

S.O.C.
Series C/P-85-1

For Release
March 21, 1985

PRELIMINARY REPORT ON U.S. PRODUCTION OF SELECTED SYNTHETIC ORGANIC CHEMICALS (INCLUDING SYNTHETIC PLASTICS AND RESIN MATERIALS) PRELIMINARY TOTALS, 1984

The Chemicals and synthetic plastics and resin materials covered in this report were selected, with the advice and assistance of industry and Government representatives, on the basis of their economic importance, seasonality, and specified uses. For the purpose of this report, production is defined as the sum of the quantities of each listed item made (a) for consumption in the producing plant, (b) for transfer to other plants of the same company, (c) for sale, and (d) produced under toll agreement. Figures are reported on a 100 percent content basis unless otherwise specified. Where applicable, the statistics include data for materials produced by tar distillers, petroleum refiners, and coke-oven operators.

This report was prepared by Mrs. Sharon Greenfield (202-523-0456).

CHEMICAL	UNIT OF QUANTITY	PRODUCTION	
		Preliminary 1984 ²	Annual 1983
<u>TAR AND TAR CRUDES</u>			
Cresosote Oil (Dead Oil); Distillate as such (100% cresosote basis)-----	1,000 gallons-----	86,050	39,470
<u>BENZENOID CRUDES</u>			
Benzene, (Benzol) (all grades)-----	do-----	1,339,423	1,232,859
Toluene, (all uses)-----	do-----	725,799	779,873
Xylene, (all uses)-----	do-----	850,171	726,072
<u>ALIPHATIC CRUDES</u>			
Alpha olefins (C ₂ and higher)-----	1,000 pounds-----	1,232,731	1,095,226
1,3-Butadiene (grade for rubber)-----	do-----	2,531,376	2,353,372
Ethylene-----	do-----	31,178,392	28,676,842
Propylene-----	do-----	15,469,537	13,958,546
Total:-----	do-----	13,679,300	-
Chemical and polymer grades (90-100%)-----	do-----	1,790,237	-
Other grades (38-89.9%)-----	do-----	-	-
<u>CYCLIC INTERMEDIATES</u>			
Aniline-----	do-----	786,032	663,282
Chlorobenzene, mono-----	do-----	253,126	232,534
Cresylic acid and cresols (including mixtures)-----	do-----	115,546	126,605
Cumene-----	do-----	3,359,880	3,345,143
Cyclohexane-----	do-----	2,129,639	1,656,205
Ethylbenzene-----	do-----	8,613,434	7,875,531
4,4'-Isopropylidenediphenol (Bis-phenol A)-----	do-----	762,138	643,349
Nitrobenzene-----	do-----	-	840,720
Phenol, synthetic-----	do-----	2,845,426	2,637,658
Phthalic anhydride-----	do-----	869,430	838,305
Styrene, monomer-----	do-----	7,706,040	6,801,835
Terephthalic acid, dimethyl ester ⁵ -----	do-----	6,047,033	5,625,692
Toluene 2,4- and 2,6-diisocyanate (80/20 mixtures)-----	do-----	674,260	638,610
o-Xylene-----	do-----	696,492	781,166
p-Xylene-----	do-----	4,268,160	4,113,897
<u>ORGANIC PIGMENTS</u>			
Pigment Yellow 12, C.I. 21090-----	do-----	12,503	13,327
Pigment Yellow 14, C.I. 21095-----	do-----	9,075	3,713

N36683

CHEMICAL	UNIT OF QUANTITY	PRODUCTION	
		Preliminary 1984	Annual 1983
<u>MISCELLANEOUS CYCLIC & ACYCLIC</u> <u>CHEMICALS--Continued</u>			
1,2-yl alcohol, synthetic only, for non-beverage purposes	1,000 pounds	1,108,294	1,077,433
Ethyl 1-hexanol	do	511,801	386,644
Ethylene glycol	do	4,841,837	4,424,515
Ethylene oxide	do	5,957,420	5,534,052
Formaldehyde (37% by weight)	do	5,712,237	5,464,863
Halogenated hydrocarbons:			
Carbon tetrachloride	do	712,084	572,828
Chlorodifluoromethane (F-22) ¹⁰	do	255,132	235,639
Chloroform (Trichloromethane)	do	392,640	362,334
Chloromethane (Methyl chloride)	do	384,386	409,234
Dichlorodifluoromethane (F-12) ¹⁰	do	939,839	289,510
Ethyl chloride (Chloroethane)	do	292,169	281,701
Ethylene dichloride	do	13,730,636	11,506,143
Methylene chloride (Dichloromethane)	do	550,633	583,961
Perchloroethylene (Tetrachloroethylene)	do	508,727	546,958
1,1,1-Trichloroethane (Methylchloroform)	do	667,949	586,400
Trichlorofluoromethane (F-11) ¹¹	do	185,186	214,794
Vinyl chloride, monomer (Chloroethylene)	do	7,513,075	1,209,412
Isopropyl alcohol	do	1,146,815	6,875,437
Maleic anhydride	do	360,525	298,965
Methanol (synthetic)	do	8,279,984	7,981,771
Methyl ethyl ketone (2-Butanone)	do	556,068	531,395
Methyl methacrylate	do	905,913	843,617
Pentaerythritol	do	119,192	103,346
Propylene glycol	do	487,334	483,976
Vinyl acetate, monomer	do	2,023,273	1,962,579

¹A Toll agreement is an agreement between two firms, under which one firm furnishes the raw materials and pays the processing cost and the other firm prepares the finished product and returns it to the first firm. ²Revised. Data for these chemicals may be partially estimated either by the staff of the Energy and Chemicals Division or by the reporting company, therefore, this column does not necessarily indicate actual production data for this month. ³Totals are constantly revised as new and corrected information is received from reporting companies, hence they may not equal the sum of the monthly figures. ⁴The figures for terephthalic acid (DMT) are intended to include both the acid itself and the dimethyl ester without double counting. The acid figures are multiplied by the factor 1.16 to convert them to equivalent DMT. ⁵Billion international units. ⁶Data is in thousands of pounds. ⁷LDPE includes homopolymers of ethylene, copolymers containing 50 percent or more of ethylene, as well as linear low density polyethylene, LLDPE. ⁸The sales figures from the 1983 annual report were misstated. The correct sales quantity of F-22 is 168,322 thousand pounds, valued at 182,938 thousand dollars. ⁹Production, sales quantity and value from the 1983 annual report were misstated. The correct production figure for F-12 is 298,609 thousand pounds. The sales quantity is 294,116 thousand pounds, valued at 180,776 thousand dollars. ¹⁰Production, sales quantity and value from the 1983 annual report were overstated. The correct production figure for F-11 is 161,356 thousand pounds. The sales quantity is 156,356 thousand pounds, valued at 77,858 thousand dollars.

Note.--Data contained in this report are compiled primarily from Commission's questionnaires sent to domestic producers and represent the best data available to the Commission. While the data supplied in the questionnaires are checked against data previously supplied by the submitting firm and with data supplied by other domestic producers, data are not independently verified by direct Commission examination of the books of companies furnishing information. Data contained in this report should not be used for investment and other purposes without independent verification.

Note.--Schedule of release date for subsequent monthly "C/P" reports:

Data for:

Will be mailed:

MISCELLANEOUS
CHEMICALS
Ethyl alcohol

CHEMICAL	UNIT OF QUANTITY	PRODUCTION	
		Preliminary 1984 ²	Annual 1984
<u>ORGANIC PIGMENTS--Continued</u>			
Pigment Blue 15, all forms, C.I. 74160-----	-1,000 pounds--	11,433	12,212
Pigment Red 49:1, Barium toner, C.I. 15630-----	do-----	6,494	4,241
Pigment Red 53:1, (barium), C.I. 15585-----	do-----	4,858	4,751
Pigment Green 7, C.I. 74260-----	do-----	-	1,995
<u>MEDICINALS AND CHEMICALS (BULK)</u>			
Acetaminophen (N-Acetyl-p-aminophenol)-----	do-----	-	-
Acetylsalicylic acid (Aspirin)-----	do-----	30,865	30,748
Choline chloride, all grades-----	do-----	54,031	52,806
Penicillins, other than semi-synthetic-----	B. I. U. ⁶ -----	-	6,067
Tetracyclines and derivatives-----	-1,000 pounds--	-	7,203
<u>PLASTICS AND RESIN MATERIALS</u>			
Phenolic and other tar acid resins-----	do-----	1,470,483	1,459,605
Polyamide resins, nylon type-----	do-----	309,886	288,404
Polyethylene and copolymers:			
LDPE (Specific gravity 0.940 and below) ⁸ -----	do-----	8,159,232	8,296,651
HDPE (Specific gravity over 0.940)-----	do-----	6,462,712	5,593,636
Polypropylene-----	do-----	4,960,745	4,456,919
Polyvinyl chloride and copolymers-----	do-----	6,957,602	6,256,089
Styrene polymers and copolymers:			
ABS resins-----	do-----	1,106,806	1,053,841
Other (including SAN resins)-----	do-----	4,754,548	5,200,190
<u>PLASTICIZERS</u>			
Diisodecyl phthalate-----	do-----	140,944	157,986
Diocetyl phthalate-----	do-----	291,727	300,188
<u>MISCELLANEOUS END-USE CHEMICALS AND CHEMICAL PRODUCTS</u>			
Acrylonitrile polymers and copolymer for fiber-----	do-----	621,043	604,204
Methyl-t-butyl ether-----	do-----	1,469,450	838,687
Nylon 6 and 6/6 polymer for fiber-----	do-----	2,031,937	1,978,294
Polyethylene terephthalate-----	do-----	2,415,075	2,239,334
<u>MISCELLANEOUS CYCLIC & ACYCLIC CHEMICALS</u>			
Acetic acid-----	do-----	2,541,774	2,806,677
Acetone-----	do-----	1,986,985	1,858,544
Acrylic acid-----	do-----	385,753	733,505
Acrylonitrile-----	do-----	2,201,333	2,146,248
Alcohols, C ₁₂ and higher (detergent range)-----	do-----	755,159	-
2-Butoxyethanol (Ethylene glycol monobutyl monobutyl ether)-----	do-----	286,041	240,357
n-Butyl alcohol-----	do-----	918,169	883,718
Caprolactam (2-Oxohexamethylenimine)-----	do-----	1,026,959	976,906
Diethylene glycol-----	do-----	548,376	462,514
Ethanolamines (Mono-, di-, & tri-)-----	do-----	513,635	467,995
2-Ethoxyethanol (Ethylene glycol monoethyl ether)-----	do-----	-	187,490
Ethyl acetate (85%)-----	do-----	193,453	212,950