

1994
94

2/4

3/4

가

93

가

Exxon,
가 ,
가

가

Enichem
가

가 , 가

(1990=100) (: %)								
1990	100.0	26.9	100.0	24.2	100.0	41.5	100.0	26.3
1991	127.4	27.4	112.7	12.7	203.8	103.8	125.1	25.1
1992	169.9	33.3	135.5	20.3	399.3	95.9	171.4	37.0
1993	189.3	11.5	149.3	10.1	462.0	15.7	191.8	11.9
1994	204.8	8.2	167.5	12.2	464.5	0.5	207.9	8.4
1994. 1/4	204.7	10.4	158.8	14.8	492.6	12.1	204.2	13.9
2/4	184.8	7.4	162.9	10.7	427.2	3.0	198.9	6.3
3/4	211.4	5.6	174.2	13.1	470.5	2.3	214.5	9.6
4/4	218.2	9.4	174.2	10.6	467.7	8.0	214.1	4.3
1995. 1/4	217.8	6.4	165.7	4.3	561.5	14.0	219.5	7.5
2/4	223.5	21.0	177.5	8.9	526.1	23.2	224.9	13.1
()	220.7	13.3	171.6	6.6	543.8	18.3	222.2	10.2

) 3 (, ,) .

() (: 1000M/T, %)								
	(A)	(B)	(C)	(D)				
					B/A	B/D	C/A	C/D
1990	1,235.9	565.1	219.0	1,582.0	45.7	35.7	17.7	13.8
1991	1,695.0	496.6	376.0	1,815.6	29.3	27.4	22.2	20.7
1992	2,780.4	353.8	997.9	2,136.3	12.7	16.6	35.9	46.7
1993	2,970.5	405.5	1,074.5	2,301.5	13.7	17.6	36.2	46.7
1994	3,213.8	438.9	1,056.8	2,595.9	13.7	16.9	32.9	40.7
1994. 1/4	801.8	89.6	280.6	610.8	11.2	14.7	35.0	45.9
2/4	739.2	121.1	235.8	624.5	16.4	19.4	31.9	37.8
3/4	829.9	116.4	267.1	679.2	14.0	17.1	32.2	39.3
4/4	842.9	111.9	273.3	681.5	13.3	16.4	32.4	40.1
1995. 1/4	851.2	127.5	337.9	640.8	15.0	19.9	39.7	52.7
2/4	854.9	148.5	316.7	686.7	17.4	21.6	37.0	46.1
()	1,706.1	276.0	654.6	1,327.5	16.2	20.8	38.4	49.3

)

95

가 94

가 가

2

가 가

가 ,

95

94

가

, 94
357

365 6000 93 331
가 100%
824 6000 93 8.4% 가 , 90

, 3
107.9% 가

95

182 7000
10.2% 가 440 6000

6.6% 가 , 3
가

(, 73%
43 9000 , 73%

) 94 321 4000
259 6000 105

7000

95

170 6000

27 6000

67%

132 7000

94 27%

33% 가

(: 1000M/T, %)									
		1990	1991	1992	1993	1994		1995()	
		1,064.9	1,584.1	2,811.5	3,310.1	3,655.7	10.4	1,826.8	6.6
		219.3	284.9	49.0	-	9.3	-	43.4	-
		1,284.2	1,869.0	2,860.5	3,310.1	3,664.9	10.7	1,870.2	9.1
		16.6	12.0	47.0	235.8	364.0	54.4	123.9	31.2
		1,267.6	1,857.1	2,813.6	3,074.4	3,300.9	7.4	1,746.3	13.9
		2,689.0	3,394.8	4,791.8	5,350.9	5,855.4	9.4	3,071.2	8.3
		276.0	221.5	127.7	154.7	129.8	16.1	53.2	16.7
		2,965.0	3,616.3	4,919.5	5,505.6	5,985.2	8.7	3,124.4	7.8
		445.6	960.2	1,912.4	2,272.1	2,306.4	1.5	1,323.7	16.2
		2,519.4	2,656.1	3,007.1	3,233.5	3,678.8	13.8	1,800.7	2.3
		1,101.4	1,391.0	1,798.6	2,019.7	2,127.7	5.3	1,202.9	16.5
		998.5	891.9	786.0	852.1	998.6	17.2	526.7	7.0
		2,099.9	2,282.9	2,584.6	2,871.8	3,126.3	8.9	1,729.6	13.4
		46.6	86.4	158.3	121.5	87.0	28.4	103.5	138.2
		2,053.3	2,196.5	2,426.3	2,750.3	3,039.3	10.5	1,626.1	9.8
		175.8	175.3	207.3	236.1	263.0	11.4	132.2	2.0
		44.0	47.4	47.6	38.8	40.6	4.6	14.4	32.7
		219.8	222.7	254.9	274.9	303.6	10.4	146.6	2.9
		47.1	52.5	82.8	98.0	111.6	13.9	39.2	32.0
		172.7	170.2	172.1	176.9	192.0	8.5	107.4	15.1
3		3,966.2	4,961.1	6,797.7	7,606.7	8,246.1	8.4	4,406.3	10.2
		1,318.5	1,160.8	961.3	1,045.6	1,169.0	11.8	594.3	2.9
		5,284.7	6,121.9	7,759.0	8,652.3	9,415.1	8.8	5,000.6	9.3
		539.3	1,099.1	2,153.5	2,491.6	2,505.0	0.5	1,466.4	18.3
		4,745.4	5,022.8	5,605.5	6,160.7	6,910.1	12.2	3,534.2	6.0

) 1. LDPE, HDPE, PP, PS, ABS, PVC
3. SBR, BR ()

2. AN, CPLM, PTA, DMT, EG
4. : +

92 , 94
13.7% 93 16.9% 93
32.9%, 40.7% 92 93
95 가
EG 가 , L-LDPE 가
94 38 1000 , 31 5000
6 6000 , 95 29 5000 , 24
가 5 5000 가
95 5.1% 가
90 가 95 가
80
91
가

가 94

9000

95

가

(: 1000M/T, %)					
	1990	1991	1992	1993	1994
	555	555	555	570	570
	600	700	700	700	700
	—	350	350	400	400
	—	350	350	400	400
	—	350	350	400	400
	—	—	350	400	400
	—	250	250	300	300
	—	—	350	400	400
	1,155	2,555	3,255	3,570	3,570

(: 1000M/T, %)								
	1990	1993	1994			1995()		
L D P E	15.2	340.3	995.5	320.9	32.2	581.7	255.3	43.9
H D P E	125.6	596.6	1,308.8	597.3	45.6	649.9	332.2	51.1
P P	74.6	763.5	1,610.8	837.7	52.0	799.8	441.1	55.2
P S	105.8	290.2	810.0	281.1	35.1	404.5	138.2	34.2
A B S	72.2	151.9	383.5	172.2	44.9	220.0	109.2	49.6
P V C	52.2	129.6	791.2	97.1	12.3	441.3	47.6	10.8
	445.6	2,272.1	5,890.8	2,306.4	39.2	3,097.2	1,323.7	42.7

) LDPE L-LDPE

가 94

1 2400 (1978 k \emptyset)

44% 5 4500

56% 6 9500

가 가

, 95 가 가

, 92

가

가

가

8

92 3200

, 93 5200

93 1

() (: 1000M/T, %)					
	1990	1991	1992	1993	1994
P E	752.7 (70.7)	1,066.3 (67.3)	1,851.3 (65.8)	2,201.1 (66.5)	2,371.8 (64.9)
M	112.7 (10.6)	209.4 (13.2)	345.5 (12.3)	367.1 (11.1)	389.7 (10.7)
EO/EG	51.7 (4.9)	120.4 (7.6)	260.7 (9.3)	247.0 (7.5)	243.8 (6.7)
VC/VCM	96.7 (9.1)	134.4 (8.5)	244.6 (8.7)	201.3 (6.1)	211.6 (5.8)
	34.5 (3.2)	41.7 (2.6)	62.6 (2.2)	58.6 (1.8)	84.7 (2.3)
	16.6 (1.6)	12.0 (0.8)	46.9 (1.7)	235.0 (7.1)	354.1 (9.7)
	1,064.9 (100)	1,584.1 (100)	2,811.5 (100)	3,310.1 (100)	3,655.7 (100)

(: 1000M/)								
	1992		1993		1994		1995()	
Caprolactam	287.0	97.1	276.7	102.3	314.3	105.4	162.1	57
A N	267.1	77.0	287.2	92.3	305.0	95.6	167.4	46
P T A	1,194.8	1,166.9	1,421.9	1,316.4	1,571.3	1,416.2	824.7	85
D M T	107.9	93.7	113.5	108.0	117.4	115.1	60.1	57
E G	569.5	373.0	651.1	352.9	731.2	358.6	411.8	19
	2,426.3	1,807.7	2,750.3	1,971.9	3,039.3	2,090.8	1,626.1	1,207

가

가

1300

, 95

(LDPE, HDPE, PP, PVC, PS/ABS

), (, AN, PTA/DMT, EG),

(SBR, BR) 3

941 5000 93 8.8% 가 , 824 6000

8.4% 가

		(: 1000M/T, %)						
		1991	1992	1993	1994		1995()	
M A		11.1	18.5	25.3	29.0	14.8	15.1	11.5
P A		121.9	129.5	153.3	162.5	6.0	75.6	6.8
		200.1	220.8	246.0	266.4	8.3	143.1	8.6
		21.9	22.0	24.2	31.5	30.0	22.2	13.8
P P G		59.1	64.8	72.7	80.7	11.0	47.1	19.8
		39.9	42.2	43.0	57.1	32.6	28.7	12.1
2 - E H		149.4	167.3	193.5	192.4	0.6	94.0	7.2
		44.1	58.0	63.4	72.7	14.6	42.1	18.0
		35.8	48.6	55.0	63.0	14.5	33.2	6.1
		19.9	21.2	23.7	24.4	2.6	14.3	22.6
		16.7	18.5	19.7	24.4	23.7	7.0	42.4
		73.3	79.1	88.3	95.6	8.3	69.9	47.0
T D I		22.8	24.7	26.5	29.1	9.9	14.8	5.3
P O		70.9	81.4	106.1	116.6	9.8	71.3	19.5

		() (: , %)				
		1990	1991	1992	1993	1994
		23,928 (55.9)	25,920 (55.5)	28,534 (61.4)	30,516 (59.6)	37,412 (60.9)
		10,810 (25.3)	12,858 (27.5)	8,386 (18.0)	9,262 (18.1)	11,356 (18.5)
		3,252 (7.6)	2,883 (6.2)	2,187 (4.7)	2,562 (5.0)	2,655 (4.3)
		4,793 (11.2)	5,029 (10.8)	7,359 (15.8)	8,891 (17.4)	9,986 (16.3)
		42,783 (100)	46,690 (100)	46,466 (100)	51,231 (100)	61,409 (100)

- 1.
2. , BTX, EDC, VCM, SM, PO, AA
3. ()

691 93 12.2% 250 5000
0.5% 가 . 94 가 가

DMT PTA 가 93 12 2000 93
94 가 , 가
28% .
95 500 1000 9.3% 가 .
353 4000 6.0% 가 146 6000 18.3% 가

가 , 94 LDPE, HDPE, SM 가
93 10.4% 가 365 6000
93 331 34 가
90 2 115 5000 91
LG , , 4 , 92
, 2 , 92 8 321 5000

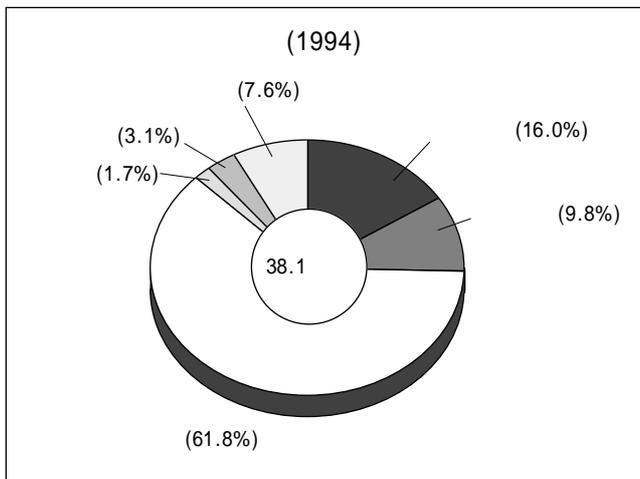
357 가 , 2 1 93
380

94 가 90 ,
 95 가 182 7000 6.6% 가 , 174 6000
 13.9% 가 , 31%
 가 가 94 L-LDPE
 가

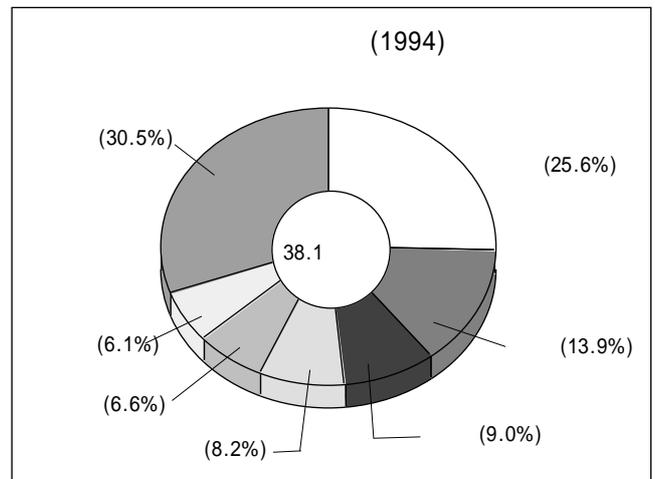
		()				(: , %)	
		1990	1991	1992	1993	1994	1995()
		650.2	718.7	766.3	822.4	960.1	583.3
		11.8	16.4	25.7	28.8	38.1	29.5
		1.8	2.3	3.4	3.5	4.0	5.1
		698.4	815.2	817.8	838.0	1,023.5	652.6
		33.1	32.6	25.8	26.7	31.5	24.0
		4.7	4.0	3.2	3.2	3.1	3.7
		48.3	96.5	51.4	15.6	63.4	69.4
		21.3	16.2	0.1	2.1	6.6	5.5

)

94 65% 237 2000 (PE)
 가 PE SM, EO/EG,
 EDC/VCM 10.7%, 6.7%, 5.8% 9.7% 35
 4000 가
 95 L-LDPE 가 PE 가 70%
 가 가 94 93 8.7% 가 598 5000
 367 9000 230 6000 13.8%
 가 1.5% 가 가
 95 312 4000 7.8% 가 180 1000
 132 4000 16.2% 가



가



L-LDPE

가

94 98% 585 5000 2%
 13 40% 230 6000
 (PE, PP) . 95
 307 1000 가 43.0% 132 4000

	()			(: 100)					
	1993	1994	1995.	1993	1994	1995.	1993	1994	1995.
	410	611	381	201	262	199	209	349	182
	263	373	279	457	521	633	194	148	354
	1,793	2,356	1,899	975	1,155	699	818	1,201	1,200
	66	66	110	578	694	532	512	628	422
	101	118	64	194	217	121	93	99	57
	247	290	221	264	301	220	17	11	1
	2,880	3,814	2,955	2,669	3,150	2,404	211	664	551

, 94 LDPE 99 6000 32 1000 , HDPE
 46.0%, PP 52.0% , PS ABS 35.0%, 45.0%
 PVC 12.0% , 8.3%
 6 4500 . 94 76.0%
 175 6000
 95 , LDPE 94 32.0% 44.0% , HDPE 46.0%
 51.0% , PP 52.0% 55.0%
 가

	가 (: /MT)							
	1990	1991	1992	1993	1994		1995	
					1/4	4/4	1/4	2/4
	1,060	395	318	295	301	543	438	455
	790	393	330	307	338	660	720	583
	480	370	303	250	285	360	360	323
S M	920	503	454	488	532	975	1,305	1,233
L D P E	1,085	735	770	615	600	920	970	1,100
H D P E	1,125	695	575	505	515	880	955	995
P P	1,025	695	535	535	530	1,010	1,085	1,190
P S	1,215	670	665	650	735	1,110	1,355	1,440
P V C	790	520	545	640	700	1,000	1,060	1,020
Caprolactam	2,000	1,595	1,290	1,115	1,065	1,450	1,550	1,713
A N	883	635	655	535	540	1,150	1,413	1,525
P T A	720	618	610	650	680	850	930	1,055
E G	490	463	395	375	375	520	600	680

	() (: 1000BBL, %)			
	1993		1994	
가	18,675	31.2	14,379	20.7
	1,255	2.1	1,141	1.6
	969	1.6	1,962	2.8
	6,018	10.1	9,626	13.9
	26,917	45.0	27,108	39.0
	17,039	28.5	21,341	30.7
	232	0.4	588	0.8
	7,634	12.8	10,372	14.9
	1,298	2.2	3,322	4.8
	4,969	8.3	6,244	9.0
	31,172	52.1	41,867	60.3
	1,691	2.8	475	0.7
	59,780	100.0	69,450	100.0

) Spot가

가 가
 93 94
 94 312 6000 93 8.9% 가 303

9000 10.5% 가 , 28.0% . 212 8000 99 9000
 68.0% 가 가
 95 가 94
 10.0% 가 , PTA
 16.5% 가 .

가				
	가	가		
	(\$/Bbl)	(\$/MT)		
	Dubai	Arabian Gulf	C & F Japan	가
1990	20.25	206	228	219
1991	16.54	198	217	227
1992	17.18	179	194	198
1993	14.95	152	170	178
1994	14.73	141	161	160
1994. 1	13.18	115	138	140
2	12.90	116	138	140
3	12.17	116	135	140
4	13.83	127	146	137
5	14.71	139	159	148
6	15.67	145	164	161
7	16.40	152	171	166
8	15.82	153	172	174
9	15.28	151	171	175
10	15.36	156	178	174
11	15.98	158	181	181
12	15.41	158	181	184
1995. 1	16.00	154	178	184
2	16.56	154	176	180
3	16.36	158	181	182
4	17.38	165	185	186
5	17.29	167	186	189
6	16.19	162	184	189

(: 1000M/T, %)						
	1990	1991	1992	1993	1994	1995
	1,155	2,555	3,255	3,570	3,570	1,770
	625	1,505	1,930	2,103	2,103	1,043
S M	675	1,135	1,135	1,278	1,325	657
V C M	510	660	660	660	660	327
P - X	560	560	560	650	650	357
L D P E	483	755	775	980	1,170	580
H D P E	743	1,033	1,173	1,363	1,363	676
P P	805	1,280	1,310	1,665	1,705	845
P V C	610	690	710	720	780	387
P S	787	840	925	935	925	459
A B S	320	355	370	390	460	263
	3,748	4,953	5,263	6,053	6,403	3,210
Caprolatam	80	80	80	80	80	40
A N	52	90	90	90	90	45
P T A	1,160	1,210	1,210	1,310	1,310	893
D M T	120	120	120	120	120	60
E G	80	380	380	405	405	201
	1,492	1,880	1,880	2,005	2,005	1,239
S B R	150	150	150	150	150	45
B R	90	95	95	95	95	47
	240	245	245	245	245	122

94 가 , AN, EG 가
 가
 (AN)
 PTA
 가
 SBR, BR 94
 93 8.5% 가 , 11 2000 13.9% 가
 11.4% 가 26 3000 4.6% 가 4 1000
 IIR, CR 가
 95 가 가 10 7000
 15.0% 가 33.0%, 32.0% 가

가 가

가 % 2 가

가 93 33% 가 . 94

95 가 . 가 .

, 94 93 가 . 94 (

) 6 1409 , 가 60.9% 3 7412 ,

가 18.5% 1 1356 , 가 4.3% 2655 , 16.3%

, 3 84.0% . 91

가 25.0% 92 18% 91

가 가 92

95 가 가 . , 가

10 94

(: 1000BBL, %)							
	NCC	BTX					
1990	37,983	3,574	855	42,412	27,712	14,700	34.7
1991	53,708	7,792	815	62,315	42,215	20,100	32.3
1992	85,773	11,326	1,213	98,312	47,712	50,600	51.5
1993	98,064	11,346	1,498	110,908	51,128	59,780	53.9
1994	109,363	13,050	1,568	123,981	54,531	69,450	56.0

80

, SM, VCM

80 가 90

92 가

93 2 1000 , 94 6 6000

95 가

29 5000 , 24 94

6 6000 5 5000

가

, 94 BTX 가 3 4900

12 100

EDC/VCM, SM, PO 1 4800 , 6 2800 ,

9900

가 PTA DMT , AN, EG
 가 , SBR, BR
 IIR, CR

(: 1000M/T)					
					()
		—	250	1995. ~ 1997. 6	()
		—	200	1995. 6 ~ 1997. 1	()
S M		240	200	1995. ~ 1996. 6	()
		125	200	1995. ~ 1996.	()
		300	170	1995. ~ 1996. 3	()
V C M		360	160	1995. ~ 1997.	()
	L G	300	300	1994. ~ 1996.12	()
E D C		436	150	1995. ~ 1997.	()
	L G	—	150	1994. ~ 1996.12	()
P - X		180	200	1994. ~ 1995.10	()
		650	350	1995. 9 ~ 1997. 4	()
		270	80	1994. ~ 1996. 1	()
		—	300	1995. 6 ~ 1996.12	()
		—	400	1995. 6 ~ 1997. 1	()
L-LDPE		100	100	1995. ~ 1996. 6	()
H D P E		100	120	1994. ~ 1996. 6	()
P P		200	80	1995. ~ 1996. 6	()
		150	100	1994. ~ 1996. 6	()
A B S		80	20	1994.10 ~ 1995. 8	()
P V C		360	145	1994. ~ 1995.12	()
A N		—	250	1995. ~ 1998. 6	()
		90	19	1995. ~ 1996. 6	()
C P L M		—	70	1995. ~ 1997.	()
		—	120	1995. ~ 1997. 6	()
P T A		400	150	1995. ~ 1997. 1	()
		—	250	1995. ~ 1997. 6	()
E G		200	120	1995. ~ 1997. 7	()
S B R		—	40	1995. ~ 1996.	()
B R		—	30	1995. ~ 1996.	()
S B - L		—	40	1995. ~ 1996.	()
E P R		20	20	1995. ~ 1996.12	()
P O		130	75	1995. ~ 1996. 3	()
	L G	—	100	1995. ~ 1997.	()
		110	100	1994. ~ 1996. 6	()
P A		110	50	1995. ~ 1996. 3	()
M D I		40	10	1996. ~ 1996.12	()
		30	10	1993.10 ~ 1995. 8	()
M M A	L G MMA	40	40	1995. ~ 1998.	()
		—	40	1995. ~ 1997.	()
	L G	200	10	1994. 3 ~ 1995. 9	()
		140	60	1995. ~ 1997.	()
		—	100	1995. 2 ~ 1996. 6	()
		100	50	1995. ~ 1997. 6	()
		20	20	1995. ~ 1997.	()
V A M	L G B P	77	90	1994. ~ 1996.	()
		—	150	1995. 5 ~ 1996.	()

95 94 95
 가 94
 가 12
 61.8% 94
 가
 가 25.6% , 13.9% , 9.0%
 , 8.2% , 6.6%
 , 6.1%
 가
 가
 25.6%
 40%
 가
 가
 가 91 가 가
 가 가 가
 가 가
 92 가 가
 가 가
 92
 가
 (91 94) 가 91
 94 95
 가
 가

가 , 가 C & F Japan 가
 161 93 5.3% . 가 160
 가 (C & F Japan) 가 ,
 10.1% 가
 95 가 94 가 가 C & F Japan 180
 가 Dubai 16 , 가
 가 94
 , SM 488 975 , PP 가 93 295 543 가
 535 1010
 95 , 94
 가 가 가 94 가 가
 가 가 가 가
 가 가 가
 , 95 94 2 . 93

BTX
 LPG, Gas Oil, LNG

LPG , , 1,4-
 LPG
 94 가 가 1 2400 93 1 1090 12.0% 가
 가 가 가
 (NCC) 11.6% 가 1 940 , BTX 15%
 가 1300 44% 5450
 가 93 54.0% 56.0%
 95 94 6.7% 1 3230 ,
 53.0% 7010
 가 60% 가 30.7% , 94
 , 가 2130

94

28

9082

93

6310

44.0% 가

가

94

93

가

94

95

95

94

가 1 8000

SM, VCM, EDC, P-X
AN, , PTA, EG

95

Debottlenecking