



TOP 75

ANNUAL RANKING

CHEMICAL PRODUCERS

Surging feedstock prices are evident, but otherwise there were few changes in the rankings of U.S. chemical makers during 2000

ALEXANDER H. TULLO, C&EN NORTHEAST NEWS BUREAU

A YEAR AGO, C&EN WAS EXPECTING ITS LIST OF THE Top 75 U.S. chemical producers for 2000 to be somewhat dramatic. At the time, it looked like Dow plus Union Carbide could very well equal more than DuPont—excluding DuPont's pharmaceuticals and Pioneer Seed business. A year ago, C&EN even predicted that the two U.S. chemical companies would be "neck and neck" when their 2000 results came out.

C&EN had good reason to think this. Dow Chemical promised, over and over, that it would complete its deal to merge with Union Carbide in 2000.

Alas, C&EN called it a little too early, and DuPont still tops the list with a lead of more than \$5 billion.

The question of how best to combine the polyethylene technology holdings of Dow and Union Carbide made the deal one of the most complex that the U.S. Federal Trade Commission ever grappled with. Even the Dow executives who were involved in the negotiations and were mak-

Movers and shakers

High raw material costs left the biggest mark on the Top 75 this year

RANK	RANK		CHEMICAL	CHANGE	CHEMICAL		CHEMICAL	CHANGE	CHEMICAL	OPERATING	IDENTIFIABLE	CHEMICAL	OPERATING
2000	1999		SALES	FROM	SALES AS	INDUSTRY	OPERATING	FROM	% OF TOTAL	% OF TOTAL	CHEMICAL	ASSETS AS	RETURN ON
			(\$ MILLIONS)	1999	% OF TOTAL	CLASSIFICATION	PROFITS ^a	1999	OPERATING	OPERATING	ASSETS	% OF TOTAL	CHEMICAL
			2000		SALES		(\$ MILLIONS)		PROFIT	MARGIN ^b	(\$ MILLIONS)	ASSETS	ASSETS ^c
1	1	DuPont	\$28,406.0	2.6%	89.2%	Diversified	na	na	na	na	\$20,245.0	69.5%	na
2	2	Dow Chemical	23,008.0	15.1	100.0	Basic chemicals	\$2,266.0	0.9%	100.0%	9.8%	27,645.0	100.0	8.2%
3	3	ExxonMobil ^d	21,543.0	35.1	9.3	Petroleum	1,161.0	-14.3	6.9	5.4	na	na	na
4	4	Huntsman Corp.	8,000.0	0.0	100.0	Basic chemicals	na	na	na	na	na	na	na
5	6	General Electric ^{e,f}	7,776.0	12.0	6.0	Diversified	1,923.0	16.5	15.1	24.7	9,561.0	2.2	20.1
6	7	BASF	7,756.6	16.5	100.0	Basic chemicals	na	na	na	na	na	na	na
7	20	Chevron Phillips	7,633.0	30.3	100.0	Basic chemicals	na	na	na	na	6,673.0	100.0	na
8	10	Equistar	7,495.0	37.9	100.0	Basic chemicals	334.0	106.2	100.0	4.5	6,582.0	100.0	5.1
9	8	Union Carbide	6,526.0	11.2	100.0	Basic chemicals	596.0	-29.9	100.0	9.1	8,346.0	100.0	7.1
10	9	PPG Industries	6,279.0	14.1	72.8	Diversified	859.0	22.9	72.7	13.7	5,813.0	63.7	14.8
11	16	Shell Oil	6,265.0	38.0	21.1	Petroleum	37.0	-87.7	1.2	0.6	4,630.0	14.1	0.8
12	11	Rohm and Haas	6,004.0	21.7	87.3	Basic chemicals	na	na	na	na	9,215.0	81.8	na
13	15	Eastman Chemical	5,292.0	15.3	100.0	Basic chemicals	562.0	178.2	100.0	10.6	6,550.0	100.0	8.6
14	13	Air Products ^g	5,238.3	12.6	95.8	Basic chemicals	896.5	30.0	98.2	17.1	7,741.2	93.6	11.6
15	5	BP	5,100.0	-28.2	7.3	Petroleum	na	na	na	na	na	na	na
16	14	Praxair	5,043.0	8.7	100.0	Basic chemicals	1,220.0	1.8	100.0	24.2	7,762.0	100.0	15.7
17	32	TotalfinaElf	4,800.0	166.7	100.0	Basic chemicals	na	na	na	0.0	na	na	na
18	18	Honeywell	4,055.0	1.2	16.2	Diversified	334.0	-23.9	9.2	8.2	na	na	na
19	19	Lyondell	4,036.0	9.3	100.0	Basic chemicals	440.0	-12.7	100.0	10.9	6,448.0	100.0	6.8
20	—	Nova Chemicals	3,916.0	39.5	100.0	Basic chemicals	720.0	50.6	100.0	18.4	4,688.0	100.0	15.4
21	12	Monsanto	3,885.0	8.3	70.7	Agrochemicals	1,099.0	22.5	212.2	28.3	6,104.0	52.1	18.0
22	23	Occidental Petroleum	3,795.0	24.9	28.0	Petroleum	176.0	-563.2	5.8	4.6	3,645.0	18.8	4.8
23	17	ICI Americas	3,314.1	-20.4	100.0	Specialty chemicals	291.1	-14.7	100.0	8.8	na	na	na
24	22	Akzo Nobel	3,313.1	-0.1	100.0	Basic chemicals	231.3	-0.8	100.0	7.0	2,081.3	100.0	11.1
25	24	Solutia	3,185.0	12.5	100.0	Basic chemicals	57.0	-80.8	100.0	1.8	3,581.0	100.0	1.6
26	21	Hercules	3,152.0	-3.0	100.0	Basic chemicals	478.0	-21.1	100.0	15.2	5,309.0	100.0	9.0
27	35	Degussa	2,986.0	71.8	100.0	Basic chemicals	na	na	na	na	na	na	na
28	26	Celanese	2,786.2	9.3	100.0	Basic chemicals	na	na	na	na	na	na	na
29	25	Dow Corning	2,750.9	5.7	100.0	Specialty chemicals	231.1	0.5	100.0	8.4	6,470.7	100.0	3.6
30	33	Crompton	2,728.0	51.9	89.8	Specialty chemicals	351.6	33.2	93.5	12.9	3,405.6	96.5	10.3
31	—	Ondeo Nalco	2,400.0	na	100.0	Specialty chemicals	na	na	na	na	na	na	na
32	30	Potash Corp.	2,231.6	8.3	100.0	Fertilizers	371.8	27.3	100.0	16.7	4,145.7	100.0	9.0
33	28	IMC Global	2,095.9	-11.5	100.0	Agrochemicals	229.4	-27.9	100.0	10.9	4,261.6	100.0	5.4
34	29	FMC	2,059.1	-5.3	52.5	Machinery	294.7	4.4	67.6	14.3	2,395.8	64.0	12.3
35	31	Ciba Specialty Chemicals	2,025.0	7.6	100.0	Specialty chemicals	na	na	na	na	1,190.0	100.0	na
36	37	Engelhard	1,887.7	11.1	34.3	Diversified	298.5	10.1	69.8	15.8	1,857.9	70.2	16.1
37	39	Millennium	1,793.0	12.8	100.0	Basic chemicals	326.0	19.4	100.0	18.2	2,460.0	100.0	13.3
38	36	Lubrizol	1,775.8	1.9	100.0	Specialty chemicals	178.8	-19.2	100.0	10.1	1,659.5	100.0	10.8
39	—	Formosa	1,700.0	na	na	Basic chemicals	na	na	na	na	na	na	na
40	42	Great Lakes Chemical	1,670.5	14.9	100.0	Specialty chemicals	203.6	12.9	100.0	12.2	2,134.4	100.0	9.5
41	41	W.R. Grace	1,597.4	8.5	100.0	Specialty chemicals	254.7	56.5	100.0	15.9	2,584.9	100.0	9.9
42	58	Georgia Gulf	1,581.6	84.4	100.0	Basic chemicals	168.0	63.4	100.0	10.6	1,041.0	100.0	16.1
43	48	Rhodia	1,568.0	51.9	100.0	Specialty chemicals	na	na	na	na	na	na	na
44	—	Solvay	1,528.0	2.9	73.5	Basic chemicals	na	na	na	na	na	na	na
45	40	Cabot ^g	1,517.0	12.0	100.0	Basic chemicals	157.0	38.9	100.0	10.3	2,134.0	100.0	7.4
46	43	Cytec Industries	1,492.5	5.7	100.0	Specialty chemicals	189.0	-3.7	100.0	12.7	1,719.4	100.0	11.0
47	68	Ferro	1,447.3	6.8	100.0	Specialty chemicals	154.4	0.5	100.0	10.7	1,127.0	100.0	13.7
48	44	H. B. Fuller ^h	1,352.6	-0.9	100.0	Specialty chemicals	102.2	-15.5	100.0	7.6	1,010.4	100.0	10.1
49	45	Ashland ^g	1,283.0	1.6	16.1	Petroleum	95.0	-11.2	14.2	7.4	888.0	13.1	10.7
50	—	Shin-Etsu ⁱ	1,267.5	-2.7	100.0	Basic chemicals	138.2	-18.3	100.0	10.9	2,136.3	100.0	6.5
51	53	Kerr-McGee	1,261.0	36.2	30.6	Petroleum	185.0	44.5	11.2	14.7	1,643.0	21.4	11.3
52	50	DSM	1,192.6	25.3	100.0	Basic chemicals	na	na	na	na	na	na	na
53	46	BFGoodrich	1,167.7	-4.1	21.1	Diversified	119.1	-20.8	14.3	10.2	1,380.2	24.1	8.6
54	52	Goodyear	1,129.7	21.7	9.9	Rubber products	64.2	-46.0	11.8	5.7	742.9	5.5	8.6
55	51	Wellman	1,116.7	19.4	100.0	Basic chemicals	540.8	2,972.7	100.0	48.4	1,334.1	100.0	40.5

Top 75 ranking—continued

RANK 2000	RANK 1999	COMPANY	CHEMICAL SALES (\$ MILLIONS) 2000	CHANGE FROM 1999	CHEMICAL SALES AS % OF TOTAL SALES	INDUSTRY CLASSIFICATION	CHEMICAL OPERATING PROFITS ^a (\$ MILLIONS)	CHANGE FROM 1999	CHEMICAL OPERATING PROFITS AS % OF TOTAL OPERATING PROFIT	IDENTIFIABLE CHEMICAL ASSETS (\$ MILLIONS)	CHEMICAL ASSETS AS % OF TOTAL ASSETS	OPERATING RETURN ON CHEMICAL ASSETS ^c
56	47	CF Industries	\$1,100.9	0.6%	100.0%	Agrochemicals	\$-63.6	-4.2%	100.0%	\$1,512.6	100.0%	-4.2%
57	64	Sterling Chemicals	1,078.4	49.6	100.0	Basic chemicals	101.6	20,220.0	100.0	701.2	100.0	14.5
58	54	Clariant	1,062.9	18.2	100.0	Specialty chemicals	59.8	19.6	100.0	834.9	100.0	7.2
59	63	Terra Industries	1,001.2	34.5	100.0	Agrochemicals	42.8	-167.9	100.0	1,512.6	100.0	2.8
60	49	Farmland Industries ^j	979.2	-2.3	8.0	Agricultural supplies	-17.5	-45.3	-14.2	596.4	18.2	-2.9
61	57	Arch Chemicals	941.2	7.0	100.0	Basic chemicals	60.5	-0.2	100.0	1,073.6	100.0	5.6
62	55	NL Industries	922.3	1.5	100.0	Basic chemicals	212.5	45.8	100.0	1,120.8	100.0	19.0
63	59	Albemarle	917.5	8.5	100.0	Specialty chemicals	142.0	24.5	100.0	981.8	100.0	14.5
64	34	Cognis	910.0	-49.0	100.0	Specialty chemicals	na	na	na	na	na	na
65	56	International Paper	845.0	-4.5	3.0	Basic chemicals	na	na	na	na	na	na
66	60	Ethyl	820.9	-2.7	100.0	Basic chemicals	53.0	-51.3	100.0	1,001.6	100.0	5.3
67	61	Int. Spec. Products	783.9	-0.4	100.0	Specialty chemicals	112.0	-27.3	100.0	1,960.3	100.0	5.7
68	70	Sunoco	730.0	37.7	5.2	Petroleum	57.0	16.3	7.3	709.0	13.1	8.0
69	66	Alcoa	702.7	14.4	3.1	Nonferrous metals	na	na	na	na	na	na
70	65	Stepan	698.9	4.8	100.0	Specialty chemicals	32.0	-23.4	100.0	415.0	100.0	7.7
71	67	Vulcan	605.8	11.1	24.3	Nonmetallic minerals	-20.1	-177.9	-5.7	634.5	19.7	-3.2
72	69	Phelps Dodge	598.4	10.2	13.2	Diversified	88.1	-20.1	29.9	768.6	9.8	11.5
73	71	Sigma Aldrich ^e	548.2	5.6	50.0	Specialty chemicals	na	na	na	na	na	na
74	72	Borden	491.1	21.9	100.0	Basic chemicals	37.0	-15.1	100.0	388.8	100.0	9.5
75	73	Mississippi Chemical ^k	485.2	3.7	100.0	Basic chemicals	-19.6	-330.6	100.0	870.7	100.0	-2.3

^a Operating profit is sales less administrative expenses and cost of sales. ^b Chemical operating profit as a percentage of sales. ^c Chemical operating profit as a percentage of identifiable assets. ^d Profits and profitability ratios are after tax. ^e Excludes sales of chemicals not actually manufactured by the company. ^f Chemical sales include a significant amount of nonchemical products. ^g Fiscal year ended Sept. 30. ^h Fiscal year ended Dec. 2. ⁱ Fiscal year ended Mar. 31. ^j Fiscal year ended Aug. 31. ^k Fiscal year ended June 30. **na** = not available.

ing the promises throughout the year had little idea that the talks would drag on until the deal closed on Feb. 6.

Because C&EN can't retroactively combine the two companies for 2000, Dow and Carbide are still separate, according to our list.

But if C&EN did break the rules, it would have listed Dow's sales at \$29.5 billion, ahead of DuPont by \$1.1 billion. That is still pretty close—way too close for C&EN to make any kind of prediction for next year. Perhaps DuPont will make acquisitions that will change the picture.

Maybe natural gas and energy prices will drop and take petrochemical prices with them, affecting Dow more than DuPont for the full year. Having learned our lesson, C&EN will avoid making any more predictions—at least for awhile.

It is worth noting that Dow had the highest operating profits of any of the companies reporting. However, DuPont does not report earnings before taxes, depreciation, one-time items, and other charges on each of its segments, so it is excluded from this comparison.

Mergers and acquisitions usually leave

the biggest mark on the Top 75 list. They account for companies moving up or down the ranks and disappearing from the list altogether, especially when two companies that were on the list—like Dow and Carbide or Exxon and Mobil—combine.

This year, deals haven't affected the list much. The most noticeable change is the increase in revenues at many companies. Even with the U.S. economic slowdown that began toward the end of the year, the combined sales of the companies on our list hit \$262.4 billion, a 16% jump since last year. This increase is mostly due to higher

THE BIG LIST

Compiling The Top 75

C&EN ranks the Top 75 U.S. chemical producers by chemical sales, defined as sales of chemical and allied products, except pharmaceuticals. Ranking the companies by chemical sales is the only way that privately held companies, some diversified producers, and the U.S. operations of many foreign-owned producers can be included. However, because chemical sales are derived

from company annual reports, nonchemical products often creep in. For instance, GE Plastics' results include Lexan polycarbonate sheet and other finished plastic products.

Also, C&EN does not restate prior-year results, except when a company changes accounting procedures. Thus, Cognis is posting a large decrease because last year it was counted as its parent company, Henkel.

Nor does C&EN routinely restate prior-year rankings, and in the case of mergers and acquisitions, the ranking of the surviving company is used.

C&EN tries to treat the chemical operations of foreign-owned companies the same as it treats those of U.S.-owned companies—that is, chemical sales that are administered by the U.S. headquarters. But if the U.S. headquarters has responsibility for the products, they can go anywhere in the world. BASF's results, therefore, might be

below readers' expectations because they do not represent the sales of all of BASF AG. A comparison of total global operations of chemical producers is scheduled to appear in the July 23 issue of C&EN.

To compile the information included for the Top 75 U.S. chemical producers, C&EN uses, for the most part, official company documents such as annual reports and 10K filings with the Securities & Exchange Commission. For privately held companies and some foreign producers, company interviews are used.

The ABCs of the chemical industry

The Top 75 in terms of chemical sales, operating profits, assets, and profitability

\$ MILLIONS	CHEMICAL SALES			CHEMICAL OPERATING PROFITS			CHEMICAL OPERATING PROFIT MARGIN			IDENTIFIABLE CHEMICAL ASSETS			RETURN ON CHEMICAL ASSETS		
	2000	RANK		2000	RANK		2000	RANK		2000	RANK		2000	RANK	
Air Products	\$5,238.3	14	13	\$896.5	6	7	17.1%	7	10	\$7,741.2	7	10	11.6%	14	25
Akzo Nobel	3,313.1	24	22	231.3	22	20	7.0	40	40	2,081.3	29	—	11.1	17	—
Albemarle	917.5	63	59	142.0	34	38	15.5	11	16	981.8	46	41	14.5	9	14
Alcoa	702.7	69	66	na	—	—	0.0	—	—	na	—	—	na	—	—
Arch Chemicals	941.2	61	57	60.5	43	43	6.4	42	43	1,073.6	42	46	5.6	40	28
Ashland	1,283.0	49	45	95.0	40	40	7.4	39	37	888.0	47	43	10.7	20	13
BASF	7,756.6	6	7	na	—	—	0.0	—	—	na	—	—	na	—	—
BFGoodrich	1,167.7	53	46	119.1	36	31	10.2	28	23	1,380.2	37	33	8.6	28	21
Borden	491.1	74	72	37.0	51	50	7.5	38	50	388.8	57	53	9.5	24	42
BP	5,100.0	15	5	na	—	—	0.0	—	—	na	—	—	na	—	—
Cabot	1,517.0	45	40	157.0	32	21	10.3	27	7	2,134.0	28	31	7.4	34	6
Celanese	2,786.2	28	26	na	—	—	0.0	—	—	na	—	—	na	—	—
CF Industries	1,100.9	56	47	-63.6	56	55	def	—	—	1,512.6	35	35	-4.2	—	—
Chevron Phillips	7,633.0	7	20	na	—	—	0.0	—	—	6,673.0	8	18	na	—	—
Ciba Specialty Chemicals	2,025.0	35	31	na	—	—	0.0	—	—	1,190.0	39	36	na	—	—
Clariant	1,062.9	58	54	59.8	44	—	5.6	44	—	834.9	49	—	7.2	35	—
Cognis	910.0	64	34	na	—	—	0.0	—	—	na	—	—	na	—	—
Crompton	2,728.0	30	33	351.6	14	19	12.9	18	11	3,405.6	22	26	10.3	21	12
Cytec Industries	1,492.5	46	43	189.0	27	25	12.7	19	16	1,719.4	32	32	11.0	18	9
Degussa	2,986.0	27	35	na	—	—	0.0	—	—	na	—	—	na	—	—
Dow Chemical	23,008.0	2	2	2,266.0	1	1	9.8	30	11	27,645.0	1	2	8.2	31	8
Dow Corning	2,750.9	29	25	231.1	22	23	8.4	34	37	6,470.7	11	—	3.6	46	—
DSM	1,192.6	52	50	na	—	—	0.0	—	—	na	—	—	na	—	—
DuPont	28,406.0	1	1	na	—	—	0.0	—	—	20,245.0	2	1	na	—	—
Eastman Chemical	5,292.0	13	15	562.0	10	24	10.6	25	46	6,550.0	10	11	8.6	28	39
Engelhard	1,887.7	36	37	298.5	18	18	15.8	10	8	1,857.9	31	27	16.1	4	7
Equistar	7,495.0	8	10	334.0	15	29	4.5	49	47	6,582.0	9	9	5.1	43	41
Ethyl	820.9	66	60	53.0	48	37	6.5	41	14	1,001.6	45	40	5.3	42	17
ExxonMobil ^a	21,543.0	3	3	1,161.0	4	—	5.4	45	—	na	—	—	na	—	—
Farmland Industries	979.2	60	49	-17.5	53	52	def	—	—	596.4	55	48	-2.9	—	—
Ferro	1,447.3	47	68	154.4	33	44	10.7	24	29	1,127.0	40	55	13.7	11	3
FMC	2,059.1	34	29	294.7	19	17	14.3	15	19	2,395.8	25	22	12.3	13	20
Formosa	1,700.0	39	—	na	—	—	0.0	—	—	na	—	—	na	—	—
General Electric	7,776.0	5	6	1,923.0	2	2	24.7	2	2	9,561.0	3	5	20.1	1	5
Georgia Gulf	1,581.6	42	58	168.0	31	41	10.6	25	25	1,041.0	43	38	16.1	4	27
Goodyear	1,129.7	54	52	64.2	42	36	5.7	43	20	742.9	51	49	8.6	28	4
Great Lakes Chemical	1,670.5	40	42	203.6	26	28	12.2	20	26	2,134.4	27	25	9.5	24	30
H. B. Fuller	1,352.6	48	44	102.2	38	35	7.6	37	36	1,010.4	44	39	10.1	22	16
Hercules	3,152.0	26	21	478.0	11	8	15.2	12	3	5,309.0	15	12	9.0	26	26
Honeywell	4,055.0	18	18	334.0	15	12	8.2	35	28	na	—	—	na	—	—
Huntsman Corp.	8,000.0	4	4	na	—	—	0.0	—	—	na	—	—	na	—	—
ICI Americas	3,314.1	23	17	291.1	20	14	8.8	33	40	na	—	—	na	—	—
IMC Global	2,095.9	33	28	229.4	24	15	10.9	21	18	4,261.6	18	15	5.4	41	34
International Paper	845.0	65	56	na	—	—	0.0	—	—	na	—	—	na	—	—
International Specialty Products	783.9	67	61	112.0	37	32	14.3	15	4	1,960.3	30	28	5.7	39	28
Kerr-McGee	1,261.0	51	53	185.0	28	33	14.7	13	14	1,643.0	34	37	11.3	16	18
Lubrizol	1,775.8	38	36	178.8	29	22	10.1	29	21	1,659.5	33	29	10.8	19	9
Lyondell	4,036.0	19	19	440.0	12	13	10.9	21	29	6,448.0	12	4	6.8	37	38
Millennium	1,793.0	37	39	326.0	17	26	18.2	6	32	2,460.0	24	20	13.3	12	35
Mississippi Chemical	485.2	75	73	-19.6	54	49	def	—	—	870.7	48	42	-2.3	—	44
Monsanto	3,885.0	21	12	1,099.0	5	5	28.3	1	9	6,104.0	13	—	18.0	3	—
NL Industries	922.3	62	55	212.5	25	39	23.0	4	24	1,120.8	41	51	19.0	2	2
Nova Chemicals	3,916.0	20	—	720.0	8	—	18.4	5	—	4,688.0	16	—	15.4	7	—
Occidental Petroleum	3,795.0	22	23	176.0	30	53	4.6	47	—	3,645.0	20	14	4.8	44	—
Ondeo Nalco	2,400.0	31	—	na	—	—	0.0	—	—	na	—	—	na	—	—
Phelps Dodge	598.4	72	69	88.1	41	42	14.7	13	6	768.6	50	45	11.5	15	14
Potash Corp.	2,231.6	32	30	371.8	13	56	16.7	8	—	4,145.7	19	19	9.0	26	—
PPG Industries	6,279.0	10	9	859.0	7	6	13.7	17	21	5,813.0	14	13	14.8	8	11
Praxair	5,043.0	16	14	1,220.0	3	4	24.2	3	5	7,762.0	6	7	15.7	6	21
Rhodia	1,568.0	43	48	na	—	—	0.0	—	—	na	—	—	na	—	—

Top 75 alphabetically—continued

\$ MILLIONS	CHEMICAL SALES			CHEMICAL OPERATING PROFITS			CHEMICAL OPERATING PROFIT MARGIN			IDENTIFIABLE CHEMICAL ASSETS			RETURN ON CHEMICAL ASSETS		
	2000	RANK		2000	RANK		2000	RANK		2000	RANK		2000	RANK	
Rohm and Haas	\$6,004.0	12	11	na	—	—	0.0%	—	—	\$9,215.0	4	3	na	—	—
Shell Oil	6,265.0	11	16	37.0%	50	—	0.6	52	—	4,630.0	17	17	0.8%	49	—
Shin-Etsu	1,267.5	50	—	138.2	35	—	10.9	21	—	2,136.3	26	—	6.5	38	—
Sigma Aldrich	548.2	73	71	na	—	—	0.0	—	—	na	—	—	na	—	—
Solutia	3,185.0	25	24	57.0	45	16	1.8	51	—	3,581.0	21	21	1.6	48	24
Solvay	1,528.0	44	—	na	—	—	0.0	—	—	na	—	—	na	—	—
Stepan	698.9	70	65	32.0	52	46	4.6	47	44	415.0	56	54	7.7	33	18
Sterling Chemicals	1,078.4	57	64	101.6	39	51	9.4	31	51	701.2	53	44	14.5	9	45
Sunoco	730.0	68	70	57.0	45	45	7.8	36	34	709.0	52	47	8.0	32	30
Terra Industries	1,001.2	59	63	42.8	49	54	4.3	50	—	1,512.6	36	30	2.8	47	—
TotalfinaElf	4,800.0	17	32	na	—	—	0.0	—	—	na	—	—	na	—	—
Union Carbide	6,526.0	9	8	596.0	9	3	9.1	32	13	8,346.0	5	6	7.1	36	—
Vulcan	605.8	71	67	-20.1	55	47	def	—	—	634.5	54	50	-3.2	—	37
W.R. Grace	1,597.4	41	41	254.7	21	27	15.9	9	27	2,584.9	23	23	9.9	23	33
Wellman	1,116.7	55	51	54.8	47	48	4.9	46	48	1,334.1	38	34	4.1	45	43

NOTE: There are 56 companies ranked for operating profits, 52 ranked for operating profit margins, 57 ranked for chemical assets, and 49 ranked for return on chemical assets. **a** Reported after-tax profits only. **def** = deficit. **na** = not available.

feedstock costs driving up prices of downstream chemical products.

Only 14 companies out of the 73 with comparable, year-to-year sales show a decrease in sales, but profitability didn't increase in kind. Out of the 56 companies that have operating profits that can be compared year-to-year, 29 posted a decrease.

BUT THIS DOESN'T TELL the whole story. Cognis, for example, is posting a decrease in sales because this year C&EN is counting North American sales of Cognis instead of those of its parent company, Henkel.

Similarly, Monsanto, which was spun off of Pharmacia in 2000, dropped in ranking from 12 to 21 because this year C&EN no longer counts all of its sales as chemical sales. Last year, before Monsanto was independent, C&EN warned readers that seeds were included in its total sales. Because the new Monsanto is reporting agrochemicals and seeds separately, C&EN can report Monsanto's numbers the same way it reports DuPont's.

Rohm and Haas's salt business wasn't included in its sales this year. C&EN never included it while it was still a part of Morton International. After Rohm and Haas acquired Morton, Rohm and Haas did not report operating profits for all of its segments, and its total sales were counted to circumvent the problem. However, Rohm and Haas didn't pay much of a penalty for this: It only dropped from 11 to 12 in the standings.

Some deals do show up on the Top 75 list. Last year, Chevron's number-20 chemical business merged with Phillips Petroleum's chemical business, ranked 27th, creating the seventh largest chemical company in the U.S. C&EN is also combining numbers from all of the TotalfinaElf

companies in the U.S. that make chemicals instead of counting Elf Atochem as C&EN had previously. The result is a \$4.8 billion giant at number 17.

However, positions of other companies on the list didn't change much with new acquisitions. Kerr-McGee, which posted a 36.2% sales increase because of its purchase of titanium dioxide plants from Kemira, only jumped from 53 to 51. Sunoco only moved from 70 to 68 because its purchase of Aristech was completed on Jan. 1. Sunoco is likely to move up the list next year after it reports a full year of Aristech.

Another factor affecting the high overall increase in sales is the inclusion of five companies that were omitted from the list last year. Each of these companies is starting out near the middle of the list. Including these strong results made it tougher for companies like Sunoco to climb much. The five additions also displaced a couple of smaller companies from the list.

THE LARGEST OF the newcomers, in terms of sales in 2000, is Nova Chemicals, which C&EN decided to include this year at number 20. Nova is Canadian, but many of its operations, especially in polystyrene, are in the U.S. Moreover, C&EN has included Potash Corp. of Saskatchewan for years, establishing precedent.

Ondeo Nalco rejoins the list at number 31. Nalco Chemical traditionally made the Top 75, but after it was acquired by Suez Lyonnaise in 1999, C&EN dropped it because it didn't produce annual reports. Nevertheless, C&EN has decided to go with the number it quotes as its annual sales.

Two Asian producers have made the list this year. Shin-Etsu, the Japanese parent

company of polyvinyl chloride producer Shintech, is entering the list at 50. Formosa Plastics' U.S. subsidiary, which also makes PVC as well as polypropylene and other plastics, is joining the list at 39.

Finally, Solvay makes the list at 44. The company now releases a sales figure for the U.S. in which chemical and pharmaceutical sales are separable.

A few companies have left the list, at least for the time being. Lonza and Cambrex, which were 74 and 75 last year, respectively, dropped off.

Other firms, like Aristech and Phillips, have left because of mergers or the sale of chemical businesses. American Home Products, having sold its American Cyanamid division to BASF, has left the Top 75 because the rest of its sales are in nonchemical products and pharmaceuticals.

Next year, there will certainly be some changes to the list. The Carbide deal is done, and its 2001 results will show up as part of Dow. BFGoodrich sold its performance materials business to AEA Investors, a private investment group. The now-private company no longer has to report its annual financial data. If it does give a sales figure, it will be included on the list under its new name, PMD Group.

General Electric, which reached the number-five spot for 2000, is merging with number-18 Honeywell sometime this year, according to the companies. Their combined 2000 chemical results are \$11.8 billion, which would put them at number four, ahead of Huntsman.

C&EN won't make calls for next year unless all the facts are in—and for some companies, they aren't. Though it doesn't always seem that way, the chemical business is dynamic enough to be unpredictable. ■