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Table 13--Current utilization and projected potential of plant matter in producing intermediate chemicals and industrial materials in the United States, estimated by the Institute for Local Self-Reliance

Product	Total 1992 production	Plant matter-derived 1/	Plant matter-derived 1996 potential	Conventional product costs	Plant matter product costs 2/	Reduction in plant matter product costs since 1985	Reduction in plant matter product costs by 1996 3/
	Million tons	--Percent--		--Dollars/pound--		--Percent--	
Wall paints	8.0	3.5	10.0	0.50	1.20	14.0	20.0
Special paints	2.5	2.0	4.0	0.80	1.75	3.0	5.0
Pigments	15.5	4.0	6.0	2.00	5.80	20.0	15.0
Dyes	4.5	6.0	15.0	12.00	18.00	25.0	20.0
Inks	3.6	8.0	17.0	2.00	2.40	30.0	10.0
Detergents	3.8	12.0	18.0	1.20	1.50	15.0	5.0
Surfactants	3.9	39.0	50.0	0.45	0.45	20.0	5.0
Adhesives	5.1	42.0	48.0	1.65	1.40	15.0	2.0
Poymers	30.3	3.4	7.0	0.50	2.00	20.0	45.0
Plasticizers	0.9	15.0	32.0	1.50	2.50	20.0	20.0
Acetic acid	1.8	16.0	24.0	0.33	0.35	5.0	2.0
Furfural derivatives	0.3	25.0	35.0	0.75	0.78	10.0	2.0
Fatty acids	2.5	40.0	55.0	0.46	0.33	5.0	5.0
Industrial carbon	1.5	12.0	19.0	0.50	0.45	10.0	15.0

1/ Represents both wholly and partially plant-matter-derived products. 2/ The cost premium of plant matter-based products is calculated based on the average median costs of commercially available products in a given category. 3/ Market projections based on performance over the past 5 years and the expected contributions of recent technical breakthroughs.

Source: David Morris and Irshad Ahmed, The Carbohydrate Economy: Making Chemicals and Industrial Materials from Plant Matter. Washington, DC; Institute for Local Self-Reliance 1992, revised June 1993.

Table 14--Flaxseed, acreage planted, harvested, yield, production, and value, 1985-92

Year	Planted	Harvested	Yield	Production	Value
	--1,000 acres--		Bushels per acre	1,000 bushels	\$1,000
1985	620	584	14.2	8,293	41,912
1986	720	683	16.9	11,538	39,962
1987	470	463	16.1	7,444	25,188
1988	275	226	7.1	1,615	12,200
1989	195	163	7.5	1,215	8,724
1990	260	253	15.1	3,812	21,108
1991 1/	351	337	18.1	6,100	21,395
1992 2/	191	182	16.0	2,912	14,123

1/ Preliminary. 2/ Forecast.

Table 15--Linseed oil, supply and disappearance, United States, 1985/86-1992/93

Year	Supply			Disappearance			Ending stocks
	beginning June 1	Production	Total	Exports	Domestic	Total	
	stocks						
				--1,000 short tons--			
1985/86	33	205	238	15	184	199	39
1986/87	39	201	240	6	183	189	51
1987/88	51	217	268	8	219	227	41
1988/89	41	170	211	12	151	163	48
1989/90	48	165	213	12	164	176	37
1990/91	37	176	213	6	167	173	40
1991/92 1/	40	176	216	10	166	176	40
1992/93 2/	40	176	216	10	166	176	40

1/ Preliminary. 2/ Forecast.

Table 16--Linseed meal, supply and disappearance, United States, 1985/86-1992/93

Year beginning June 1	Supply				Disappearance			Ending stocks
	Beginning stocks	Production	Imports	Total	Exports	Domestic	Total	
--1,000 short tons--								
1985/86	3	184	3	190	75	110	185	5
1986/87	5	185	2	192	63	127	190	2
1987/88	2	198	2	202	59	140	199	3
1988/89	3	156	11	170	63	102	165	5
1989/90	5	153	9	167	23	139	162	5
1990/91	5	162	3	170	41	124	165	5
1991/92 1/	5	162	3	170	35	130	165	5
1992/93 2/	5	162	3	170	30	135	165	5

1/ Preliminary. 2/ Forecast.

Table 17--Industrial rapeseed, supply, disappearance, and price, United States, 1987/88-1992/93

Year beginning June 1	Supply			Disappearance			Ending stocks	Price Minn- eapolis Cents/lb.
	Beginning stocks	Production	Total	Exports 1/	Domestic	Total		
--Million pounds--								
1987/88	2,198	21,981	24,179	0	23,072	23,072	1,107	10.00
1988/89	1,107	15,822	16,929	0	16,188	16,188	741	11.10
1989/90	741	19,143	19,884	0	19,003	19,003	882	10.50
1990/91	882	22,717	23,599	0	22,319	22,319	1,279	10.30
1991/92 2/	1,279	16,146	17,425	0	17,158	17,158	267	10.10
1992/93 3/	267	14,455	14,722	0	14,522	14,522	200	10.00

1/ Trade data does not distinguish between industrial and edible (canola) exports, therefore all exports were allocated to canola. 2/ Preliminary. 3/ Forecast.

Table 18--Industrial rapeseed oil, supply, disappearance, and price, United States, 1987/88-1992/93

Year beginning June 1	Supply				Disappearance			Ending stocks	Price Minn- eapolis Cents/lb
	Beginning stocks	Production	Imports	Total	Exports 1/	Domestic	Total		
--Million pounds--									
1987/88	800	6,785	17,637	25,222	0	22,699	22,699	2,522	23.60
1988/89	2,522	6,858	35,274	44,654	0	40,188	40,188	4,465	25.60
1989/90	4,465	8,184	29,407	42,056	0	37,851	37,851	4,206	27.80
1990/91	4,206	6,960	20,657	31,823	0	28,640	28,640	3,182	24.50
1991/92 2/	3,182	5,705	8,647	17,534	0	15,780	15,780	1,753	22.60
1992/93 3/	1,753	6,334	9,968	18,055	0	16,250	16,250	1,806	24.30

1/ Trade data does not distinguish between industrial and edible (canola) exports, therefore all exports were allocated to canola. 2/ Preliminary. 3/ Forecast.

Table 19--Industrial rapeseed meal, supply, disappearance, and price, United States, 1987/88-1992/93

Year beginning June 1	Supply				Disappearance			Ending stocks	Price Minn- eapolis Cents/lb
	Beginning stocks	Production	Imports	Total	Exports	Domestic	Total		
--Million pounds--									
1987/88	300	10,624	0	10,924	0	10,711	10,711	212	168.00
1988/89	212	10,738	0	10,950	0	10,736	10,736	215	177.00
1989/90	215	12,815	0	13,030	0	12,773	12,773	256	149.00
1990/91	256	10,897	0	11,153	0	10,935	10,935	218	145.00
1991/92 1/	218	8,933	0	9,151	0	9,017	9,017	134	151.00
1992/93 2/	134	9,918	0	10,052	0	9,903	9,903	149	144.00

1/ Preliminary. 2/ Forecast.

Table 20--Total fats and oils consumption, with inedible by category, United States, 1985/86-92

Year 1/	Total consumption	Total edible	Total inedible	Soap	Paint or varnish	Feed	Resins and plastics	Lubricants 2/	Fatty acids	Other products
--Million pounds--										
1985/86	19,249.6	13,972.6	5,277.0	754.9	228.0	1,705.7	173.4	103.4	1,968.9	342.6
1986/87	d	d	5,990.6	d	d	d	d	d	d	d
1987/88	20,241.2	14,175.5	6,065.7	868.6	179.1	1,967.6	196.3	107.8	2,203.8	542.8
1988/89	19,426.7	13,542.0	5,884.7	744.5	180.3	2,079.3	202.3	115.8	2,074.1	488.4
1989/90	20,036.0	14,382.7	5,653.3	792.0	89.5	2,143.5	222.4	157.1	1,944.7	304.1
1991	20,332.1	14,613.0	5,719.1	832.9	106.8	1,974.0	182.6	101.7	2,234.7	286.4
1992	20,751.7	14,847.3	5,904.4	738.8	123.8	2,176.5	165.5	109.4	2,041.2	549.3

d = Data withheld to avoid disclosing figures for individual companies.

1/ Crop year runs from October 1 to September 30. Annual totals reported on a calendar year basis beginning in 1991. 2/ Includes similar oils.

Source: Bureau of Census.

Table 21--Castor oil consumption, with inedible by category, United States, 1985/86-92

Year 1/	Total consumption	Total edible	Total inedible	Soap	Paint or varnish	Feed	Resins and plastics	Lubricants 2/	Fatty acids	Other products
--Million pounds--										
1985/86	59.9	0.0	59.9	d	d	0.0	4.5	d	d	d
1986/87	70.4	0.0	70.4	d	4.6	0.0	4.2	5.6	d	53.8
1987/88	74.6	0.0	74.6	d	4.3	0.0	4.8	6.1	d	59.0
1988/89	59.2	0.0	59.2	d	4.8	0.0	4.5	6.2	0.0	43.2
1989/90	51.4	0.0	51.4	d	5.9	0.0	4.0	5.7	0.0	d
1991	46.0	0.0	46.0	d	5.9	0.0	4.0	d	0.0	31.7
1992	41.3	0.0	41.3	d	d	0.0	3.3	3.5	0.0	28.4

d = Data withheld to avoid disclosing figures for individual companies.

1/ Crop year runs from October 1 to September 30. Annual totals reported on a calendar year basis beginning in 1991. 2/ Includes similar oils.

Source: Bureau of Census.

Table 22--Coconut oil consumption, with inedible by category, United States, 1985/86-92

Year 1/	Total consumption	Total edible	Total inedible	Soap	Paint or varnish	Feed	Resins and plastics	Lubricants 2/	Fatty acids	Other products
--Million pounds--										
1985/86	634.7	332.8	301.9	123.2	d	0.0	d	d	59.7	d
1986/87	858.2	319.4	538.8	216.1	d	0.0	d	d	95.7	d
1987/88	788.6	233.4	555.4	213.8	d	0.0	7.2	d	131.4	d
1988/89	688.8	211.2	477.6	130.6	1.4	d	14.6	d	121.9	206.6
1989/90	525.2	160.6	364.6	156.9	2.1	0.0	9.7	4.0	134.6	57.3
1991	815.6	153.0	662.6	158.0	d	d	2.4	d	426.7	72.8
1992	875.4	176.3	699.1	121.7	d	0.0	3.2	d	d	d

d = Data withheld to avoid disclosing figures for individual companies.

1/ Crop year runs from October 1 to September 30. Annual totals reported on a calendar year basis beginning in 1991. 2/ Includes similar oils.

Source: Bureau of Census.

Table 23--Edible tallow consumption, with inedible by category, United States, 1985/86-92

Year 1/	Total consumption	Total edible	Total inedible	Soap	Paint or varnish	Feed	Resins and plastics	Lubricants 2/	Fatty acids	Other products
--Million pounds--										
1985/86	1,080.2	1,020.9	59.2	d	0.0	0.0	0.0	d	d	d
1986/87	979.2	910.6	68.6	d	0.0	0.0	d	d	d	d
1987/88	954.3	863.6	90.5	d	0.0	0.0	d	d	d	d
1988/89	923.3	779.2	144.1	d	0.0	d	d	d	d	d
1989/90	846.4	706.3	140.1	113.9	0.0	d	d	d	d	d
1991	611.8	463.1	148.7	d	0.0	d	d	d	d	d
1992	595.0	429.3	165.7	d	0.0	d	d	d	d	d

d = Data withheld to avoid disclosing figures for individual companies.

1/ Crop year runs from October 1 to September 30. Annual totals reported on a calendar year basis beginning in 1991. 2/ Includes similar oils.

Source: Bureau of Census.

Table 24--Inedible tallow consumption, with inedible by category, United States, 1985/86-92

Year 1/	Total consumption	Total edible	Total inedible	Soap	Paint or varnish	Feed	Resins and plastics	Lubricants 2/	Fatty acids	Other products
--Million pounds--										
1985/86	2,878.5	0.0	2,878.5	492.3	0.0	1,550.5	0.0	62.8	733.4	39.5
1986/87	3,040.9	0.0	3,040.9	543.6	0.0	1,698.9	0.0	70.3	693.6	35.1
1987/88	3,137.8	0.0	3,137.8	502.0	0.0	1,820.3	0.0	69.9	712.6	33.0
1988/89	3,086.7	0.0	3,086.7	374.9	0.0	1,925.4	0.0	70.3	680.0	36.1
1989/90	3,219.0	0.0	3,219.0	398.4	0.0	1,982.9	0.0	109.0	684.0	44.7
1991	2,949.3	0.0	2,949.3	391.5	0.0	1,748.4	0.0	59.6	700.9	48.9
1992	3,050.1	0.0	3,050.1	334.4	0.0	1,954.4	0.0	63.2	659.0	39.1

d = Data withheld to avoid disclosing figures for individual companies.

1/ Crop year runs from October 1 to September 30. Annual totals reported on a calendar year basis beginning in 1991. 2/ Includes similar oils.

Source: Bureau of Census.

Table 25--Lard consumption, with inedible by category, United States, 1985/86-92

Year 1/	Total consumption	Total edible	Total inedible	Soap	Paint or varnish	Feed	Resins and plastics	Lubricants 2/	Fatty acids	Other products
--Million pounds--										
1985/86	405.8	355.0	50.8	0.0	0.0	d	0.0	7.2	d	d
1986/87	301.2	240.9	60.3	d	0.0	d	0.0	6.2	d	d
1987/88	347.5	280.3	66.9	d	0.0	d	0.0	8.4	d	d
1988/89	389.9	324.5	65.4	0.0	0.0	d	0.0	d	d	d
1989/90	369.3	303.8	65.5	d	0.0	d	0.0	9.1	d	d
1991	393.1	313.8	79.3	0.0	0.0	d	0.0	5.7	d	4.1
1992	479.7	345.0	134.6	0.0	0.0	d	0.0	10.9	d	13.5

d = Data withheld to avoid disclosing figures for individual companies.

1/ Crop year runs from October 1 to September 30. Annual totals reported on a calendar year basis beginning in 1991. 2/ Includes similar oils.

Source: Bureau of Census.

Table 26--Linseed oil consumption, with inedible by category, United States, 1985/86-92

Year 1/	Total consumption	Total edible	Total inedible	Soap	Paint or varnish	Feed	Resins and plastics	Lubricants 2/	Fatty acids	Other products
--Million pounds--										
1985/86	176.9	0.0	176.9	0.0	131.0	0.0	29.7	d	d	d
1986/87	280.8	0.0	280.8	0.0	187.6	0.0	d	d	d	d
1987/88	159.3	0.0	159.3	0.0	85.5	0.0	31.0	d	d	40.5
1988/89	154.9	0.0	154.9	0.0	101.6	0.0	23.1	d	d	28.2
1989/90	110.5	0.0	110.5	0.0	30.3	d	52.5	d	d	23.8
1991	95.8	0.0	95.8	0.0	40.7	0.0	41.6	d	d	12.7
1992	154.4	0.0	154.4	0.0	69.0	0.0	31.3	d	d	d

d = Data withheld to avoid disclosing figures for individual companies.

1/ Crop year runs from October 1 to September 30. Annual totals reported on a calendar year basis beginning in 1991. 2/ Includes similar oils.

Source: Bureau of Census.

Table 27--Palm oil consumption, with inedible by category, United States, 1985/86-92

Year 1/	Total consumption	Total edible	Total inedible	Soap	Paint or varnish	Feed	Resins and plastics	Lubricants 2/	Fatty acids	Other products
--Million pounds--										
1985/86	398.1	364.0	34.1	d	0.0	d	0.0	d	d	d
1986/87	317.9	278.7	39.2	d	d	d	d	d	d	d
1987/88	242.6	197.5	45.1	d	d	d	d	d	d	d
1988/89	247.0	203.8	43.2	d	0.0	d	d	0.0	d	d
1989/90	177.7	124.0	53.7	d	0.0	d	0.0	d	d	d
1991	d	d	d	d	0.0	d	0.0	d	d	d
1992	220.5	108.1	112.4	d	0.0	d	0.0	d	40.6	3.6

d = Data withheld to avoid disclosing figures for individual companies.

1/ Crop year runs from October 1 to September 30. Annual totals reported on a calendar year basis beginning in 1991. 2/ Includes similar oils.

Source: Bureau of Census.

Table 28--Rapeseed oil consumption, with inedible by category, United States, 1989/90-92 1/

Year 2/	Total consumption	Total edible	Total inedible	Soap	Paint or varnish	Feed	Resins and plastics	Lubricants 3/	Fatty acids	Other products
--Million pounds--										
1989/90	d	265.0	d	0.0	d	d	d	d	d	d
1991	d	285.1	d	0.0	0.0	d	0.0	d	d	d
1992	d	360.5	d	0.0	0.0	d	0.0	d	d	d

d = Data withheld to avoid disclosing figures for individual companies.

1/ Includes both canola and industrial rapeseed. 2/ Crop year runs from October 1 to September 30. Annual totals reported on a calendar year basis beginning in 1991. 3/ Includes similar oils.

Source: Bureau of Census.

Table 29--Soybean oil consumption, with inedible by category, United States, 1985/86-92

Year 1/	Total consumption	Total edible	Total inedible	Soap	Paint or varnish	Feed	Resins and plastics	Lubricants 2/	Fatty acids	Other products
--Million pounds--										
1985/86	10,283.3	10,003.7	279.5	d	59.5	d	98.7	d	31.5	d
1986/87	10,512.2	10,212.7	299.5	d	63.2	d	109.2	d	d	65.3
1987/88	10,714.5	10,429.1	285.3	2.7	54.1	d	106.1	d	d	72.3
1988/89	9,917.6	9,635.8	281.8	1.5	34.9	d	123.7	d	d	68.2
1989/90	10,808.3	10,536.7	271.6	d	38.2	d	112.4	d	d	52.4
1991	11,267.7	10,966.7	301.0	d	49.2	d	104.7	d	d	40.4
1992	11,471.6	11,168.7	302.8	d	43.5	22.3	94.0	5.9	d	69.8

d = Data withheld to avoid disclosing figures for individual companies.

1/ Crop year runs from October 1 to September 30. Annual totals reported on a calendar year basis beginning in 1991. 2/ Includes similar oils.

Source: Bureau of Census.

Table 30--Tall oil consumption, with inedible by category, United States, 1985/86-92

Year 1/	Total consumption	Total edible	Total inedible	Soap	Paint or varnish	Feed	Resins and plastics	Lubricants 2/	Fatty acids	Other products
--Million pounds--										
1985/86	1,143.4	0.0	1,143.4	12.8	17.0	0.0	15.6	12.0	1,055.2	30.8
1986/87	1,227.0	0.0	1,227.0	12.2	d	0.0	15.7	12.9	1,152.6	19.2
1987/88	1,269.4	0.0	1,269.4	16.8	23.3	0.0	20.9	9.6	1,181.1	17.8
1988/89	1,234.3	0.0	1,234.3	8.3	31.8	0.0	18.0	8.1	1,157.3	10.8
1989/90	1,024.7	0.0	1,024.7	8.4	7.4	0.0	21.7	7.1	969.9	10.2
1991	940.0	0.0	940.0	3.5	5.4	0.0	11.6	4.0	906.5	9.0
1992	883.5	0.0	883.5	d	d	0.0	19.4	7.0	841.8	11.4

d = Data withheld to avoid disclosing figures for individual companies.

1/ Crop year runs from October 1 to September 30. Annual totals reported on a calendar year basis beginning in 1991. 2/ Includes similar oils.

Source: Bureau of Census.

Table 31--Vegetable oil foots consumption, with inedible by category, United States, 1985/86-92

Year 1/	Total consumption	Total edible	Total inedible	Soap	Paint or varnish	Feed	Resins and plastics	Lubricants 2/	Fatty acids	Other products
--Million pounds--										
1985/86	99.2	0.0	99.2	d	d	d	d	d	d	d
1986/87	94.9	0.0	94.9	d	d	d	d	d	d	d
1987/88	91.1	0.0	91.1	d	d	74.3	d	d	d	d
1988/89	87.5	0.0	87.5	d	d	72.7	d	d	d	d
1989/90	100.1	0.0	100.1	d	d	81.7	d	d	d	d
1991	148.8	0.0	148.8	d	0.0	131.4	d	d	d	d
1992	134.9	0.0	134.9	d	0.0	120.2	0.0	d	d	d

d = Data withheld to avoid disclosing figures for individual companies.

1/ Crop year runs from October 1 to September 30. Annual totals reported on a calendar year basis beginning in 1991. 2/ Includes similar oils.

Source: Bureau of Census.

Table 32--Canola oil prices, Midwest markets, 1989-93

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents/pound--													
1989	25.00	25.30	26.40	26.25	25.55	23.44	22.50	22.38	23.00	23.19	25.31	25.60	24.49
1990	26.69	27.50	28.94	29.25	31.15	27.19	25.31	26.90	18.38	24.38	24.63	23.13	26.12
1991	24.00	23.56	24.38	24.88	24.25	23.75	22.90	23.94	24.56	23.05	23.38	22.42	23.76
1992	22.25	21.75	21.75	20.75	22.00	22.31	20.94	20.69	22.90	22.19	24.38	23.08	22.08
1993	22.08												

Source: Milling and Baking News.

Table 33--Castor oil prices, raw No. 1, tanks, Brazilian, 1989-93

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents/pound--													
1989	51.00	51.75	51.90	51.50	51.50	51.50	51.50	51.50	41.20	51.50	51.50	53.75	50.84
1990	54.50	53.50	52.60	52.00	51.20	51.00	51.00	51.00	45.00	42.40	39.63	39.63	48.62
1991	39.30	36.00	36.75	37.00	37.00	36.50	35.50	35.00	35.00	35.40	35.00	37.50	36.33
1992	37.50	37.50	37.50	36.00	34.50	34.50	34.50	34.50	34.00	34.00	34.00	34.00	35.21
1993	34.00	32.00	32.00	37.00									

Source: Chemical Marketing Reporter.

Table 34--Coconut oil prices, crude, tanks, f.o.b. New York, 1989-93

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents/pound--													
1989	26.75	27.63	27.90	28.94	29.90	29.56	28.94	27.75	28.63	27.25	26.35	24.81	27.87
1990	24.31	23.69	22.10	21.63	21.30	20.31	19.16	18.58	18.26	18.18	20.45	20.13	20.67
1991	20.22	20.31	20.50	19.38	19.69	21.69	26.19	25.63	25.63	28.50	31.50	32.38	24.30
1992	39.33	36.00	34.57	34.75	33.56	32.13	29.63	27.31	27.88	26.94	27.00	25.50	31.22
1993	24.94	24.33	23.65	23.25	24.13								

Source: Chemical Marketing Reporter.

Table 35--Edible tallow prices, Chicago, 1989-93

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents/pound--													
1989	16.50	16.07	16.25	15.75	16.19	16.00	15.73	15.33	16.50	16.18	N.A.	N.A.	13.37
1990	16.77	17.16	15.46	14.25	14.20	14.28	14.21	10.53	13.76	14.55	15.00	15.28	14.62
1991	15.88	14.28	14.43	14.80	13.02	13.25	13.70	14.61	14.37	14.60	14.09	14.00	14.25
1992	14.05	14.00	14.15	14.28	14.66	15.37	15.87	16.00	16.05	16.88	18.18	17.00	15.54
1993	16.08	15.39	16.07										

N.A. = Not available.

Source: Grain and Feed Marketing News.

Table 36--Flaxseed, average price received by farmers, 1989-93

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Dollars/bushel--													
1989	8.34	8.70	8.09	7.78	7.54	6.79	5.90	6.49	7.07	7.09	7.15	7.14	7.29
1990	7.24	7.69	8.03	8.60	8.23	8.31	7.56	5.86	5.36	5.15	5.16	5.15	5.53
1991	5.12	4.80	4.90	4.66	4.33	3.98	3.91	3.69	3.55	3.40	3.31	3.46	3.57
1992	3.39	3.43	3.52	3.53	3.61	3.67	3.70	3.71	4.12	4.09	4.10	4.21	3.94
1993	4.12	4.47	4.54	4.41	4.35								

Source: National Agricultural Statistical Service, USDA.



Table 37--Industrial rapeseed oil prices, refined, tanks, New York, 1989-93

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents/pound--													
1989	70.00	70.00	80.25	80.25	80.25	80.25	80.25	80.25	80.25	64.20	80.25	80.25	77.20
1990	81.75	82.25	82.25	82.25	82.25	82.25	82.25	82.25	79.75	77.25	77.25	81.00	81.06
1991	82.25	82.25	82.25	82.25	82.25	82.25	82.25	82.25	82.25	82.25	82.25	82.25	82.25
1992	82.25	82.25	82.25	82.25	82.25	82.25	82.25	82.25	67.25	62.25	62.25	62.25	76.00
1993	62.25	62.25	62.25	62.25	55.88								

Source: Chemical Marketing Reporter.

Table 38--Inedible tallow prices, Chicago, 1989-93

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents/pound--													
1989	14.90	16.00	14.86	14.60	14.70	15.10	14.48	13.52	14.13	10.94	14.75	14.25	14.35
1990	14.87	14.50	14.47	13.50	13.51	14.01	13.50	10.12	13.50	13.42	14.09	14.50	13.67
1991	14.53	12.91	13.63	13.57	12.25	12.36	12.96	14.00	13.50	13.68	13.08	12.50	13.25
1992	N.A.	12.63	12.68	13.25	13.75	13.98	14.75	15.42	15.25	15.73	16.75	13.52	14.34
1993	15.09	14.69	15.24	15.94	15.13								

N.A. = Not available.

Source: Grain and Feed Marketing News.

Table 39--Linseed oil prices, tanks, Minneapolis, 1989-93

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents/pound--													
1989	41.00	41.00	41.40	42.00	42.00	39.75	39.00	39.00	39.50	40.00	40.00	39.50	40.35
1990	40.00	40.00	41.60	42.00	42.00	43.00	44.00	40.40	39.75	36.80	36.00	36.00	40.13
1991	36.00	36.00	36.00	36.00	36.50	36.00	36.00	36.00	36.00	30.00	30.00	30.00	34.54
1992	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	32.00	32.00	32.00	32.00	28.17
1993	32.00	32.00	32.00	32.00	32.00								

Source: Grain and Feed Marketing News.

Table 40--Linseed meal prices, bulk, 34 percent protein, Minneapolis, 1989-93

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Dollars/tons--													
1989	164.00	151.25	150.00	155.00	156.00	162.50	158.75	161.00	145.00	129.00	126.25	128.75	148.96
1990	132.50	124.50	126.25	133.75	143.00	142.50	136.00	126.25	116.25	133.00	143.75	133.50	132.60
1991	131.00	131.25	120.00	121.00	126.25	134.25	133.00	131.25	116.25	128.00	113.75	127.80	126.15
1992	122.00	124.00	115.00	117.50	120.00	125.00	123.50	126.25	131.00	141.25	152.50	137.40	127.95
1993	136.70	142.50	135.40	125.50									

N.A. = Not available.

Source: Grain and Feed Marketing News.

Table 41--Soybean oil prices, crude, tanks, f.o.b. Decatur, 1989-93

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents/pound--													
1989	21.13	21.21	22.11	21.97	22.23	20.75	19.66	18.08	18.77	19.02	19.57	19.11	21.09
1990	19.28	20.27	22.80	23.35	24.72	25.03	24.69	25.05	24.45	22.59	21.05	21.55	22.28
1991	21.56	21.66	22.21	21.50	20.23	19.65	19.05	20.23	20.46	19.57	18.78	18.99	20.98
1992	18.77	18.88	19.74	19.00	20.15	20.71	18.82	17.87	18.28	18.36	20.10	20.52	19.13
1993	21.23	20.72	21.00	21.24	21.15								

Source: The Wall Street Journal.

Table 42--World production of jojoba seed, 1992/93

Country and source	Production Pounds
United States	
Native stands 1/	36,372
Plantations	4,110,503
Total	4,146,875
Mexico	
Native stands 1/	79,809
Plantations	216,051
Total	295,860
Israel	
Plantations	320,000
Argentina	
Plantations 2/	250,000
Total estimated seed production	5,012,735
Total estimated oil production	2,025,200

1/ Amount of processed seed. Unknown quantities of unprocessed seed may be held in inventory. 2/ Estimated.

Source: Jojoba Association.

Table 43--U.S. natural rubber latex imports, by country, 1989-92

Country	1989	1990	1991	1992
--Metric tons--				
Malaysia	47,281,074	30,647,643	40,000,125	45,279,103
Singapore	3,002,828	3,148,579	6,803,119	564,895
Sri Lanka	244,768	257,566	256,217	216,601
Thailand	7,507,633	3,418,870	4,120,504	4,129,368
Other	61,755,077	34,984,788	27,859,374	36,461,643
Total	119,791,380	72,457,446	79,039,339	86,651,610

Source: International Rubber Study Group.

Table 44--U.S. natural rubber latex exports, by country, 1989-92

Country	1989	1990	1991	1992
--Metric tons--				
Canada	12,185,785	3,227,593	3,027,736	1,820,378
Italy	1,134,076	908,833	908,833	1,075,446
Venezuela	741,103	1,115,554	324,467	120,071
Mexico	711,748	989,194	892,819	1,589,600
Singapore	502,050	31,939	31,939	38,518
Chile	276,223	188,569	278,567	132,340
Japan	262,814	629,970	714,781	720,519
Sweden	235,930	61,435	52,509	6,261
United Kingdom	207,673	227,511	287,345	66,154
Germany	133,937	262,349	403,486	151,613
Other 1/	1,277,459	1,664,326	2,029,626	1,739,865
Total	17,668,798	9,307,273	8,952,108	7,460,765

1/ Includes 62 countries.

Source: International Rubber Study Group.

## List Prices

The following are list prices from the Chemical Marketing Reporter for selected chemicals and related materials on a New York or other indicated basis. They do not represent bid, asked, or actual transaction prices. Variations from listed prices may occur for differences in quantity, quality, and location. Commodities whose list prices did not change more than once or twice since January 1989 are not included here.

Table 45--Denatured alcohol prices, ethyl (ethanol), SD2B, tanks delivered east, 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Dollars/gallons--													
1989	2.01	2.01	2.01	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.09
1990	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11
1991	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.02	2.02	2.02	2.02	2.08
1992	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02
1993	2.02	2.02	2.02	2.02	2.02								

1/ Made by yeast fermentation of carbohydrates or by hydrolysis of ethylene for solvents, cosmetics, and oxygenated gasoline additive.

Source: Chemical Marketing Reporter.

Table 46--Dextrin prices, com, canary dark, 100 lb. bags, carload, 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents/pound--													
1989	28.04	28.04	28.04	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	31.01
1990	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
1991	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
1992	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
1993	32.00	32.00	32.00	32.00	32.00								

1/ Obtained by heating acidified dry starch for adhesives and paper products.

Source: Chemical Marketing Reporter.

Table 47--Dextrose prices, hydrated, commercial, 100 lb. bags, carloads delivered, 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents/pound--													
1989	24.25	24.25	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.29
1990	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50
1991	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50
1992	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50
1993	25.50	25.50	25.50	25.50	25.50								

1/ Obtained from corn starch hydrolysis for use in foods and as a fermentation substrate.

Source: Chemical Marketing Reporter.

Table 48--Furfural prices, tanks, f.o.b., 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents/pound--													
1989	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
1990	75.00	75.00	75.00	75.00	75.00	79.00	79.00	79.00	79.00	79.00	79.00	79.00	77.33
1991	79.00	79.00	79.00	79.00	79.00	79.00	79.00	79.00	79.00	79.00	79.00	79.00	79.00
1992	79.00	79.00	79.00	79.00	79.00	79.00	79.00	79.00	79.00	79.00	79.00	79.00	79.00
1993	79.00	79.00	79.00	79.00	79.00								

1/ Obtained by steam distillation of acidified plant materials for polymers and foundry binders.

Source: Chemical Marketing Reporter.

Table 49--Sorbitol prices, USP, regular, 70 percent aqueous, drums, carload, f.o.b., 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents/pound--													
1989	38.00	38.00	39.00	39.00	39.00	39.00	40.50	40.50	40.50	40.50	40.50	40.50	39.58
1990	40.50	40.50	40.50	40.50	40.50	40.50	40.50	40.50	40.50	40.50	40.50	36.50	40.17
1991	36.50	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.29
1992	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00
1993	33.00	33.00	33.00	33.00	33.00								

1/ Hydrogenation of glucose for foods, cosmetics, and polyester polymers. Prices quoted are low end of a range.

Source: Chemical Marketing Reporter.

Table 50--Beeswax prices, refined, bleached white bricks, 100 lb. cartons, 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Dollars per pound--													
1989	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10
1990	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10
1991	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10
1992	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.35	3.12
1993	3.35	3.35	3.35	3.35	3.35								

1/ A byproduct of honey production used for cosmetics and candles. Price quotes are low end of a range.

Source: Chemical Marketing Reporter.

Table 51--Capric acid prices, commercial, pure, tanks, 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents per gallon--													
1989	66.00	66.00	66.00	66.00	66.00	66.00	66.00	66.00	73.00	73.00	73.00	73.00	68.33
1990	73.00	73.00	73.00	73.00	73.00	73.00	73.00	73.00	83.00	83.00	83.00	83.00	76.33
1991	83.00	83.00	83.00	83.00	83.00	83.00	83.00	83.00	83.00	83.00	83.00	83.00	83.00
1992	83.00	83.00	83.00	83.00	83.00	83.00	83.00	92.00	92.00	92.00	92.00	92.00	86.75
1993	92.00	92.00	92.00	92.00	92.00								

1/ Fatty acid obtained from coconut oil.

Source: Chemical Marketing Reporter.

Table 52--Caprylic acid prices, commercial, pure, tanks, 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents per pound--													
1989	64.00	64.00	74.00	74.00	74.00	74.00	74.00	74.00	74.00	76.00	76.00	76.00	72.83
1990	76.00	76.00	76.00	76.00	76.00	76.00	76.00	76.00	83.00	83.00	83.00	83.00	78.33
1991	83.00	83.00	83.00	83.00	83.00	83.00	83.00	83.00	83.00	83.00	83.00	83.00	83.00
1992	83.00	83.00	83.00	83.00	83.00	83.00	83.00	102.00	102.00	102.00	102.00	102.00	90.92
1993	102.00	102.00	102.00	102.00	102.00								

1/ Fatty acid obtained from coconut oil.

Source: Chemical Marketing Reporter.

Table 53--Glycerine prices, natural, refined, USP, 99.7 percent, tanks, delivered, 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents per pound--													
1989	76.00	76.00	76.00	76.00	76.00	76.00	82.00	82.00	82.00	82.00	82.00	82.00	79.00
1990	82.00	82.00	82.00	77.00	73.00	73.00	73.00	73.00	73.00	73.00	75.00	75.00	75.92
1991	75.00	75.00	75.00	63.00	63.00	63.00	63.00	63.00	63.00	63.00	51.00	51.00	64.00
1992	51.00	51.00	51.00	58.50	58.50	58.50	58.50	58.50	58.50	58.50	58.50	58.50	56.63
1993	58.50	58.50	58.50	58.50	58.50								

1/ Byproduct of splitting or saponification of fats and oils or made by petrochemical synthesis for cosmetics, food, drugs, and polyurethane polymers.

Source: Chemical Marketing Reporter.

Table 54--Jojoba oil prices, 2,200 lbs. or more, f.o.b. Arizona, 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Dollars per kilogram--													
1989	14.18	14.18	14.18	14.18	14.18	14.18	15.25	15.25	15.25	15.25	15.25	15.25	14.72
1990	15.25	20.02	20.02	20.02	20.02	20.02	26.00	26.00	25.00	25.00	24.00	24.00	22.11
1991	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	21.00	15.50	15.50	15.50	21.63
1992	15.50	15.50	15.50	15.50	15.50	15.50	15.50	13.50	13.50	11.99	11.99	11.99	14.29
1993	11.99	11.99	11.99	11.99	11.99								

1/ Price quotes are the low end of a range.

Source: Chemical Marketing Reporter.

Table 55--Lard oil prices, tanks, f.o.b., 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents per pound--													
1989	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
1990	30.00	30.00	30.00	30.00	30.00	30.00	30.00	47.00	47.00	47.00	47.00	47.00	37.08
1991	47.00	47.00	47.00	47.00	47.00	47.00	47.00	47.00	47.00	47.00	47.00	47.00	47.00
1992	47.00	47.00	47.00	47.00	47.00	47.00	47.00	47.00	47.00	47.00	47.00	47.00	47.00
1993	47.00	35.00	35.00	35.00	35.00								

1/ Rendered from pork fat for cutting oils and leather processing.

Source: Chemical Marketing Reporter.

Table 56--Lauric acid prices, commercial, pure bags, truckload, 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents per pound--													
1989	56.00	56.00	56.00	56.00	56.00	56.00	56.00	56.00	61.00	61.00	61.00	61.00	57.67
1990	61.00	61.00	61.00	61.00	61.00	61.00	61.00	61.00	65.50	65.50	65.50	65.50	62.50
1991	65.50	65.50	65.50	54.50	54.50	54.50	54.50	54.50	54.50	54.50	54.50	54.50	57.25
1992	54.50	54.50	54.50	65.00	65.00	65.00	65.00	65.00	65.00	65.00	65.00	65.00	62.38
1993	65.00	65.00	65.00	65.00	65.00								

1/ The major fatty acid (45 to 50 percent) in coconut oil. Price quotes are the low end of a range.

Source: Chemical Marketing Reporter.

Table 57--Lecithin prices, unbleached, bulk, 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents per pound--													
1989	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00
1990	38.00	38.00	38.00	38.00	38.00	38.00	38.00	32.00	32.00	32.00	29.00	29.00	35.00
1991	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00
1992	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	26.00	26.00	26.00	26.00	28.00
1993	26.00	26.00	26.00	26.00	26.00								

1/ Byproduct of soy oil extraction used as an emulsifying agent and antioxidant in foods.

Source: Chemical Marketing Reporter.

Table 58--Neatsfoot oil prices, 20 deg. F. drums, truckload, f.o.b., 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents per pound--													
1989	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00
1990	54.00	54.00	54.00	54.00	54.00	54.00	70.00	70.00	70.00	70.00	70.00	70.00	62.00
1991	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00
1992	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	72.50	72.50	72.50	72.50	70.83
1993	72.50	65.00	65.00	65.00	65.00								

1/ Extract from feet/horns of slaughtered animals for specialty leather dressings.

Source: Chemical Marketing Reporter.

Table 59--Oleic acid prices, double distilled (white), tanks, 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents per pound--													
1989	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00
1990	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00
1991	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00
1992	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00	54.00
1993	54.00	61.00	61.00	61.00	61.00								

1/ Obtained by fractional crystallization from mixed fatty acids for candles, soaps, and synthesis of other surfactants.

Source: Chemical Marketing Reporter.

Table 60--Palm kernel oil prices, bulk, c.i.f. U.S. ports, 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents per pound--													
1989	25.00	25.00	23.00	23.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
1990	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00
1991	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00
1992	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00
1993	23.00	23.00	23.00	23.00	23.00								

1/ Extracted from the seed kernels of palm trees for food products and soap.

Source: Chemical Marketing Reporter.

Table 61--Sebacic acid prices, CP bags, carload, 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Dollars per pound--													
1989	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	2.05	2.05	2.05	1.97
1990	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05
1991	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05
1992	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05
1993	2.05	2.05	2.05	2.05	2.05								

1/ Made by high temperature cleavage of castor oil for use as an intermediate chemical in the manufacture of polymers and plasticizers.

Source: Chemical Marketing Reporter.

Table 62--Stearic acid prices, single pressed, bulk, 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents per pound--													
1989	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00
1990	37.00	37.00	37.00	37.00	37.00	37.00	41.00	41.00	41.00	41.00	36.00	36.00	38.17
1991	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00
1992	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	39.00	39.00	39.00	44.00	37.42
1993	44.00	44.00	44.00	44.00	44.00								

1/ Obtained by hydrogenation of oils and fats for lubricating greases, soaps, and lubricants.

Source: Chemical Marketing Reporter.

Table 63--Tallow fatty acids prices, tanks, delivered, 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents per pound--													
1989	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00
1990	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00
1991	29.00	29.00	29.00	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	24.88
1992	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50
1993	23.50	23.50	23.50	23.50	23.50								

1/ Made from splitting tallow for direct use as lubricants or in greases and for separation into pure fatty acids. Prices quoted are the low end of a range.

Source: Chemical Marketing Reporter.

Table 64--Bone phosphate, feed grade, 18.5 percent phosphorus, bulk, carload, truckload, f.o.b., 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Dollars per ton--													
1989	195.00	195.00	195.00	195.00	195.00	195.00	195.00	195.00	195.00	195.00	195.00	195.00	195.00
1990	195.00	195.00	195.00	195.00	195.00	195.00	195.00	195.00	195.00	195.00	195.00	195.00	195.00
1991	195.00	195.00	195.00	195.00	195.00	195.00	195.00	228.00	228.00	228.00	228.00	228.00	208.75
1992	228.00	228.00	228.00	228.00	228.00	228.00	228.00	228.00	228.00	228.00	195.00	195.00	222.50
1993	195.00	195.00	195.00	195.00	N.A.								

N.A.= Not available.

1/ Extracted from cooked bones for feed and fertilizer.

Source: Chemical Marketing Reporter.

Table 65--Casein prices, imported, acid precipitated, ground, 30-mesh, edible, c.i.f., 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Dollars per pound--													
1989	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
1990	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
1991	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
1992	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.55	2.55	2.55	2.55	2.52
1993	2.55	2.55	2.55	2.55	2.55								

1/ Coagulated and dried milk protein for adhesives and plastics.

Source: Chemical Marketing Reporter.

Table 66--Gelatin prices, edible, 100 AOAC test, drums, delivered, 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents per pound--													
1989	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
1990	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
1991	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.65	1.65	1.65	1.54
1992	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.70	1.70	1.70	1.70	1.70	1.68
1993	1.70	1.70	1.70	1.70	1.70								

1/ Water extract of bones and hides for photographic emulsions and food. Price quotes are the low end of a range.

Source: Chemical Marketing Reporter.

Table 67--Glue, bone prices, extracted, green, 85 jellygrams, bags, carload, 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents per pound--													
1989	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00
1990	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00
1991	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00
1992	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	89.00	89.00	94.00
1993	89.00	89.00	89.00	89.00	89.00								

1/ Steam treatment and water extraction of bones for glue and mineral flotation processes.

Source: Chemical Marketing Reporter.

Table 68--Lanolin prices, anhydrous, pharmaceutical 400 lb. drums, 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Dollars per pound--													
1989	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
1990	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.28	1.28	0.95	1.01
1991	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.25	1.25	1.00
1992	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
1993	1.25	1.25	1.25	1.25	1.25								

1/ Extracted from wool for cosmetics, leather dressing, and lubricants. Price quotes are the low end of a range.

Source: Chemical Marketing Reporter.

Table 69--Alpha pinene prices, technical grade, 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents per pound--													
1989	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00
1990	43.00	43.00	43.00	43.00	43.00	43.00	43.00	43.00	43.00	43.00	43.00	43.00	43.00
1991	43.00	43.00	43.00	43.00	43.00	43.00	43.00	43.00	43.00	43.00	43.00	43.00	43.00
1992	43.00	43.00	43.00	43.00	43.00	43.00	43.00	43.00	43.00	43.00	43.00	43.00	43.00
1993	43.00	43.00	43.00	43.00	43.00								

1/ Separated from turpentine for chemical synthesis.

Source: Chemical Marketing Reporter.

Table 70--Beta pinene prices, technical grade, tanks, 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents per pound--													
1989	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00
1990	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00
1991	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00
1992	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00
1993	55.00	55.00	55.00	55.00	55.00								

1/ Separated from turpentine for chemical synthesis.

Source: Chemical Marketing Reporter.

Table 71--Carboxymethyl cellulose prices, technical, 96 percent minimum low or medium viscosity, bags, 24,000 lbs., f.o.b. Hopewell, VA, 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Dollars per pound--													
1989	1.25	1.25	1.25	1.25	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.16
1990	1.18	1.18	1.18	1.18	1.18	1.45	1.55	1.55	1.55	1.55	1.55	1.55	1.39
1991	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
1992	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
1993	1.55	1.55	1.55	1.55	1.55								

1/ Reaction of cellulose with sodium chloroacetate for food, cosmetics, paper products, and drilling muds. Price quotes are low end of a range.

Source: Chemical Marketing Reporter.

Table 72--Cellulose acetate prices, powdered, bags, truckloads delivered east, 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Dollars per pound--													
1989	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
1990	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58
1991	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62
1992	1.62	1.62	1.62	1.62	2.02	2.02	2.12	2.12	2.12	2.12	2.12	2.12	1.94
1993	2.12	2.12	2.12	2.12	2.12								

1/ Reaction of cellulose from wood with acetic acid for rayon textiles and cigarette filters.

Source: Chemical Marketing Reporter.

Table 73--Crude tall oil, tanks, freight equalled, Southeast, 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Dollars per ton--													
1989	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00	140.00
1990	135.00	135.00	135.00	135.00	125.00	125.00	130.00	130.00	130.00	145.00	145.00	155.00	135.42
1991	155.00	155.00	155.00	155.00	155.00	155.00	155.00	165.00	165.00	165.00	165.00	165.00	159.17
1992	165.00	165.00	165.00	155.00	155.00	155.00	155.00	145.00	145.00	135.00	135.00	135.00	150.83
1993	135.00	125.00	125.00	125.00	115.00								

1/ Byproduct of kraft paper production for refining into rosin and fatty acids.

Source: Chemical Marketing Reporter.



Table 74--Ethyl vanillin, 25 lb. drums, 500 lbs. or more, 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Dollars per pound--													
1989	13.75	13.75	13.75	13.75	13.75	13.75	13.75	13.75	13.75	14.50	14.50	14.50	13.94
1990	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50
1991	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.75	14.75	14.75	14.56
1992	14.75	14.75	14.75	14.75	14.75	14.75	14.75	14.75	14.75	14.75	14.75	14.75	14.75
1993	14.75	14.75	14.75	14.75	14.75								

1/ Chemically modified vanillin from lignin for food flavoring. Price quotes are the low end of a range.

Source: Chemical Marketing Reporter.

Table 75--Pine oil prices, 80 percent minimum alcohol content, bulk, f.o.b., 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Cents per pound--													
1989	61.00	61.00	66.00	66.00	59.00	59.00	59.00	59.00	59.00	59.00	59.00	59.00	60.50
1990	68.00	68.00	68.00	68.00	68.00	68.00	68.00	68.00	68.00	68.00	68.00	72.00	68.33
1991	72.00	72.00	72.00	72.00	72.00	72.00	72.00	72.00	72.00	72.00	72.00	72.00	72.00
1992	72.00	72.00	72.00	72.00	72.00	72.00	72.00	72.00	72.00	72.00	72.00	72.00	72.00
1993	72.00	72.00	72.00	72.00	72.00								

1/ Steam distillation from pine stumps or synthesized from turpentine for household cleansers, coated paper, mineral flotation, and perfume.

Source: Chemical Marketing Reporter.

Table 76--Turpentine prices, crude sulfate, tanks, f.o.b. Southeast, 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Dollars per gallon--													
1989	1.80	1.80	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.05
1990	2.00	2.00	1.90	1.80	1.80	1.80	1.70	1.60	1.60	1.50	1.50	1.80	1.75
1991	1.50	1.50	1.50	1.50	1.40	1.40	1.25	1.25	1.25	1.25	1.25	1.25	1.36
1992	1.15	1.10	1.10	0.90	0.90	0.90	0.90	0.75	0.75	0.70	0.70	0.70	0.88
1993	0.70	0.70	0.70	0.70	0.70								

1/ Paper industry byproduct for recovery of alpha and beta pinene.

Source: Chemical Marketing Reporter.

Table 77--Fir oil prices, Canada, drums, 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Dollars per pound--													
1989	9.75	9.75	9.75	9.75	9.75	9.75	9.75	9.75	9.75	9.75	9.75	9.75	9.75
1990	9.75	9.75	9.75	9.75	9.75	9.75	9.75	9.75	9.75	9.75	9.75	9.75	9.75
1991	9.75	9.75	9.75	9.75	9.75	9.75	9.75	9.75	9.75	9.75	9.75	9.75	9.75
1992	9.75	9.75	9.75	11.00	11.00	11.00	11.50	11.50	11.50	11.50	11.50	11.50	10.94
1993	11.50	11.50	11.50	11.50	11.50								

1/ Steam distilled from *Picea nigra* for perfumes. Price quotes are low end of a range.

Source: Chemical Marketing Reporter.

Table 78--Juniperberry oil prices, Italian, 1989-93 1/

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Avg.
--Dollars per kilogram--													
1989	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00
1990	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	57.00	91.83
1991	57.00	57.00	57.00	220.00	220.00	220.00	220.00	220.00	220.00	220.00	220.00	220.00	179.25
1992	220.00	210.00	210.00	210.00	210.00	210.00	210.00	210.00	264.00	264.00	264.00	264.00	228.83
1993	264.00	264.00	264.00	264.00	264.00								

1/ Byproduct of gin production used for perfume. Price quotes are low end of a range.

Source: Chemical Marketing Reporter.