

Synthetic Organic Dye and Pigment Manufacturing: 2002

Issued December 2004

EC02-311-325132 (RV)

2002 Economic Census

Manufacturing

Industry Series



U S C E N S U S B U R E A U

Helping You Make Informed Decisions

U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU



CONTENTS

Introduction to the Economic Census	v
Manufacturing	ix
Tables	
1. Historical Statistics for the Industry: 2002 and Earlier Years ...	1
2. Industry Statistics for Selected States: 2002	2
3. Detailed Statistics by Industry: 2002	3
4. Industry Statistics by Employment Size: 2002.....	4
5. Industry Statistics by Primary Product Class Specialization: 2002	5
6a. Products Statistics: 2002 and 1997	6
6b. Product Class Shipments for Selected States: 2002 and 1997 .	7
7. Materials Consumed by Kind: 2002 and 1997.....	8
Appendixes	
A. Explanation of Terms	A-1
B. NAICS Codes, Titles, and Descriptions	B-1
C. Methodology.....	C-1
D. Geographic Notes	--
E. Metropolitan and Micropolitan Statistical Areas	--
F. Comparability of Product Classes and Product Codes: 2002 to 1997.....	F-1

-- Not applicable for this report.

Table 1. Historical Statistics for the Industry: 2002 and Earlier Years

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry and year ¹	Com- panies ²	All estab- lish- ments ³	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
			Number ⁴	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
325132, Synthetic organic dye and pigment manufacturing	97	123	7 674	382 897	4 432	9 528	185 279	1 419 644	1 392 173	2 825 877	74 865
2002..	N	N	9 044	403 956	5 659	13 241	204 032	1 117 108	1 591 590	2 762 517	113 142
2001..	N	N	9 337	422 236	5 331	11 417	216 402	1 487 146	1 507 376	2 956 598	118 149
2000..	N	N	8 872	389 901	5 236	11 282	198 987	1 370 699	1 367 558	2 717 745	80 828
1999..	N	N	8 440	378 968	4 662	9 781	193 566	1 403 335	1 273 733	2 650 229	82 520
1998..	N	N	8 689	388 021	4 883	10 600	200 980	1 330 646	1 328 769	2 693 356	128 147
1997..	95	123									

¹Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

²For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

³Includes establishments with payroll at any time during the year.

⁴Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 2. Industry Statistics for Selected States: 2002

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

Industry and geographic area	All establishments ²			All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
	E ¹	Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
325132, Synthetic organic dye and pigment manufacturing												
United States.....	1	123	62	7 674	382 897	4 432	9 528	185 279	1 419 644	1 392 173	2 825 877	174 865
Illinois.....	2	6	3	232	11 384	169	396	7 194	37 422	41 947	79 491	714
North Carolina.....	-	9	5	533	28 471	334	683	16 174	167 472	190 421	373 882	17 451
Ohio.....	1	11	5	912	48 143	538	1 161	25 409	115 053	205 833	321 024	18 616
Pennsylvania.....	-	9	4	482	25 038	274	600	12 101	75 089	41 545	112 990	13 471

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1-10 to 19 percent; 2-20 to 29 percent; 3-30 to 39 percent; 4-40 to 49 percent; 5-50 to 59 percent; 6-60 to 69 percent; 7-70 to 79 percent; 8-80 to 89 percent; 9-90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 3. Detailed Statistics by Industry: 2002

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
325132, Synthetic organic dye and pigment manufacturing	
Companies ¹	number.. 97
All establishments ²	number.. 123
Establishments with 1 to 19 employees	number.. 61
Establishments with 20 to 99 employees	number.. 36
Establishments with 100 employees or more	number.. 26
All employees ³	number.. 7 674
Total compensation	\$1,000.. 487 273
Annual payroll	\$1,000.. 382 897
Total fringe benefits	\$1,000.. 104 376
Production workers, average for year	number.. 4 432
Production workers on March 12	number.. 4 431
Production workers on May 12	number.. 4 396
Production workers on August 12	number.. 4 414
Production workers on November 12	number.. 4 451
Production worker hours	1,000.. 9 528
Production worker wages	\$1,000.. 185 279
Total cost of materials	\$1,000.. 1 392 173
Materials, parts, containers, packaging, etc., used	\$1,000.. 1 217 987
Resales	\$1,000.. 67 569
Purchased fuels	\$1,000.. 42 465
Purchased electricity	\$1,000.. 40 295
Contract work	\$1,000.. 23 857
Quantity of electricity purchased for heat and power	1,000 kWh.. 734 400
Quantity of electricity generated less sold for heat and power	1,000 kWh.. D
Total value of shipments	\$1,000.. 2 825 877
Primary products value of shipments	\$1,000.. 2 380 610
Secondary products value of shipments	\$1,000.. 351 384
Total miscellaneous receipts	\$1,000.. 93 883
Value of resales	\$1,000.. D
Contract receipts	\$1,000.. D
Other miscellaneous receipts	\$1,000.. D
Primary products specialization ratio	percent.. 87
Value of primary products shipments made in all industries	\$1,000.. 2 512 792
Value of primary products shipments made in this industry	\$1,000.. 2 380 610
Value of primary products shipments made in other industries	\$1,000.. 132 182
Coverage ratio	percent.. 95
Value added	\$1,000.. 1 419 644
Total inventories, beginning of year	\$1,000.. 485 046
Finished goods inventories	\$1,000.. 295 807
Work-in-process inventories	\$1,000.. 67 564
Materials and supplies inventories	\$1,000.. 121 675
Total inventories, end of year	\$1,000.. 469 618
Finished goods inventories	\$1,000.. 271 841
Work-in-process inventories	\$1,000.. 77 470
Materials and supplies inventories	\$1,000.. 120 307
Gross value of depreciable assets (acquisition costs) at beginning of year	\$1,000.. '2 734 708
Total capital expenditures (new and used)	\$1,000.. '74 865
Buildings and other structures (new and used)	\$1,000.. '8 733
Machinery and equipment (new and used)	\$1,000.. '66 132
Automobiles, trucks, etc., for highway use	\$1,000.. '1 134
Computers and peripheral data processing equipment	\$1,000.. '3 736
All other expenditures for machinery and equipment	\$1,000.. '61 262
Total retirements	\$1,000.. '78 489
Gross value of depreciable assets at end of year	\$1,000.. '2 731 084
Depreciation charges during year	\$1,000.. '161 886
Total rental payments	\$1,000.. 26 099
Buildings and other structures	\$1,000.. 7 442
Machinery and equipment	\$1,000.. 18 657
Total other expenses ⁴	\$1,000.. 195 842
Response coverage ratio ⁵	percent.. 62
Repair and maintenance services of buildings and/or machinery ⁴	\$1,000.. 24 651
Communications services ⁴	\$1,000.. 10 844
Legal services ⁴	\$1,000.. 3 876
Accounting, auditing, and bookkeeping services ⁴	\$1,000.. 2 433
Advertising and promotional services ⁴	\$1,000.. 2 532
Expensed computer hardware and supplies and purchased computer services ⁴	\$1,000.. 2 786
Refuse removal (including hazardous waste) services ⁴	\$1,000.. 7 224
Management consulting and administrative services ⁴	\$1,000.. 5 275
Taxes and license fees ⁴	\$1,000.. 12 722
All other expenses ⁴	\$1,000.. 123 231

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Based on 2002 Annual Survey of Manufactures (ASM) sample data.

⁵A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 4. Industry Statistics by Employment Size: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class	E ¹	All establishments ²	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
325132, Synthetic organic dye and pigment manufacturing											
All establishments	1	123	7 674	382 897	4 432	9 528	185 279	1 419 644	1 392 173	2 825 877	'74 865
Establishments with—											
1 to 4 employees	8	30	68	2 804	39	63	1 243	9 644	6 879	16 530	'577
5 to 9 employees	3	14	c	D	D	D	D	D	D	D	D
10 to 19 employees	5	17	232	11 642	126	257	4 809	41 121	42 255	82 600	'1 760
20 to 49 employees	4	20	614	26 542	380	762	13 937	171 359	136 874	299 245	'3 758
50 to 99 employees	—	16	1 141	60 041	743	1 351	36 071	312 260	304 045	634 049	'10 577
100 to 249 employees	—	18	2 610	133 885	1 430	2 934	59 208	409 499	400 152	809 616	'29 668
250 to 499 employees	—	7	2 345	107 516	1 351	3 308	51 593	347 624	400 408	745 666	'19 956
500 to 999 employees	—	f	D	D	D	D	D	D	D	D	D
1,000 to 2,499 employees	—	—	—	—	—	—	—	—	—	—	—
2,500 employees or more	—	—	—	—	—	—	—	—	—	—	—
Administrative records ⁴	9	36	156	6 952	93	175	3 328	23 094	18 927	41 976	'1 388

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 5. Industry Statistics by Primary Product Class Specialization: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry or product class code	Industry or primary product class	All establishments ¹	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ²	Payroll (\$1,000)	Number ²	Hours (1,000)	Wages (\$1,000)				
325132	Synthetic organic dye and pigment manufacturing	123	7 674	382 897	4 432	9 528	185 279	1 419 644	1 392 173	2 825 877	'74 865
3251321	Synthetic organic dyes	35	2 287	119 139	1 276	2 506	52 525	539 522	468 807	1 007 367	'27 342
3251324	Synthetic organic pigments, lakes, and toners	39	4 988	246 259	2 918	6 567	124 454	833 211	879 876	1 724 948	'44 520

¹Includes establishments with payroll at any time during the year.

²Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6a. Products Statistics: 2002 and 1997

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
325132	Synthetic organic dye and pigment manufacturing	2002.. N 1997.. N	X X	X X	2 512 792 2 746 542
3251321	Synthetic organic dyes	2002.. N 1997.. N	X X	X X	980 191 1 060 777
32513211	Synthetic organic dyes	2002.. N 1997.. N	X X	X X	980 191 1 060 777
3251321100	Synthetic organic dyes	2002.. 37 1997.. 52	X X	X X	980 191 1 060 777
3251324	Synthetic organic pigments, lakes, and toners	2002.. N 1997.. N	X X	X X	1 452 531 1 623 765
32513241	Synthetic organic pigments, lakes, and toners	2002.. N 1997.. N	X X	X X	1 452 531 1 623 765
3251324100	Synthetic organic pigments, lakes, and toners	2002.. 34 1997.. 52	X X	X X	1 452 531 1 623 765
325132W	Synthetic organic dye and pigment manufacturing, nsk, total	2002.. N 1997.. N	X X	X X	80 070 62 000
325132WY	Synthetic organic dye and pigment manufacturing, nsk, total	2002.. N 1997.. N	X X	X X	80 070 62 000
325132WYWW	Synthetic organic dye and pigment manufacturing, nsk, for nonadministrative-record establishments	2002.. N 1997.. N	X X	X X	38 703 9 487
325132WYWY	Synthetic organic dye and pigment manufacturing, nsk, for administrative-record establishments	2002.. N 1997.. N	X X	X X	41 367 52 513

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6b. Product Class Shipments for Selected States: 2002 and 1997

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 2002. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographic definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS product class code	Product class and geographic area	Value of product shipments (\$1,000)
3251321	Synthetic organic dyes	
	United States.....	2002.. 980 191 1997.. 1 060 777
	North Carolina.....	2002.. 311 886 1997.. 119 149
	Ohio.....	2002.. 17 230 1997.. N
3251324	Synthetic organic pigments, lakes, and toners	
	United States.....	2002.. 1 452 531 1997.. 1 623 765
	Ohio.....	2002.. 274 926 1997.. 345 978

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 7. Materials Consumed by Kind: 2002 and 1997

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Material code	Material consumed	Quantity	Delivered cost (\$1,000)
325132	Synthetic organic dye and pigment manufacturing		
00900001	Total materials	X	1 217 987
	..... 2002..	X	1 165 180
	..... 1997..		
32518807	Hydrochloric acid (100 percent HCl)..... 1,000 s tons	25.6	2 685
	..... 2002..	41.2	4 345
	..... 1997..		
32531101	Nitrogenous fertilizers, nitric acid (100 percent HNO ₃)	D	D
	..... 1,000 s tons	D	D
	..... 2002..		
	..... 1997..		
32518805	Sulfuric acid, excluding spent (100 percent H ₂ SO ₄)	P37.8	2 648
	..... 1,000 s tons	13 426.8	4 534
	..... 2002..		
	..... 1997..		
32531103	Nitrogenous fertilizers, ammonia, synthetic anhydrous (100 percent NH ₃) .....	.5	130
	..... 1,000 s tons	D	D
	..... 2002..		
	..... 1997..		
32518107	Sodium hydroxide (caustic soda)(100 percent NaOH)	P50.6	7 456
	..... 1,000 s tons	116.8	14 766
	..... 2002..		
	..... 1997..		
32500071	All other industrial inorganic chemicals	X	92 762
	..... 2002..		
	..... 1997..		
32519300	Ethyl alcohol, pure and denatured	X	217 614
	..... 2002..		
	..... 1997..		
32510067	Other alcohols (including amyl, butyl, methyl, and propyl)	X	D
	..... 2002..		1 688
	..... 1997..		1 397
	..... 1997..		2 417
32519213	Toluene and xylene (100 percent basis)	2.4	708
	..... mil lb	4.7	1 195
	..... 2002..		
	..... 1997..		
32519233	Other cyclic crudes and intermediates	S	198 943
	..... mil lb		178 903
	..... 2002..		
	..... 1997..		
325100A5	All other miscellaneous synthetic organic chemicals	X	258 432
	..... 2002..		302 496
	..... 1997..		
21111013	Natural gas used as a raw material	S	4 343
	..... bil cu ft	D	D
	..... 2002..		
	..... 1997..		
00190012	Other hydrocarbons used as raw materials or feedstocks	X	1 679
	..... 2002..		
	..... 1997..		
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	D
	..... 2002..		7 814
	..... 1997..		
11100033	Agricultural products, crude (including flowers, grains, seeds, herbs, etc.)	X	D
	..... 2002..		D
	..... 1997..		
33300015	Parts and attachments for machinery and equipment	X	7 327
	..... 2002..		
	..... 1997..		
32221001	Paperboard containers, boxes, and corrugated paperboard	X	4 889
	..... 2002..		6 588
	..... 1997..		9 727
33240000	Metal containers	X	11 602
	..... 2002..		
	..... 1997..		
00970099	All other materials and components, parts, containers, and supplies	X	9 811
	..... 2002..		446 096
	..... 1997..		262 443
00971000	Materials, ingredients, containers, and supplies, nsk	X	154 389
	..... 2002..		110 780
	..... 1997..		

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.