455	16850	19150	18475	18075	13600	13800	13400	13400
14	TRIAZOPHOS	3900	3900	3360	3360	3360	3360	3360	3360	3360
15	TEMEPHOS	250	250	250	250	250	250	250	250	250
16	DELTAMETHRIN	625	614	614	618	731	790	790	850	1020
17	ALPHAMETHRIN	510	504	504	504	491	480	500	600	644
18	PROFENOFOS TECHNICAL	14900	12900	10500	10500	10500	10500	10500	17300	17400
19	PRETILACHLOR TECHNICAL	2560	2580	2580	2580	4240	4240	4240	4240	4480
20	PHENTHOATE	900	900	900	900	900	900	900	900	900
21	PENDIMETHALIN	2000	3000	4500	4500	4700	6000	5800	6600	7400
22	PERMETHRIN TECH	1800	1970	1970	1674	1674	1800	1800	1800	1914
23	LAMBDA CYHALOTHRIN	2400	2400	2400	2600	2600	2850	3200	3150	3766
24	IMIDACALOPRID TECH	975	1125	1125	1125	200	150	150	150	150
25	CAPTAN & CAPTAFOL	3850	3450	3430	3430	3430	3430	3430	3430	3430
26	ZIRAM(THIO BARBAMATE)	697	697	697	697	697	697	697	697	697
27	CARBENDZIM(BAVISTIN)	980	980	980	980	980	780	780	780	780
28	MANCOZAB	71556	72456	77136	82386	84696	84696	119796	121796	121796
29	HEXACONAZOLE	1084	1084	1084	1084	1201	1700	1700	2820	3460
30	BUTACHLOR	500	500	500	500	500	500	500	500	500
31	ISOPROTURON	6250	6250	6250	6250	6250	6000	6000	6000	6000
32	GLYPHOSATE	9260	9260	13160	12920	12870	12920	12920	12920	12920
33	ETHOFUMESATE TECHNICAL	1650	1560	1650	1425	1425	1650	1650	1650	1950

Sl.No	NAME OF THE PRODUCT	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
34	METCONAZOLE	750	750	750	750	750	750	750	500	500
35	DIURON	330	3300	3720	3720	3720	6000	6000	6000	6000
36	2, 4-D	22000	22000	26000	27000	27000	27000	27000	30000	30000
37	TRICLOPYR ACID TECH	300	300	300	300	300	300	300	300	300
38	THIAMETHOXAM TECHNICAL	3100	3100	3100	3100	3750	4550	5100	5100	6320
39	ATRAZIN	500	500	500	500	500	1200	1200	1200	2400
40	METRIBUZIN	750	1200	1200	1200	1350	1950	2518	2865	3840
41	ZINC PHOSPHIDE	1320	1320	1920	1920	1920	1920	1920	1920	1920
42	ALUMINIUM PHOSPHIDE	3900	3900	4740	4740	4740	4740	4740	4740	4740
43	DICOFOL	90	150	150	150	100	150	150	150	150
	GROUP TOTAL	301701	307389	321574	325088	324155	333693	371481	380108	388600
E.	DYES AND PIGMENTS									
1	AZO DYES	22620	22620	22620	21138	21138	21138	21138	21138	18897
2	ACID DIRECT DYES(OTHER THAN AZO)	34900	34900	34900	34900	40900	40900	40900	40900	46000
3	DISPERSE DYES	55209	55209	71009	67209	67209	75009	77925	77925	92267
4	FAST COLOUR BASES	500	500	500	0	0	0	0	0	0
5	INGRAIN DYES	1605	1605	1605	1440	0	0	0	0	0
6	OIL SOLUBLE (SOLVENT DYES)	3600	3600	3600	3600	3600	3600	3600	3600	1200
7	OPTICAL WHITENING AGENTS	37300	40900	40900	40800	41160	67680	67680	67680	67680
8	ORGANIC PIGMENTS	85227	86147	86147	87035	87035	88355	88355	88355	89015
9	PIGMENT EMULSION	5414	5414	5414	5414	5414	5414	5414	5414	3770
10	REACTIVE DYES	189015	180015	178791	186691	194691	195731	196331	197531	216531
11	SULPHUR DYES (SULPHUR BLACK)	3000	3000	3000	8247	8247	8247	8247	8247	13200
12	VAT DYES	2980	2980	2980	2860	3040	2860	2860	2860	3340

Sl.No	NAME OF THE PRODUCT	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
13	SOLUBILISED VAT DYES	127	127	127	132	132	132	132	132	0
14	NAPTHOLS	900	900	900	900	900	900	900	900	0
15	INORGANIC PIGMENTS	18054	18054	18054	18054	18054	18054	18054	18054	18054
	GROUP TOTAL	460451	455971	470547	478420	491520	528020	531536	532736	569954
	TOTAL Chemical	12771576	13081775	13455536	13926794	14112168	15159943	15652413	16177762	16538177
	TOTAL Chemical (In 000' MT)	12772	13082	13456	13927	14112	15160	15652	16178	16538

Installed Capacity of Petrochemical products from 2014-15 to 2022-23 (Product wise)

(Figures in MT)

Sl.No	GROUP / PRODUCT	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
A	SYNTHETIC FIBRES									
1	ACRYLIC FIBRE (AF)	107000	107000	107000	107000	107000	107000	107000	107000	108000
2	POLYESTER STAPLE FIBREFILL	87000	69000	69000	69000	69000	69000	69000	69000	69000
3	NYLON FILAMENT YARN	20000	22616	24616	24616	24616	58516	58516	66582	66582
4	NYLON INDUSTRIAL YARN/TYRE CORD	61000	90500	90500	90500	90500	152015	152015	165703	165703
5	POLYESTER FILAMENT YARN	2591307	2844357	2784007	2765812	2827423	2719791	2727365	2661147	2661147
6	POLYESTER STAPLE FIBRE	1280162	1256562	1256082	1256562	1256562	1350462	1350462	1350462	1350462
7	POLYPROPYLENE FILAMENT YARN	7920	3600	3600	3600	3600	3600	3600	3600	3600
8	POLYPROPYLENE STAPLE FIBRE	32125	32125	32125	32125	30925	30925	30925	29725	29725
9	POLYSTER INDUSTRIAL YARN	21500	21500	21500	21500	21500	21500	21500	21500	21500
10	Elastomeric/Spandex Filament Yarn	5000	5000	5000	8500	8500	8500	8500	8500	20000
	Group Total	4213014	4452260	4393430	4379215	4439626	4521309	4528883	4483219	4495719
B	FIBRE INTERMEDIATES									
1	ACRYLONITRILE (ACN)	41000	41000	41000	41000	41000	24000	24000	24000	24000
2	CAPROLACTUM	120000	120000	120000	120000	120000	120000	120000	120000	120000
3	MONO ETHYLENE GLYCOL (MEG)	1153400	1153400	1153400	1153400	1153400	1868100	2210600	2210600	2210600

Sl.No	GROUP / PRODUCT	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
4	PURIFIED TEREPHTHALIC ACID (PTA)	3753000	3753000	3753000	3873000	3873000	3873000	3873000	3873000	3873000
	Group Total	5067400	5067400	5067400	5187400	5187400	5885100	6227600	6227600	6227600
C	POLYMERS									
1	LOW DENSITY POLYETHYLENE (LDPE)	160000	160000	160000	160000	160000	560000	610000	610000	610000
2	HIGH DENSITY POLYETHYLENE (HDPE)/LLDPE (iii)	2735000	3135000	3348100	3348100	3348100	5158100	5158100	5158100	5158100
3	POLYSTYRENE (PS)	462000	472000	472000	471000	471000	471000	471000	471000	499000
4	POLYPROPYLENE (PP)	4016200	4456200	4514000	4514000	4514000	4933800	4933800	4933800	4933800
5	EXPANDABLE POLYSTYRENE (EXPS)	108800	121800	122800	126300	128700	133300	133300	147100	193000
6	POLY VINYL CHLORIDE (PVC)	1423000	1423000	1493000	1493000	1493000	1498000	1493000	1500000	1500000
	Group Total	8905000	9768000	10109900	10112400	10114800	12754200	12799200	12820000	12893900
	**Swing Capacity to produce both LLDPE and HDPE									
D	SYNTHETIC RUBBER (ELASTOMERS)									
1	STYRENE BUTADIENE RUBBER (SBR)	271000	271000	271000	271000	271000	271000	277000	271000	271000
2	POLY BUTADIENE RUBBER (PBR)	114000	114000	114000	114000	114000	100000	100000	100000	100000
3	ETHYL VINYL ACETATE (EVA)	15000	15000	15000	15000	15000	15000	15000	15000	15000
4	NITRILE BUTADIENE RUBBER (NBR)	25300	25300	25300	25300	25300	25300	13700	13700	15500
	Group Total	425300	425300	425300	425300	425300	411300	405700	399700	401500
E	SYNTH. DETERGENT INTERMEDIATE									
1	LINEAR ALKYL BENZENE (LAB)	547400	547400	547400	547400	547400	544790	544790	544790	544790
2	ETHYLENE OXIDE (EO)	140000	140000	140000	140000	140000	135000	135000	135000	135000
	Group Total	687400	687400	687400	687400	687400	679790	679790	679790	679790
F	PERFORMANCE PLASTICS									
1	ABS RESINS	128000	128000	140000	140000	156000	210000	213000	199000	199000
2	NYLON-6/ NYLON 6,6*	22700	28200	28200	28200	28200	68500	83500	83500	83500
3	POLYMETHYL METHACRYLATE (PMMA)	3500	3500	3500	3500	3500	3900	3900	3900	3900
4	STYRENE ACRYLONITRILE (SAN)	136000	136000	148000	148000	148000	148000	167000	167000	167000
5	PET Chips/Polyester Chips	2672660	2702910	2605060	2607660	2607660	2468500	2558550	2558550	2622550

Sl.No	GROUP / PRODUCT	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
6	PTFE (TEFLON)	19710	19710	19800	19800	19800	20300	20300	20300	20300
	Group Total	2982570	3018320	2944560	2947160	2963160	2919200	3046250	3032250	3096250
G	OLEFINS									
1	BUTADIENE	433000	433000	433000	433000	433000	552000	552000	552000	552000
2	ETHYLENE	3783400	4283400	4446500	4446500	4446500	7147300	7147300	7147300	7147300
3	PROPYLENE	4267634	4745634	4803418	4803418	4803378	5190378	5190378	5190378	5190378
	Group Total	8484034	9462034	9682918	9682918	9682878	12889678	12889678	12889678	12889678
H	AROMATICS									
1	BENZENE	1566146	1566146	1566346	1566346	1566346	1721346	1884346	1884346	1884346
2	MIXED XYLENE	898333	898333	898333	898333	898333	898333	898333	898333	898333
3	ORTHOXYLENE	420000	420000	420000	420000	420000	420000	511000	511000	511000
4	TOLUENE	257968	287968	288268	288268	288268	288268	288268	288268	288268
5	PARAXYLENE (PX)	3131700	3131700	3131700	3131700	3131700	3131700	3821700	3821700	3821700
	Group Total	6274147	6304147	6304647	6304647	6304647	6459647	7403647	7403647	7403647
I	OTHER PETRO-BASED CHEMICALS									
1.	DIETHYLENE GLYCOL	84504	84504	84504	83304	83304	132904	170904	170904	170904
2.	DIACETONE ALCOHOL	9500	9500	9500	9500	9500	9500	9500	9500	9500
3.	ETHYLENE DICHLORIDE	593200	593200	593200	593200	593200	593200	593200	593200	593200
4.	BUTANOL	26000	26000	26000	26000	26000	26000	26000	176000	176000
5.	2-ETHYL HEXANOL	55200	55200	55200	55200	55200	55200	55200	110200	110200
6.	VINYL CHLORIDE MONOMER	541300	541300	541300	541300	541300	541300	541300	541300	541300
7.	PROPYLENE OXIDE	36000	36000	36000	36000	36000	36000	51000	51000	51000
8.	PROPYLENE GLYCOL	20000	20000	20000	20000	20000	20000	22000	22000	22000
9.	POLYVINYL ACETATE RESIN	17340	17340	17340	17340	17340	17340	12000	12000	12000
10.	UNSATURATED POLYESTER RESIN	0	0	0	0	0	34000	34000	34000	34000
11.	METHYL METHACRYLATE	4375	4375	4375	4375	4375	4375	4375	4375	4375
12.	ISO-BUTANOL	2800	2800	2800	2800	2800	2800	2800	9800	9800

Sl.No	GROUP / PRODUCT	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
13.	C4-RAFFINATE	291600	291600	291600	291600	291600	291600	291600	291600	291600
14.	PHTHALIC ANHYDRIDE	349046	349046	349046	349046	349046	401906	401906	401906	401906
15.	VINYL ACTATE MONOMER	30000	30000	30000	30000	30000	30000	30000	30000	30000
16.	ISOPROPANOL	70000	70000	70200	70200	70200	70200	70200	70200	70200
17.	POLYOL	113500	141628	141628	141628	141628	146762	142027	148527	163027
	Group Total	2244365	2272493	2272693	2271493	2271493	2413087	2458012	2676512	2691012
	TOTAL PC (In MT)	39283230	41457354	41888248	41997933	42076704	48933311	50438760	50612396	50779096
	TOTAL PC (In 000'MT)	39283.23	41457.35	41888.24	41997.93	42076.70	48933.31	50438.76	50612.39	50779.09

Annexure-II

Product	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
Production of major chemicals products (Productwise) from 2014-15 to 2022-23									
<i>Figures in MT</i>									
ALKALI CHEMICALS									
SODA ASH	2462002	2583013	2613419	2989570	3048187	3069431	2638117	3078901	3219315
CAUSTIC SODA	2442891	2503955	2594495	2742313	2925352	3136937	2964078	3462771	3604471
LIQUID CHLORINE	1720099	1714816	1800666	1899412	2069111	2250429	2174264	2499329	2668849
Total	6624992	6801784	7008580	7631295	8042650	8456797	7776459	9041001	9492635
INORGANIC CHEMICALS									
ALUMINIUM FLUORIDE	6732	9514	8142	7514	5697	5050	3698	8909	5307
CALCIUM CARBIDE	87181	83472	85021	87297	83170	81339	86778	98618	83437
CARBON BLACK	444350	469561	535273	530356	546390	500146	384780	456487	447003
POTASSIUM CHLORATE	447	406	12	347	703	16178	17079	17678	14233
SODIUM CHLORATE	0	0	0	0	0	0	17917	21144	23210
TITANIUM DIOXIDE	47879	58533	58459	57817	57059	49487	51222	56957	46811
RED PHOSPHORUS	885	836	771	881	1029	1030	1066	1146	1170
HYDROGEN PEROXIDE	119752	153083	148866	157020	156453	122839	139904	143488	184366
POTASSIUM IODATE	0	0	0	0	0	564	542	579	507
CALCIUM CARBONATE	236926	226126	216329	217248	213329	286833	274791	246775	252382
Total	944152	1001531	1052873	1058480	1063830	1063466	977777	1051781	1058426
ORGANIC CHEMICALS									
ACETIC ACID	159609	157906	158512	157067	153801	167856	154755	166590	165488
ACETIC ANHYDRIDE	93836	92986	94820	97093	95471	74149	75088	78425	97851

Product	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
ACETONE	25982	24960	26793	32865	40740	36268	39034	36115	33987
PHENOL	42264	40424	43569	53448	65394	57850	61272	58156	54980
METHANOL	209826	162621	176959	260489	271929	176046	234026	167714	69268
FORMALDEHYDE	255950	242089	244187	248234	226610	260413	244660	293071	301056
NITROBENZENE	69722	68373	69714	71406	68804	61138	76092	82846	64466
MALEIC ANHYDRIDE	3204	3539	3529	3312	4557	5024	5382	6328	6905
PENTAERYTHRITOL	13460	13967	14014	14097	14990	15210	11652	16334	15594
ANILINE	34474	39402	41454	41881	37852	25437	33529	39662	22165
CHLORO METHANES	220714	220181	221509	222433	285531	296909	326952	340820	411558
ISOBUTYLBENZENE	4304	7241	6920	8954	9699	9441	12719	8520	9603
ONCB	16128	19262	22550	24902	23696	19836	23269	26686	27076
PNCB	26960	31270	34191	37778	36073	31903	38885	43710	46193
MEK	4021	5751	6539	6397	6995	9834	8001	8850	8348
ACETALDEHYDE	67769	58958	60455	65736	61890	77102	55965	72512	77697
ETHANOLAMINES	13764	13248	13108	13195	16703	15390	16703	20976	19685
ETHYL ACETATE	327936	360402	371273	411491	440563	473392	453127	445434	438343
MENTHOL	17445	14727	14541	13683	6239	7444	7482	10299	6357
ORTHO NITRO TOLUENE	11737	11524	13802	14390	16886	25975	27672	29948	34895
Total	1619105	1588831	1638439	1798851	1884423	1846617	1906265	1952996	1911515
PESTICIDES AND INSECTICIDES									
D.D.T.	3627	2093	2263	1265	1366	1103	569	658	279
MALATHION	2241	2042	2255	3293	4390	3793	3838	3286	2837
DIMETHOATE	1433	1437	1372	1184	1257	1446	1452	1391	1014
D.D.V.P.	6657	7219	8130	8127	9136	0	935	422	42
QUINALPHOS	1881	839	1289	1184	885	856	1056	2454	601
MONOCROTOPHOS	6967	5484	6577	5500	5298	5817	7917	7487	5100

Product	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
PHOSPHAMIDON	128	128	90	112	0	0	0	0	0
PHORATE	6619	5916	5910	7016	5847	0	0	0	0
ETHION	1604	1717	2112	2381	1318	2127	2220	2794	2333
FENVALERATE	512	557	529	741	695	670	493	678	502
CYPERMETHRIN	8587	8526	7875	8246	10952	10865	12291	16480	10883
ACEPHATE	17971	16580	16265	18271	19633	21081	29588	29556	33387
CHLORPYRIPHOS	9731	6865	5867	7984	7143	6496	8529	7620	8454
TRIAZOPHOS	1000	1718	2373	1543	886	0	0	0	0
TEMEPHOS	0	79	84	100	77	148	148	0	64
DELTAMETHRIN	511	382	372	551	682	685	590	707	740
ALPHAMETHRIN	746	231	101	320	344	438	536	506	488
PROFENOFOS TECHNICAL	7577	6853	10504	9945	12452	12361	16080	16247	16099
PRETILACHLOR TECHNICAL	1876	1941	2581	3597	3626	3066	3587	3218	3455
LAMBDA CYHALOTHRIN	473	418	740	1142	622	2297	1677	2696	3099
PHENTHOATE	1400	1113	1137	1323	1534	1408	1349	1830	1797
PERMETHRIN TECH	1696	1301	1104	1525	1860	1222	1656	2485	3584
IMIDACALOPRID TECH	560	200	175	344	100	20	29	26	1
CAPTAN & CAPTAFOL	2382	2118	1785	1763	1931	1462	1463	1897	1634
ZIRAM(THIO BARBAMATE)	578	508	601	720	763	634	881	673	587
CARBENDZIM(BAVISTIN)	355	242	130	27	21	0	0	0	0
MANCOZAB	61402	66384	78480	70245	69331	60880	97428	118667	83615
HEXACONAZOLE	593	622	462	588	501	753	809	1279	614
METCONAZOLE	607	389	354	400	336	207	200	190	347
2, 4-D	11623	18456	23358	25830	24236	22555	27050	39996	41962
BUTACHLOR	0	2	0	0	0	0	0	0	0
ETHOFUMESATE TECHNICAL	619	502	1036	1287	1042	792	433	732	892
THIAMETHOXAM TECHNICAL	1659	1916	2507	3282	5569	6152	5211	6562	6425

Product	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
PENDIMETHALIN	2259	2818	4038	3780	2822	2753	3639	4764	4674
METRIBUZIN	519	908	1120	882	1919	2648	3191	1999	2336
TRICLOPYR ACID TECH	191	300	282	153	125	132	0	380	169
ISOPROTURON	2426	1952	132	0	0	0	0	0	0
GLYPHOSATE	9688	6959	6352	6294	6684	5911	6129	5722	4697
DIURON	122	1255	3679	3262	3618	3397	3423	2325	3501
ATRAZIN	1198	1211	1895	2249	1477	1730	1611	1689	3063
ZINC PHOSPHIDE	1290	1500	1310	1395	1260	1316	1468	2019	1488
ALUMINIUM PHOSPHIDE	5051	5747	6402	4771	4913	4914	7614	9904	7367
DICOFOL	107	94	90	77	52	10	0	0	0
Total	186466	187522	213718	212699	216703	192145	255090	299339	258130
DYES AND PIGMENTS									
AZO DYES	10593	9818	9979	11037	9049	8540	6624	9146	7646
ACID DIRECT DYES(OTHER THAN AZO)	17226	20569	19862	21150	24126	22748	20224	23973	21161
DISPERSE DYES	29559	43569	41351	46718	55242	61942	51790	65940	60431
FAST COLOUR BASES	8	0	0	0	0	0	0	0	0
INGRAIN DYES	439	299	0	0	0	0	0	0	0
OIL SOLUBLE (SOLVENT DYES)	1800	2200	2234	2067	2291	2413	441	673	473
OPTICAL WHITENING AGENTS	22944	24698	23766	23206	29303	20741	18175	22544	16767
ORGANIC PIGMENT	76893	61306	63744	73343	73935	75082	67274	74335	55595
PIGMENT EMULSION	9641	9667	10608	10162	9777	9685	8596	9310	8320
REACTIVE DYES	89467	106234	120955	151909	151384	156710	132127	161940	117213
SULPHUR DYES (SULPHUR BLACK)	9383	9551	10073	7318	7541	7445	5094	8583	10683
VAT DYES	1768	1443	1523	1654	1779	2126	1986	2320	2442
SOLUBILISED VAT DYES	32	29	20	24	4	0	0	0	0
FOOD COLOURS	658	708	750	779	786	671	493	705	919

Product	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
INORGANIC PIGMENTS	14818	14187	15408	17880	16288	16121	14637	18551	16408
Total	285229	304278	320273	367247	381505	384224	327461	398020	318058
^a Total chemical production	9659944	9883946	10233883	11068572	11589111	11943249	11243052	12743137	13038764

Product	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
Production of major Petro chemicals products (Productwise) from 2014-15 to 2022-23									
<i>Figures in MT</i>									
SYNTHETIC FIBRE									
ACRYLIC FIBRE	89625	105872	95390	90970	99454	102904	77016	66683	96154
POLYESTER STAPLE FIBREFILL	57295	51052	53653	51328	52993	49888	40296	39041	34134
NYLON FILAMENT YARN	32449	37251	40906	40008	46615	48290	33270	46189	44111
NYLON INDUSTRIAL YARN/TYRE CORD	100524	94866	103559	107585	109545	99749	90289	115474	100607
POLYESTER FILAMENT YARN	2178749	2179003	2200908	2283406	2316430	2520331	1997927	2560793	2486480
POLYESTER STAPLE FIBRE	1021245	1039648	1056002	1005300	931440	1027492	909382	1160484	1161022
POLYPROPYLENE FILAMENT YARN	5140	3467	3394	3146	2356	2516	2168	2805	1923
POLYPROPYLENE STAPLE FIBRE	25423	27040	24559	22240	20744	18815	15336	21246	22231
POLYESTER INDUSTRIAL YARN	16579	15377	16326	15037	14826	14730	12361	14387	13557
Elastomeric/Spandex Filament Yam	4948	4811	4700	6175	7077	8063	6600	12904	12330
Total	3531977	3558387	3599397	3625195	3601480	3892778	3184645	4040006	3972549
FIBRE INTERMEDIATE									
ACRYLONITRILE	33696	1936	0	0	0	0	0	0	0
CAPROLACTUM	87050	86297	86961	85965	92561	84062	80405	108166	129636
MONO EHYLENE GLYCOL	1001139	1158968	1110497	1132654	1159759	2007778	1981983	1990162	1656197
PURIFIED TEREPHTHALIC ACID	3755279	3431778	3390556	3492438	3404929	3267071	2996760	3383342	3202201

Product	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
Total	4877164	4678979	4588014	4711057	4657249	5358911	5059148	5481670	4988034
POLYMERS									
LOW DENSITY POLYETHYLENE	184402	200032	201762	185657	193051	613287	616613	583038	625090
HIGH DENSITY POLYTHYLENE	1155794	1317151	1520037	1578378	1597676	1897566	1910043	1915766	1717898
POLYESTYRENE	281169	308576	311345	301578	292857	291720	217447	247944	271678
POLYPROPYLENE (INC. CO-POLYMER)	3614818	4284424	4253392	4350198	4779021	4982815	4919100	5240698	4773513
EXPANDABLE POLYESTYRENE	80684	86197	96772	103914	108266	110683	87387	97220	108424
POLY VINYL CHLORIDE	1330443	1437889	1461527	1466083	1488404	1513592	1434119	1471868	1565591
LINEAR LOW DENSITY POLYTHYLENE	910257	1204568	1318263	1290046	1581224	2994026	2958915	2914119	2424421
Total	7557567	8838837	9163098	9275854	10040499	12403689	12143624	12470653	11486615
SYNTHETIC RUBBER									
STYRENE BUTADIENE RUBBER	57247	124798	167334	193971	228641	227829	212909	237471	205389
POLY BUTADIENE RUBBER	107535	113928	117092	113634	122226	130251	128547	132821	126109
ETHYL VINYL ACETATE	6423	2410	0	0	0	0	0	0	0
NITRILE BUTADIENE RUBBER	380	394	354	50	0	0	11881	12340	13358
Total	171585	241530	284780	307655	350867	358080	353337	382632	344856
SYNTHETIC DETERGENT INTERMEDIATES									
LINEAR ALKYL BENZENE	410540	377200	447645	451525	454822	413502	457072	462302	413161
ETHYLENE OXIDE	185316	188309	216063	291296	232336	301181	279365	318086	289862
Total	595856	565509	663708	742821	687158	714683	736437	780388	703023
PERFOR MANCE PLASTICS									
ABS RESIN	107284	117005	117773	145232	148181	136464	121939	122783	148937
NYLON-6	19495	20216	20374	19473	20502	40844	55385	68332	68733
POLYMETHYL METHACRYLATE	1047	1468	285	20	0	0	0	0	0
STYRENE ACRYLONITRILE	88774	98681	99239	114687	131758	133785	118613	121747	139067

Product	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
NYLON 6,6	1251	1225	1168	1082	1022	728	0	0	0
POLYESTER CHIPS/PET CHIPS	1361975	1452932	1548704	1424595	1271087	1344698	1208990	1365925	1254304
POLYTETRAFLUOROETHYLENE(PTFE)	11352	8747	11728	13723	16236	15109	14638	18897	17324
Total	1591178	1700274	1799271	1718812	1588786	1671628	1519565	1697684	1628365
OLEFINS									
BUTADIENE	239445	343450	347355	332376	385759	481014	458799	477402	429432
ETHYLENE	3191897	3727394	4021732	4222683	3831890	6466753	6364888	6414520	5802613
PROPYLENE	3869402	4456688	4425207	4457906	4639531	4887618	5215758	5635102	5064000
Total	7300744	8527532	8794294	9012965	8857180	11835385	12039445	12527024	11296045
AROMATICS									
BENZENE	1094376	1332591	1332042	1318031	1414563	1346237	1407866	1427550	1156599
MIXED XYLENE	215002	269353	296033	271352	249050	269626	146683	160867	45434
ORTHO-XYLENE	462464	499512	444878	447755	406302	386391	522116	511150	408368
TOLUENE	108158	115736	126760	106941	141139	140160	113985	115656	112502
PARAXYLENE	2757843	3266355	3161302	3194520	3331811	2782330	2614213	2461944	1638872
Total	4637843	5483547	5361015	5338599	5542865	4924744	4804863	4677167	3361775
OTHER PETROCHEMICALS									
DIETHYLENE GLYCOL	100964	114241	108241	105698	107407	167735	172326	173713	141759
DIACETONE ALCOHOL	0	0	0	208	4072	6042	2927	5660	3169
ETHYLENE DICHLORIDE	285298	277350	282569	282347	339204	345294	326242	366955	398623
BUTANOL	4203	11080	12465	17388	21693	16440	20285	38286	42426
2-ETHYL HEXANOL	13891	44411	45593	56641	58892	48748	49672	91261	90221
VINYL CHLORIDE MONOMER	717881	790705	791257	777979	803618	874468	799219	813082	849305
PBT	503	501	606	577	1292	6245	6086	7546	7927
POLYCARBONATE	164	169	154	88	115	107	0	0	0

Product	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
PROPYLENE OXIDE	36610	25590	29338	35996	35122	34563	44416	49923	49233
PROPYLENE GLYCOL	16248	13649	16345	17639	19129	19508	19705	20543	21323
POLYVINYL ACETATE RESIN	0	0	0	0	0	0	2961	7345	9539
UNSATURATED POLYESTER RESIN	0	0	0	0	0	16435	12879	16547	19007
METHYL METHACRYLATE	3473	2281	540	2829	3994	1707	0	0	0
ISO-BUTANOL	671	1857	1963	2228	2206	1712	2071	3969	5784
C4-RAFFINATE	364609	428641	437171	339202	380257	413331	433417	444565	393521
PHTHALIC ANHYDRIDE	291524	305775	296071	290011	275068	269641	292964	339617	330155
ISOPROPANOL	74983	71177	72468	71833	58266	60505	55314	65127	48781
POLYOL	51784	71797	78719	79433	82129	81752	77831	87154	99834
Total	1962806	2159224	2173500	2080097	2192464	2364233	2318315	2531293	2510607
% Total Petro chemical production	32226720	35753819	36427077	36813055	37518548	43524131	42159379	44588517	40291869
