

<EOA>

4.5 Alcohol

NP 가

EO(Ethylene Oxide) , EO 1 2000 5
EOA(Ethylene Oxide Additive)

EOA 90 2 5000 61.3% ,
38.7% , EO EOA
() 10 5000 1 8750
() 6100 6 1 ()
5200 9 1
91 EOA 2 2200 92 4 4650
EOA (70%)
Nonyl Phenol Alcohol 가

< 1> EOA

(: , %)

		1990		1991		1992		1993	
			M/S						
		3,841	15.0	6,000	56.2	8,000	33.3	11,000	37.5
		3,060	12.0	4,215	37.7	7,000	66.1	8,000	14.3
		1,551	6.0	3,600	132.1	5,000	38.9	6,000	20.0
		1,460	5.7	2,000	40.0	2,800	40.0	3,000	7.1
		9,912	38.7	15,815	59.6	22,800	44.2	28,000	12.3
		15,690	61.3	15,000	3.9	12,840	14.4	11,200	12.8
		25,602	100.0	30,815	20.4	35,640	15.7	39,200	10.0
		25,445	99.4	30,615	20.3	35,390	15.6	38,900	9.9
		157	0.6	200	27.4	250	25.0	300	20.0
		25,602	100.0	30,815	20.4	35,640	15.7	39,200	10.0

EO EOA 92 4 4650
91 EOA 3 1 5800 (51.3%), 1 5000
(49.7%) 91 50% ,
EOA EO , 90
가 , EOA 2 5602 1 6600 EO
EOA EO 5123 , EOA 9900
EO가 가
가 가

< 2> EOA

(:)

		()	EOA				
			1990	1991			
	196	38,818	3,841	6,000	5,000	13,750	18,750
	98	7,008	3,060	4,215	6,100	4,000	10,000
	54	7,658	1,551	3,600	5,200	5,000	10,000
	28	3,512	1,460	2,000	5,900		5900
	376		9,912	15,815	22,200	22,750	44,650

< 4> EO

EOA

(:)

	1989	1990	1991	1992	1993
EO	12,000	12,000	50,000	50,000	50,000
EOA	22,000	22,000	22,000	49,950	49,950
EOA	9,671	9,912	15,815	22,800	28,000
	13,600	15,690	15,000	12,840	11,200
	23,271	25,602	30,815	35,640	39,200
EOA EO	16,400(5,222)	16,600(5,123)	20,491(8,991)	23,700(15,162)	26,068(18,620)
	4,400	4,600	29,509	26,300	23,932

) EOA EO = (EOA) + EOA
 = EO - EO , ()

EO

. EOA

100

80~90

EO Nonyl Phenol Alcohol

< 3> EOA

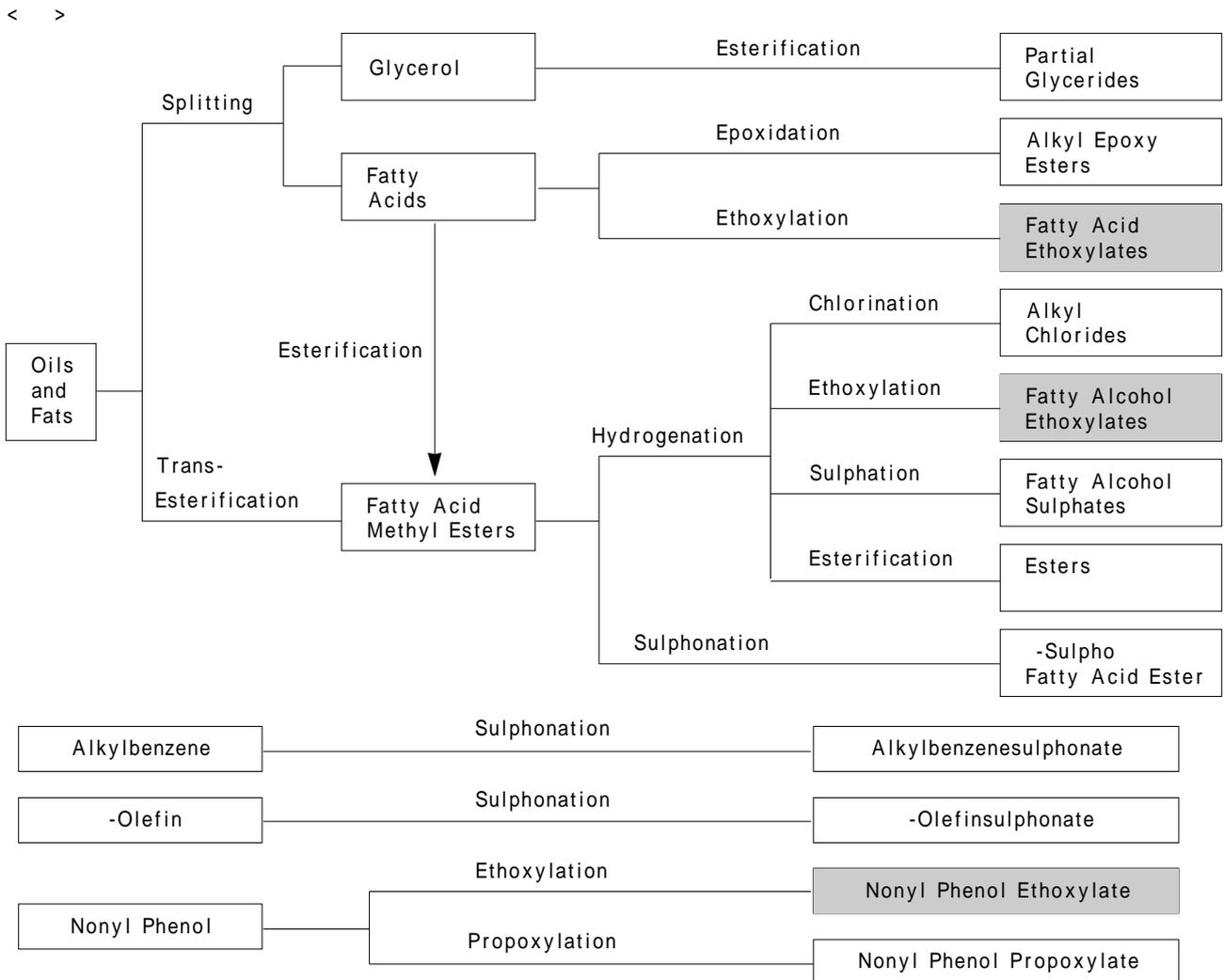
(: , %)

	1990		1991		1992	
EO + Phenol (Nonylphenol, Alkylphenol)	12,722	50.0	14,715	45.7	15,926	45.0
EO + Alcohol (Fattyalcohol, Laurylalcohol)	7,125	28.0	11,141	34.6	14,156	40.0
EO + Acid · Amine (Fattyacid)	1,272	5.0	1,417	4.4	1,769	5.0
	4,326	17.0	4,927	15.3	3,539	10.0
	25,445	100.0	32,200	100.0	35,390	100.0
가			9,306	28.9	9,622	27.2
			5,249	16.3	5,475	15.5
			4,089	12.7	7,548	21.3
()			1,127	3.5	1,280	3.7
()			2,801	8.7	3,056	8.6
			2,254	7.0	2,479	7.0
			2,415	7.5	2,473	6.9
			4,959	15.4	3,457	9.8
	25,445	100.0	32,200	100.0	35,390	100.0

) 4

EOA 3200 , Alcohol 1200 , Acid · Amine 400 , 91 Nonyl Phenol 1100 , 5900
 () Nonyl Phenol 3500 (9.4% 가), Alcohol 6680
 1500 (25.0%), Acid · Amine 480 (20.0%), 1200 (9.0%) 가

92 EOA 2 2800 44.2% 가
 Nonyl Phenol 가 Alcohol 가
 SISAS
 2000~2500
 91 Nonyl Phenol 1418 (33.6%), Alcohol 2300 (54.6%), Amine 50
 (2.2%), 447 (10.5%) 4,215
 Alcohol 가 7000



91 Alcohol Ester , 750 (20.8%), 300
 (8.3%), 100 (2.8%), 1500 (41.7%), 300 (8.3%),
 100 (2.8%), 150 (4.2%), 200 (5.6%), 100 (2.8%) 3600
 , 5000

2000 EOA 91 1 5800 90 59.6% 가 , 1
 5000 , 가 EO ,
 90 EO (1 2000) (3)
 5
 EOA 2 2800 1 5000 EOGA ,
 3 5600 EOA 2 3700 EOGA
 , 91 EOA EO 1
 4715 (45.7%), Alcohol 1 1141 (34.6%), Acid · Amine 1417 (4.4%), 4927
 (15.3%) 3 2200
 92 Phenol 가 가 가
 , Alcohol
 가
 92 Phenol 1 5926 8.2% 가 , Alcohol
 1 4156 27.1%, Acid · Amine 1769 24.8% 가가

< 5>

(: , %)

	1975	1980	1985	1987	1990	1994	2000		
								'90~'94	'87~2000
	16.7	33.7	45.7	52.3	54.3	59.3	73.0	2.3	3
	5.6	11.3	21.7	24.8	28.9	34.0	41.8	4.4	5
	1.3	2.5	5.9	6.7	7.4	8.9	11.0	5	5
	0.5	0.4	0.4	0.5	0.7	0.9	1.2	7	10
	24.1	47.9	73.7	84.3	91.3	103.1	127		

Phenol Alcohol 가
 91 가 9306 (28.9%), 5249(16.3%), 4089(12.7%),
 1127 (3.5%), 2801 (8.7%), 2254 (7.0%), 2415 (7.5%),
 4959 (15.4%) EOA 가 가 , 가
 92 , 가
 92 가 EOA 가 9622 (27.2%), 5475 (15.5%)
 , 가 3.4%, 4.3% , EOA 7548
 12.7% 21.3% , 가 80%
 가
 EOA 가 가가 kg 1080 1100
 가 , Alcohol 가
 1000~1100 SISAS 가 CIF 780
 UCC · ICI 가가 가

< 6> Nonyl Phenol (:1000)

	Exxon	9
	GAF	14
	GE	27
	Kalama	9
	Monsanto	16
	Rohm and Haas	36
	Schenectady	48
	Texaco	27
	Uniroyal Chem.	5
		191
	Sanyo	3.4
	Mitsui Toastu	18.0
	Yokkaichi chem.	9.6
		31.0
	Huls(W/G)	33
	Montedipe(Italy)	28
	SISAS(Italy)	15
	Berol Kemi.(Sweden)	10
	ICI(U.K.)	27
		113
	Danubia Foreign Trade Co.	Romania
	Ciech	Poland
	Christianson S.A.	Mexico
	Canamex S.A.	Mexico
	Industries Petrolite S.A.	Mexico
	A.D.P.	India
	Atlas Industrias Quimicas S/A	Brazil
	Hoechst do Brasil	Brazil
	Aco S.A.P.I.C.	Argentina

EO가 EOA 가
 가
 EOA가 EO 가 ,
 EOA가 1/4
 가 71 5000
 EOA가 가
 EO Nonyl Phenol 가 가
 FOB 973 (86) 87 847
 88 976 , 89 1060
 90 840 , 91 850 .
 , EOA가
 ,
 (Dow Hoechst가 Nonyl
 Phenol Nonyl Phenol
 Ethoxylate)
 , 가
 , EO
 EOA 가
 ,
 EOA가 EOA
 가 EOA
 EO 가
 ,
 < 1992/3/15>