

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

**RAJYA SABHA**  
**UNSTARRED QUESTION NO. 3373**

ANSWERED ON-01/04/2025

**CATALYZING CHEMICAL AND PETROCHEMICAL PRODUCTION GROWTH**

3373: DR. SIKANDER KUMAR:

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

- a) whether Government is pursuing strategies to foster the emergence of leading chemical manufacturing companies, promoting drive growth of petrochemicals;
- (b) the details about expansion in the production capacity of the major chemicals industry;
- (c) the overview of the current production levels of major chemicals in the country; and
- (d) the initiatives and Government's strategy for strengthening domestic manufacturing, expanding export markets, and creating jobs in Himachal Pradesh?

**ANSWER**

THE MINISTER OF STATE IN THE MINISTRY OF CHEMICALS AND FERTILIZERS  
(SMT. ANUPRIYA PATEL)

(a) The Government is pursuing various strategies to promote the growth of the chemicals & petrochemicals such as:

- (i) **Petroleum, Chemical and Petrochemical Investment Regions (PCPIRs)**: Government of India has notified the PCPIR Policy to attract investment and for the generation of employment in the Petroleum, Chemical and Petrochemical Investment Regions (PCPIRs). PCPIRs promote the Chemical and Petrochemical sectors in an integrated and environment friendly manner on a large scale. PCPIRs are conceptualized in a cluster-based approach with common infrastructure and support services to provide a competitive environment conducive for setting up businesses. At present, three Petroleum, Chemical and Petrochemical Investment Regions (PCPIRs) have been notified in the

States of Andhra Pradesh (Vishakhapatnam), Gujarat (Dahej) and Odisha (Paradeep) to promote investment and industrial development in these sectors.

The status of implementation of these PCPIR is indicated below: -

Indicator	Gujarat	Andhra Pradesh	Odisha	Total
Location/ Region	Dahej, Bharuch	Vishakhapatnam– Kakinada	Paradeep	-
Approval	Feb, 2009	Feb, 2009	Dec, 2010	-
Total Area (Sq. kms.)	453.00	640.00	284.15	1377.15
Investments made (Rs. Crore)	1,28,509	58,918	73,518	2,60,945
Employment generated (No.)	2,45,140	86,123	40,000	3,71,263
No. of Chemical Units	2079	154	13	2246

These PCPIRs has attracted investment of Rs. 2.6 lakh crore in Petroleum, Chemicals, Petrochemicals and ancillary industries and generated employment to 3.7 lakh persons.

(ii) **Central Institute of Petrochemicals Engineering and Technology (CIPET)** has been conducting regular long-term Diploma & Degree programmes with emphasis on practical training in the field of plastics engineering and technology, with the objective of creating a pool of skilled manpower required in the sector.

(iii) **Centre of Excellence (COEs):** To encourage the research and development in Chemicals and Petrochemicals sector, the Department of Chemicals and Petrochemicals implements a Scheme for setting up Centres of Excellence (CoEs). Under this Scheme, the Department provides grant-in-aid to identified research institutes with the objective of improving the existing technology and to promote development of new applications in petrochemical and chemical sector. The emphasis is on modernization and upgradation of existing manufacturing processes as well as improving the quality of products. Under the Scheme, the Department provides grant-in-aid upto 50% of the project cost, subject to an upper limit of Rs. 5 crore and 18 CoEs have been approved so far.

(iv) **Enforcement of international quality norms and compliances-** With the objective to curb the import of sub-standard products and to improve the quality of chemicals and petrochemicals products produced in the country, efforts are being made to notify mandatory standards, wherever feasible. 75QCOs have been issued in the chemicals & petrochemicals sector and out of these 42 QCOs have been implemented so far.

(v) **Rationalization of Duty:** The department has taken the exercise of import duty rationalization for the entire value chain of the Petrochemical products for boosting the domestic production.

(v) **Foreign Direct Investment (FDI):** To attract foreign direct investment in the Chemical sector with the objective of enhanced development and self-sufficiency, 100% FDI in the sector is allowed automatically, except for a few hazardous chemicals. In last 5 years, Rs. 41,856 crores of FDI has come in the sector.

(b) & (c): Department of Chemicals & Petrochemicals (DCPC) compiles data on production and installed capacity of major chemical products from certain identified major chemical units for assessing the trends of production in the sector. The data so collected is analyzed on the basis of segments of chemical products. Details of production capacity of the major chemicals so identified in the country year wise from Financial Year 2019-20 to Financial Year 2023-24 is given at **Annex-I**. The major chemicals industry has seen growth of 8.13% in 2023-24 with respect to 2019-20, reflecting significant expansion in production capacity. Production details of these major chemicals in the country during the same period is given at **Annex-II**.

(d) **Central Institute of Petrochemicals Engineering and Technology (CIPET), Centre for Skilling and Technical Support (CSTS)- BADDI** is providing technical support services to the Petrochemicals and plastics industries in and around Himachal Pradesh. The Centre is also conducting regular long-term Diploma & Degree programmes with the objective of creating a pool of skilled manpower required in the sector.

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Installed Capacity of Chemical products.							
Figures in MT							Growth rate of FY 2023-24 w r t 2019-20
Sl.No	NAME OF THE PRODUCT	2019-20	2020-21	2021-22	2022-23	2023-24	
<b>A. ALKALI CHEMICALS</b>							
1	SODA ASH	3614000	3614000	3614000	3714000	3714000	2.77
2	CAUSTIC SODA	3700340	3898200	4150825	4227395	4304395	16.32
3	LIQUID CHLORINE	2774726	2961232	3124413	3158153	3241957	16.84
	<b>GROUP TOTAL</b>	<b>10089066</b>	<b>10473432</b>	<b>10889238</b>	<b>11099548</b>	<b>11260352</b>	11.61
<b>B. INORGANIC CHEMICALS</b>							
1	ALUMINIUM FLOURIDE	25600	25600	25600	25600	25600	0.00
2	CALCIUM CARBIDE	112000	112000	112000	112000	112000	0.00
3	CARBON BLACK	696000	696000	696000	696000	771000	10.78
4	POTASSIUM CHLORATE	28600	28600	28600	28600	28600	0.00
5	SODIUM CHLORATE	0	22320	22320	22320	22320	
6	TITANIUM DIOXIDE	82500	82500	82500	82500	82500	0.00
7	RED PHOSPHORUS	1680	1680	1680	1680	1188	-29.29
8	HYDROXEN PEROXIDE	218626	218626	221766	221266	222286	1.67
9	POTASSIUM IODATE	1200	1200	1200	1200	1200	0.00
10	CALCIUM CARBONATE	371545	371545	383545	383545	383545	3.23
	<b>GROUP TOTAL</b>	<b>1537751</b>	<b>1560071</b>	<b>1575211</b>	<b>1574711</b>	<b>1650239</b>	7.32
<b>C. ORGANIC CHEMICALS</b>							
1	ACETIC ACID	142048	142048	142048	165508	165508	16.52
2	ACETIC ANHYDRIDE	119175	119175	119175	124650	112650	-5.48
3	ACETONE	47140	47140	47140	47140	47140	0.00
4	PHENOL	76750	76750	76750	76750	76750	0.00
5	METHANOL	474300	474300	474300	474300	660300	39.22
6	FORMALDEHYDE	411300	397800	451776	435276	439651	6.89

7	<b>NITROBENZENE</b>	129450	126450	126450	126450	129450	0.00
8	<b>MALEIC ANHYDRIDE</b>	7660	7660	7660	7660	7660	0.00
9	<b>PENTAERYTHRITOL</b>	15760	15760	17400	17400	17400	10.41
10	<b>ANILINE</b>	54100	54100	54100	54100	54100	0.00
11	<b>CHLORO METHANES</b>	279250	330990	345990	438450	435750	56.04
12	<b>ISOBUTYL BENZENE</b>	16800	16800	16800	16800	16800	0.00
13	<b>ONCB</b>	30000	30000	30000	30000	30000	0.00
14	<b>PNCB</b>	48400	48400	48400	48400	48400	0.00
15	<b>MEK</b>	10000	10000	10000	10000	10000	0.00
16	<b>ACETALDEHYDE</b>	151010	151010	151970	151970	154970	2.62
17	<b>ETHANOLAMINES</b>	17760	27000	27000	27000	27000	52.03
18	<b>ETHYL ACETATE</b>	562060	562060	575060	575060	564260	0.39
19	<b>MENTHOL</b>	33650	33650	33650	33650	33650	0.00
20	<b>ORTHO NITRO TOLUENE</b>	44800	44800	44800	44800	44800	0.00
	<b>GROUP TOTAL</b>	<b>267141</b>	<b>271589</b>	<b>280046</b>	<b>290536</b>		
		<b>3</b>	<b>3</b>	<b>9</b>	<b>4</b>	<b>3076239</b>	15.15
<b>D.</b>	<b>PESTICIDES AND INSECTICIDES</b>						
1	<b>D.D.T.</b>	6344	6344	6344	6344	5000	-21.19
2	<b>MALATHION</b>	3800	3800	3800	3800	5760	51.58
3	<b>DIMETHOATE</b>	1450	1450	1450	1450	1450	0.00
4	<b>D.D.V.P.</b>	33620	33620	33620	33620	24920	-25.88
5	<b>QUINALPHOS</b>	2200	3400	3400	3400	1980	-10.00
6	<b>MONOCROTOPHOS</b>	13940	13940	13940	13940	21205	52.12
7	<b>PHOSPHAMIDON</b>	2000	2000	2000	2000	0	-100.00
8	<b>PHORATE</b>	12400	12400	6600	6600	0	-100.00
9	<b>ETHION</b>	2800	2800	2800	2800	2800	0.00
10	<b>FENVALERATE</b>	4960	4960	4960	4960	4860	-2.02
11	<b>CYPERMETHRIN</b>	23826	23826	24726	26799	44779	87.94
12	<b>ACEPHATE</b>	20500	20500	20500	20500	51277	150.13
13	<b>CHLORPYRIPHOS</b>	13600	13800	13400	13400	10900	-19.85
14	<b>TRIAZOPHOS</b>	3360	3360	3360	3360	960	-71.43
15	<b>TEMEPHOS</b>	250	250	250	250	495	98.00
16	<b>DELTAMETHRIN</b>	790	790	850	1020	1070	35.44
17	<b>ALPHAMETHRIN</b>	480	500	600	644	644	34.17
18	<b>PROFENOFOS TECHNICAL</b>	10500	10500	17300	17400	19635	87.00
19	<b>PRETILACHLOR TECHNICAL</b>	4240	4240	4240	4480	4600	8.49
20	<b>LAMBDA CYHALOTHRIN</b>	2850	3200	3150	3766	10916	283.02
21	<b>PHENTHOATE</b>	900	900	900	900	1386	54.00
22	<b>PERMETHRIN TECH</b>	1800	1800	1800	1914	1914	6.33
23	<b>IMIDACALOPRID TECH</b>	150	150	150	150	200	33.33
24	<b>CAPTAN &amp; CAPTAFOL</b>	3430	3430	3430	3430	3430	0.00
25	<b>ZIRAM(THIO BARBAMATE)</b>	697	697	697	697	313	-55.09

26	<b>CARBENDZIM(BAVI STIN)</b>	780	780	780	780	240	-69.23
27	<b>MANCOZAB</b>	84696	119796	121796	121796	131950	55.79
28	<b>HEXACONAZOLE</b>	1700	1700	2820	3460	3460	103.53
29	<b>METCONAZOLE</b>	750	750	500	500	500	-33.33
30	<b>2, 4-D</b>	27000	27000	30000	30000	32000	18.52
31	<b>BUTACHLOR</b>	500	500	500	500	0	-100.00
32	<b>ETHOFUMESATE TECHNICAL</b>	1650	1650	1650	1950	2013	22.00
33	<b>THIAMETHOXAM TECHNICAL</b>	4550	5100	5100	6320	5820	27.91
34	<b>PENDIMETHALIN</b>	6000	5800	6600	7400	4900	-18.33
35	<b>METRIBUZIN</b>	1950	2518	2865	3840	3840	96.92
36	<b>TRICLOPYR ACID TECH</b>	300	300	300	300	300	0.00
37	<b>ISOPROTURON</b>	6000	6000	6000	6000	6000	0.00
38	<b>GLYPHOSATE</b>	12920	12920	12920	12920	9600	-25.70
39	<b>DIURON</b>	6000	6000	6000	6000	6000	0.00
40	<b>ATRAZIN</b>	1200	1200	1200	2400	3000	150.00
41	<b>ZINC PHOSPHIDE</b>	1920	1920	1920	1920	2544	32.50
42	<b>ALUMINIUM PHOSPHIDE</b>	4740	4740	4740	4740	11040	132.91
43	<b>DICOFOL</b>	150	150	150	150	0	-100.00
	<b>GROUP TOTAL</b>	<b>333693</b>	<b>371481</b>	<b>380108</b>	<b>388600</b>	<b>443701</b>	32.97
<b>E.</b>	<b>DYES AND PIGMENTS</b>						
1	<b>AZO DYES</b>	21138	21138	21138	18897	17700	-16.26
2	<b>BASIC DYES</b>	0	0	0	0	0	
3	<b>ACID DIRECT DYES(OTHER THAN AZO)</b>	40900	40900	40900	46000	46000	12.47
4	<b>DISPERSE DYES</b>	75009	77925	77925	92267	90380	20.49
5	<b>FAST COLOUR BASES</b>	0	0	0	0	0	
6	<b>INGRAIN DYES</b>	0	0	0	0	0	
7	<b>OIL SOLUBLE (SOLVENT DYES)</b>	3600	3600	3600	1200	1200	-66.67
8	<b>OPTICAL WHITENING AGENTS</b>	67680	67680	67680	67680	65280	-3.55
9	<b>ORGANIC PIGMENTS</b>	88355	88355	88355	89015	102687	16.22
10	<b>PIGMENT EMULSION</b>	5414	5414	5414	3770	10800	99.48
11	<b>REACTIVE DYES</b>	195731	196331	197531	216531	221151	12.99
12	<b>SULPHUR DYES (SULPHUR BLACK)</b>	8247	8247	8247	13200	13200	60.06
13	<b>VAT DYES</b>	2860	2860	2860	3340	3340	16.78
14	<b>SOLUBILISED VAT DYES</b>	132	132	132	0	0	-100.00
15	<b>FOOD COLOURS</b>	0	0	0	0	0	
16	<b>NAPTHOLS</b>	900	900	900	0	0	-100.00

17	<b>INORGANIC PIGMENTS</b>	18054	18054	18054	18054	18654	3.32
	<b>GROUP TOTAL</b>	<b>528020</b>	<b>531536</b>	<b>532736</b>	<b>569954</b>	<b>590392</b>	11.81
	<b>TOTAL Chemical</b>	<b>151599</b>	<b>156524</b>	<b>161777</b>	<b>165381</b>	<b>17020923</b>	12.28
	<b>TOTAL Chemical (In 000' MT)</b>	<b>43</b>	<b>13</b>	<b>62</b>	<b>77</b>	<b>17021</b>	12.28

<b>INSTALLED CAPACITIES OF PETROCHEMICALS PRODUCTS</b>							
<b>(Figures in MT)</b>							
<b>Sl. No</b>	<b>GROUP / PRODUCT</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>	<b>Growth rate of FY 2023-24 w r t 2019-20</b>
<b>SYNTHETIC FIBRES</b>							
A.							
	ACRYLIC FIBRE (AF)	107000	107000	107000	108000	108000	0.93
	POLYESTER STAPLE FIBREFILL	69000	69000	69000	69000	69000	0.00
	NYLON FILAMENT YARN	58516	58516	66582	66582	64736	10.63
	NYLON INDUSTRIAL YARN/TYRE CORD	152015	152015	165703	165703	176786	16.30
	POLYESTER FILAMENT YARN 1	271979	272736	266114	266114	265527	-2.37
	POLYESTER STAPLE FIBRE 2	135046	135046	135046	135046	134071	-0.72
	POLYPROPYLENE FILAMENT YARN	3600	3600	3600	3600	3600	0.00
	POLYPROPYLENE STAPLE FIBRE	30925	30925	29725	29725	29725	-3.88
	POLYSTER INDUSTRIAL YARN	21500	21500	21500	21500	21500	0.00
	Elastomeric/Spandex Filament Yarn	8500	8500	8500	20000	28500	235.29
	<b>Group Total</b>	<b>452130</b>	<b>452888</b>	<b>448321</b>	<b>449571</b>	<b>449783</b>	-0.52
		<b>9</b>	<b>3</b>	<b>9</b>	<b>9</b>	<b>1</b>	
<b>FIBRE INTERMEDIATES</b>							
B.							
	ACRYLONITRILE (ACN)	24000	24000	24000	24000	24000	0.00
	CAPROLACTUM	120000	120000	120000	120000	120000	0.00
	MONO ETHYLENE GLYCOL (MEG)	186810	221060	221060	221060	233560	25.03
	PURIFIED TEREPHTHALIC ACID (PTA)	387300	387300	387300	387300	402000	3.80
		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
	<b>GROUP TOTAL</b>	<b>588510</b>	<b>622760</b>	<b>622760</b>	<b>622760</b>	<b>649960</b>	10.44
		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

C.	<b>POLYMERS</b>						
	LOW DENSITY POLYETHYLENE (LDPE)	560000	610000	610000	610000	610000	8.93
	HIGH DENSITY POLYETHYLENE (HDPE)/LLDPE**	515810 0	515810 0	515810 0	515810 0	515810 0	0.00
	POLYSTYRENE (PS)	471000	471000	471000	499000	499000	5.94
	POLYPROPYLENE(P P)	493380 0	493380 0	493380 0	493380 0	493380 0	0.00
	EXPANDABLE POLYSTYRENE (EXPS)	133300	133300	147100	193000	199000	49.29
	POLY VINYL CHLORIDE PVC)	149800 0	149300 0	150000 0	150000 0	155000 0	3.47
	<b>Group Total</b>	<b>127542 00</b>	<b>127992 00</b>	<b>128200 00</b>	<b>128939 00</b>	<b>129499 00</b>	1.53
	<b>** Swing Capacity to produce both LLDPE and HDPE</b>						
D.	<b>SYNTHETIC RUBBER (ELASTOMERS)</b>						
	STYRENE BUTADIENE RUBBER (SBR)	271000	277000	271000	271000	271000	0.00
	POLY BUTADIENE RUBBER (PBR)	100000	100000	100000	100000	100000	0.00
	ETHYL VINYL ACETATE (EVA)	15000	15000	15000	15000	15000	0.00
	NITRILE BUTADIENE RUBBER (NBR)	25300	13700	13700	15500	17400	-31.23
	<b>GROUP TOTAL</b>	<b>411300</b>	<b>405700</b>	<b>399700</b>	<b>401500</b>	<b>403400</b>	-1.92
E.	<b>SYNTH. DETERGENT INTERMEDIATE</b>						
	LINEAR ALKYL BENZENE (LAB)	544790	544790	544790	544790	586790	7.71
	ETHYLENE OXIDE (EO)	135000	135000	135000	135000	135000	0.00
	<b>GROUP TOTAL</b>	<b>679790</b>	<b>679790</b>	<b>679790</b>	<b>679790</b>	<b>721790</b>	6.18
F.	<b>PERFORMANCE PLASTICS</b>						
	ABS RESINS	210000	213000	199000	199000	203000	-3.33
	NYLON-6/ NYLON 6,6*	68500	83500	83500	83500	83500	21.90
	POLYMETHYL METHACRYLATE (PMMA)	3900	3900	3900	3900	0	-100.00





	PHTHALIC ANHYDRIDE	401906	401906	401906	401906	401906	0.00
	VINYL ACTATE MONOMER	30000	30000	30000	30000	30000	0.00
	ISOPROPANOL	70200	70200	70200	70200	70200	0.00
	POLYOL	146762	142027	148527	163027	163027	11.08
	<b>GROUP TOTAL</b>	<b>241308</b> <b>7</b>	<b>245801</b> <b>2</b>	<b>267651</b> <b>2</b>	<b>269101</b> <b>2</b>	<b>271398</b> <b>8</b>	12.47
	TOTAL PC (In MT)	489333 11	504387 60	506123 96	507790 96	522869 31	6.85
	TOTAL PC (In 000'MT)	48933	50439	50612	50779	52287	6.85

\* Combined Capacity of PBT, Polycarbonate, Nylon- 6, Nylon-6,6.

	<b>Overall capacity of Chemical and Petrochemical Products (In 000'MT)</b>	64093	66091	66790	67317	69308	8.13
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Sl. No.	PRODUCTION REPORT OF CHEMICALS (Product Wise Summary) [in MT]					
<b>A.</b>	<b>ALKALI CHEMICALS</b>					
	Product	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
1.	SODA ASH	3069431	2638117	3078901	3219315	2975782
2.	CAUSTIC SODA	3136937	2964078	3462771	3604471	3617989
3.	LIQUID CHLORINE	2250429	2174264	2499329	2668849	2640410
	<b>Total</b>	<b>8456797</b>	<b>7776459</b>	<b>9041001</b>	<b>9492635</b>	<b>9234181</b>
<b>B.</b>	<b>INORGANIC CHEMICALS</b>					
	Product	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
1.	ALUMINIUM FLUORIDE	5050	3698	8909	5307	5384
2.	CALCIUM CARBIDE	81339	86778	98618	83437	80129
3.	CARBON BLACK	500146	384780	456487	447003	484376
4.	POTASSIUM CHLORATE	16178	17079	17678	14233	17090
5.	SODIUM CHLORATE	0	17917	21144	23210	21485
6.	TITANIUM DIOXIDE	49487	51222	56957	46811	54015
7.	RED PHOSPHORUS	1030	1066	1146	1170	1124
8.	HYDROGEN PEROXIDE	122839	139904	143488	184366	188120
9.	POTASSIUM IODATE	564	542	579	507	526
10.	CALCIUM CARBONATE	286833	274791	246775	252382	285055
	<b>Total</b>	<b>1063466</b>	<b>977777</b>	<b>1051781</b>	<b>1058426</b>	<b>1137304</b>
<b>C.</b>	<b>ORGANIC CHEMICALS</b>					
	Product	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
1.	ACETIC ACID	167856	154755	166590	165488	164318
2.	ACETIC ANHYDRIDE	74149	75088	78425	97851	69053
3.	ACETONE	36268	39034	36115	33987	29613
4.	PHENOL	57850	61272	58156	54980	47524
5.	METHANOL	176046	234026	167714	69268	183163
6.	FORMALDEHYD E	260413	244660	293071	301056	313110
7.	NITROBENZENE	61138	76092	82846	64466	82213
8.	MALEIC ANHYDRIDE	5024	5382	6328	6905	6485
9.	PENTAERYTHRI TOL	15210	11652	16334	15594	14389
10.	ANILINE	25437	33529	39662	22165	30338

11	CHLORO METHANES	296909	326952	340820	411558	386849
12	ISOBUTYLBENZ ENE	9441	12719	8520	9603	9672
13	ONCB	19836	23269	26686	27076	25431
14	PNCB	31903	38885	43710	46193	42636
15	MEK	9834	8001	8850	8348	7999
16	ACETALDEHYD E	77102	55965	72512	77697	64184
17	ETHANOLAMINE S	15390	16703	20976	19685	22415
18	ETHYL ACETATE	473392	453127	445434	438343	439642
19	MENTHOL	7444	7482	10299	6357	6651
20	ORTHO NITRO TOLUENE	25975	27672	29948	34895	37064
	<b>Total</b>	<b>1846617</b>	<b>1906265</b>	<b>1952996</b>	<b>1911515</b>	<b>1982749</b>
<b>D.</b>	<b>PESTICIDES AND INSECTICIDES</b>					
	<b>Product</b>	<b>2019-2020</b>	<b>2020-2021</b>	<b>2021-2022</b>	<b>2022-2023</b>	<b>2023- 2024</b>
1.	D.D.T.	1103	569	658	279	14
2.	MALATHION	3793	3838	3286	2837	2931
3.	DIMETHOATE	1446	1452	1391	1014	981
4.	D.D.V.P.	0	935	422	42	0
5.	QUINALPHOS	856	1056	2454	601	724
6.	MONOCROTOPH OS	5817	7917	7487	5100	11875
7.	ETHION	2127	2220	2794	2333	2626
8.	FENVALERATE	670	493	678	502	462
9.	CYPERMETHRIN	10865	12291	16480	10883	8561
10	ACEPHATE	21081	29588	29556	33387	37356
11	CHLORPYRIPHO S	6496	8529	7620	8454	7789
12	TEMEPHOS	148	148	0	64	127
13	DELTAMETHRIN	685	590	707	740	632
14	ALPHAMETHRIN	438	536	506	488	227
15	PROFENOFOS TECHNICAL	12361	16080	16247	16099	15144
16	PRETILACHLOR TECHNICAL	3066	3587	3218	3455	1994
17	LAMBDA CYHALOTHRIN	2297	1677	2696	3099	1996
18	PHENTHOATE	1408	1349	1830	1797	1584
19	PERMETHRIN TECH	1222	1656	2485	3584	2459
20	IMIDACALOPRID TECH	20	29	26	1	20
21	CAPTAN & CAPTAFOL	1462	1463	1897	1634	890
22	ZIRAM(THIO BARBAMATE)	634	881	673	587	738

23	MANCOZAB	60880	97428	118667	83615	107360
24	HEXACONAZOL E	753	809	1279	614	840
25	METCONAZOLE	207	200	190	347	298
26	2, 4-D	22555	27050	39996	41962	35131
27	ETHOFUMESATE TECHNICAL	792	433	732	892	788
28	THIAMETHOXA M TECHNICAL	6152	5211	6562	6425	5058
29	PENDIMETHALI N	2753	3639	4764	4674	4644
30	METRIBUZIN	2648	3191	1999	2336	2044
31	TRICLOPYR ACID TECH	132	0	380	169	213
32	GLYPHOSATE	5911	6129	5722	4697	4934
33	DIURON	3397	3423	2325	3501	4381
34	ATRAZIN	1730	1611	1689	3063	5224
35	ZINC PHOSPHIDE	1316	1468	2019	1488	2048
36	ALUMINIUM PHOSPHIDE	4914	7614	9904	7367	8015
37	DICOFOL	10	0	0	0	0
	<b>Total</b>	<b>192145</b>	<b>255090</b>	<b>299339</b>	<b>258130</b>	<b>280108</b>

**E.**

**DYES AND PIGMENTS**

	<b>Product</b>	<b>2019-2020</b>	<b>2020-2021</b>	<b>2021-2022</b>	<b>2022-2023</b>	<b>2023- 2024</b>
1.	AZO DYES	8540	6624	9146	7646	6472
2.	ACID DIRECT DYES(OTHER THAN AZO)	22748	20224	23973	21161	24839
3.	DISPERSE DYES	61942	51790	65940	60431	65372
4.	OIL SOLUBLE (SOLVENT DYES)	2413	441	673	473	551
5.	OPTICAL WHITENING AGENTS	20741	18175	22544	16767	19677
6.	ORGANIC PIGMENT	75082	67274	74335	55595	53932
7.	PIGMENT EMULSION	9685	8596	9310	8320	9101
8.	REACTIVE DYES	156710	132127	161940	117213	136593
9.	SULPHUR DYES (SULPHUR BLACK)	7445	5094	8583	10683	7932
10	VAT DYES	2126	1986	2320	2442	1727
11	FOOD COLOURS	671	493	705	919	778
12	INORGANIC PIGMENTS	16121	14637	18551	16408	17679
	<b>Total</b>	<b>384224</b>	<b>327461</b>	<b>398020</b>	<b>318058</b>	<b>344653</b>

Sl. No.	PRODUCTION REPORT OF PETROCHEMICALS (Product Wise Summary)[in MT]					
<b>A.</b>	<b>SYNTHETIC FIBRE</b>					
	Product	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
1.	ACRYLIC FIBRE	102904	77016	66683	96154	76209
2.	POLYESTER STAPLE FIBREFILL	49888	40296	39041	34134	34950
3.	NYLON FILAMENT YARN	48290	33270	46189	44111	38689
4.	NYLON INDUSTRIAL YARN/TYRE CORD	99749	90289	115474	100607	113287
5.	POLYESTER FILAMENT YARN	2520331	7	3	0	0
6.	POLYESTER STAPLE FIBRE	1027492	909382	116048	116102	102529
7.	POLYPROPYLENE FILAMENT YARN	2516	2168	2805	1923	1924
8.	POLYPROPYLENE STAPLE FIBRE	18815	15336	21246	22231	22413
9.	POLYSTER INDUSTRIAL YARN	14730	12361	14387	13557	14629
10.	Elastomeric/Spandex Filament Yarn	8063	6600	12904	12330	17314
	<b>Total</b>	<b>3892778</b>	<b>3184645</b>	<b>4040006</b>	<b>3972549</b>	<b>3852535</b>
<b>B.</b>	<b>FIBRE INTERMEDIATE</b>					
	Product	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
1.	CAPROLACTUM	84062	80405	108166	129636	114621
2.	MONO EHYLENE GLYCOL	2007778	198198	199016	165619	168366
3.	PURIFIED TEREPTHALIC ACID	3267071	3	2	7	8
	<b>Total</b>	<b>5358911</b>	<b>5059148</b>	<b>5481670</b>	<b>4988034</b>	<b>4956286</b>
<b>C.</b>	<b>POLYMERS</b>					
	Product	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
1.	LOW DENSITY POLYETHYLENE	613287	616613	583038	625090	581723
2.	HIGH DENSITY POLYTHYLENE	1897566	191004	191576	171789	196146
3.	POLYESTYRENE	291720	3	6	8	0
4.	POLYPROPYLENE (INC. CO-POLYMER)	217447	247944	271678	292914	
5.	EXPANDABLE POLYESTYRENE	4982815	491910	524069	477351	537120
6.	POLY VINYL CHLORIDE	110683	0	8	3	0
		110683	87387	97220	108424	118314
		1513592	143411	147186	156559	147235
			9	8	1	7

7.	LINEAR LOW DENSITY POLYTHYLENE	2994026	295891 5	291411 9	242442 1	274996 3
	<b>Total</b>	<b>1240368 9</b>	<b>121436 24</b>	<b>124706 53</b>	<b>114866 15</b>	<b>125479 31</b>
<b>D.</b>	<b>SYNTHETIC RUBBER</b>					
	<b>Product</b>	<b>2019- 2020</b>	<b>2020- 2021</b>	<b>2021- 2022</b>	<b>2022- 2023</b>	<b>2023- 2024</b>
1.	STYRENE BUTADIENE RUBBER	227829	212909	237471	205389	245504
2.	POLY BUTADIENE RUBBER	130251	128547	132821	126109	134692
3.	NITRILE BUTADIENE RUBBER	0	11881	12340	13358	14454
	<b>Total</b>	<b>358080</b>	<b>353337</b>	<b>382632</b>	<b>344856</b>	<b>394650</b>
<b>E.</b>	<b>SYNTHETIC DETERGENT INTERMEDIATES</b>					
	<b>Product</b>	<b>2019- 2020</b>	<b>2020- 2021</b>	<b>2021- 2022</b>	<b>2022- 2023</b>	<b>2023- 2024</b>
1.	LINEAR ALKYL BENZENE	413502	457072	462302	413161	478975
2.	ETHYLENE OXIDE	301181	279365	318086	289862	329391
	<b>Total</b>	<b>714683</b>	<b>736437</b>	<b>780388</b>	<b>703023</b>	<b>808366</b>
<b>F.</b>	<b>PERFORMANCE PLASTICS</b>					
	<b>Product</b>	<b>2019- 2020</b>	<b>2020- 2021</b>	<b>2021- 2022</b>	<b>2022- 2023</b>	<b>2023- 2024</b>
1.	ABS RESIN	136464	121939	122783	148937	167369
2.	NYLON-6	40844	55385	68332	68733	65242
3.	STYRENE ACRYLONITRILE	133785	118613	121747	139067	128864
4.	NYLON 6,6	728	0	0	0	0
5.	POLYESTER CHIPS/PET CHIPS	1344698	120899 0	136592 5	125430 4	104891 3
6.	POLYTETRAFLUOROETHYLEN E(PTFE)	15109	14638	18897	17324	14212
	<b>Total</b>	<b>1671628</b>	<b>151956 5</b>	<b>169768 4</b>	<b>162836 5</b>	<b>142460 0</b>
<b>G.</b>	<b>OLEFINS</b>					
	<b>Product</b>	<b>2019- 2020</b>	<b>2020- 2021</b>	<b>2021- 2022</b>	<b>2022- 2023</b>	<b>2023- 2024</b>
1.	BUTADIENE	481014	458799	477402	429432	509021
2.	ETHYLENE	6466753	636488 8	641452 0	580261 3	605796 5
3.	PROPYLENE	4887618	521575 8	563510 2	506400 0	583397 6
	<b>Total</b>	<b>1183538 5</b>	<b>120394 45</b>	<b>125270 24</b>	<b>112960 45</b>	<b>124009 62</b>
<b>H.</b>	<b>AROMATICS</b>					
	<b>Product</b>	<b>2019- 2020</b>	<b>2020- 2021</b>	<b>2021- 2022</b>	<b>2022- 2023</b>	<b>2023- 2024</b>

1.	BENZENE	1346237	140786 6	142755 0	115659 9	129192 3
2.	MIXED XYLENE	269626	146683	160867	45434	53038
3.	ORTHO-XYLENE	386391	522116	511150	408368	343191
4.	TOLUENE	140160	113985	115656	112502	131727
5.	PARAXYLENE	2782330	261421 3	246194 4	163887 2	141732 6
	<b>Total</b>	<b>4924744</b>	<b>480486 3</b>	<b>467716 7</b>	<b>336177 5</b>	<b>323720 5</b>
<b>I.</b>	<b>OTHER PETROCHEMICALS</b>					
	<b>Product</b>	<b>2019- 2020</b>	<b>2020- 2021</b>	<b>2021- 2022</b>	<b>2022- 2023</b>	<b>2023- 2024</b>
1.	DIETHYLENE GLYCOL	167735	172326	173713	141759	147264
2.	DIACETONE ALCOHOL	6042	2927	5660	3169	6
3.	ETHYLENE DICHLORIDE	345294	326242	366955	398623	380204
4.	BUTANOL	16440	20285	38286	42426	41868
5.	2-ETHYL HEXANOL	48748	49672	91261	90221	101517
6.	VINYL CHLORIDE MONOMER	874468	799219	813082	849305	792330
7.	PBT	6245	6086	7546	7927	7585
8.	POLYCARBONATE	107	0	0	0	0
9.	PROPYLENE OXIDE	34563	44416	49923	49233	45224
10.	PROPYLENE GLYCOL	19508	19705	20543	21323	21200
11.	POLYVINYL ACETATE RESIN	0	2961	7345	9539	15611
12.	UNSATURATED POLYESTER RESIN	16435	12879	16547	19007	24969
13.	METHYL METHACRYLATE	1707	0	0	0	0
14.	ISO-BUTANOL	1712	2071	3969	5784	5821
15.	C4-RAFFINATE	413331	433417	444565	393521	448472
16.	PHTHALIC ANHYDRIDE	269641	292964	339617	330155	342349
17.	ISOPROPANOL	60505	55314	65127	48781	60491
18.	POLYOL	81752	77831	87154	99834	103092
	<b>Total</b>	<b>2364233</b>	<b>231831 5</b>	<b>253129 3</b>	<b>251060 7</b>	<b>253800 3</b>