

<

>

10%

“ ”

5000 2.8%, 4000

5.7%

93 351 8000 6200

가 88 22.7%, 50 5000 20.5%, 가 25

8.8%, 가 17 9.7%

가

79 2 83 가 . 83

1 22.2kg 91 265 1 2.8

가 61.3kg

1 90 17.2% 91 4.5% 93 1

70kg

93 LDPE 41 5000 , HDPE 19 3000 , PP 34

2000 , PVC 27 7000 , PS ABS 8 5000 131 2000

82 10 가 LDPE 11.4%, HDPE 15.9%, PP 12.7%, PVC 11.5%,

PS/ABS 11.4% 12.3% 가

90 270 93 518 2000 , 94 550

. 6 93 LDPE 92 ,

HDPE 120 , PP 144 , PS 75 518 2000

92 LDPE 38 5000 , HDPE 25 9000 , PP 30 , PVC 24

4000 , PS 13 5000 133 91 15.5%가 가

EPS 92 3 5700 2700 0.13%, PSP 1 8500

0.07% . 93 EPS 가 3 6000 , 8000

5 7000 12 8000 18 6000 2

3000 3000 3 6800

70

가

PS 6 93 4 (KFRA)

EPS

EPS 93 14% . EPS 93 EPS

17 5000 EPS 3 7000 5000 . 94

EPS 18 EPS 3 8000 6000 16%가

. KFRA 95 19%, 98 30%

가

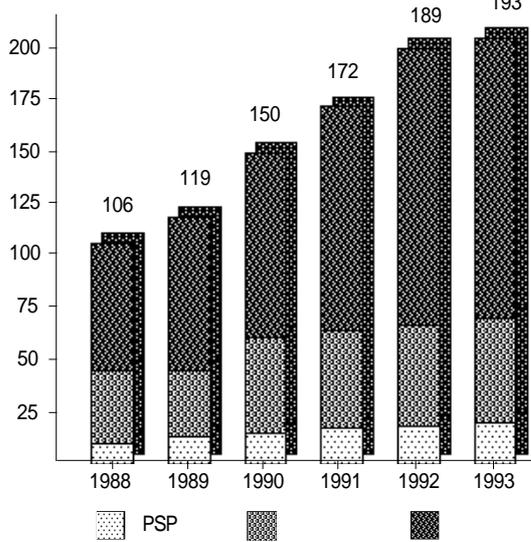
【 1】 (: M/T)

	1990	1991	1992	1993	1994
L D P E	341,115	370,753	385,822	400,000	420,000
H D P E	159,775	201,639	259,990	300,000	340,000
P P	232,932	265,431	300,530	330,500	370,000
P V C	183,826	198,994	244,648	280,000	300,000
P S	985,317	111,592	135,099	160,000	180,000
	1,016,179	1,148,409	1,326,089	1,470,500	1,610,000

【 2】 EPS (: M/T, %)

	1993	1994	1995	1996	1997	1998
EPS	175,000	180,000	186,000	191,000	197,000	203,000
EPS	36,800	38,000	39,000	40,000	41,500	43,000
	5,000	6,000	7,500	9,000	11,000	13,000
	14	16	19	23	26	30

【 1】 EPS (: 1000M/T)

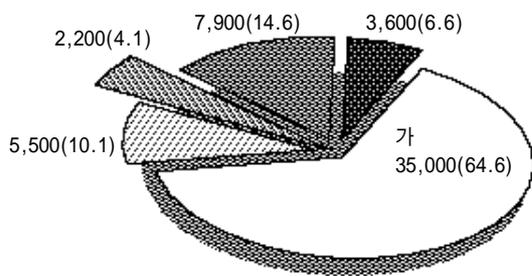


【 3】 EPS EPS (: M/T)

		1992	1993
EPS	가	35,000	36,000
		5,500	6,000
		7,900	8,000
		2,000	2,200
		3,600	4,898
		54,000	57,098
		116,000	128,832
		170,000	185,930
()		21,000	23,298
()		2,700	3,000
EPS (- +)		35,700	36,800
PSP(Polystyrene Paper)		18,500	
		5,400	
		4,980	5,000

) KFRA

【 2】



【 4】 (: MT)

	1988	1989	1990	1991	1992	1993
	77,980	83,550	73,090	67,240	70,000	75,000
(M.M.A)	11,862	13,066	12,372	12,800	13,000	14,000
P V C	30,312	13,362	13,487	12,130	13,000	15,000
	18,120	18,669	18,840	19,210	20,000	22,000
	13,884	22,430	17,573	14,410	24,000	34,000
	152,158	151,077	135,362	125,790	14,000	160,000

)

90 13 5000 92 14 , 94 20
 93 가 7 5000 ,
 1 4000 , PVC 1 5000 , 2 2000 , 3 4000 16
 93 350 5%

FRP, PET,

94

97

53%

60%

가

1000

PET

95

10%, 97

20%, 98

50%

95

5%, 97

10%, 98

20%

가

가

가

가

KFRA가 EPS

【 5】

(1993)

(: 1000M/T, 10 , %)

	1992		1993		
	840	1,357	882	1,425	22.7
	400	500	428	535	8.5
	176	228	184	238	3.8
	500	1,272	505	1,284	20.5
	197	312	210	328	5.2
	238	519	253	552	8.8
	230	409	240	426	6.8
	30	163	32	174	2.8
	220	180	233	191	3.1
	163	572	170	607	9.7
	324	393	381	500	8.1
	3,318	5,905	3,518	6,260	100

【 6】

(: 1000M/T)

	1982	1984	1986	1989	1993	가
L D P E	128	166	208	272	415	11.4
H D P E	38	58	85	104	193	15.9
P P	91	121	155	308	342	12.7
P V C	84	120	143	228	277	11.5
PS/ABS	26	42	51	77	85	11.4
	367	507	642	989	1,312	12.3

)

【 7】

(: 100 , ,)

		1987	1988	1989	1990
		108,337,496	133,080,847	146,260,242	175,234,250
		2,907,308	3,734,973	3,978,873	4,927,904
		2.7	2.8	2.7	2.8
		63,392	59,928	65,684	68,872
		2,726	3,029	3,466	3,940
		4.3	5.1	5.2	5.7
		3,001,382	3,120,486	3,093,418	3,019,816
		86,607	92,600	98,663	103,332
		2.9	3.0	3.2	3.4

PS, ABS

가 0.7% , POM

0.35%

6 PS

80

35

PS

6

KFRA가 ,

가

KFRA

EPS

【 9】

(: M/T, %)

	1989		1990		1991	
	375,016	3.1	384,879	3.0	382,980	3.0
	480,729	4.0	483,645	3.8	469,391	3.7
	125,666	1.1	124,048	1.1	140,517	1.1
	257,700	2.2	273,181	2.2	263,297	2.1
	167,167	1.4	168,369	1.3	163,558	1.3
	139,045	1.2	156,725	1.2	177,438	1.4
	110,117	0.9	117,680	0.9	123,364	1.0
	307,440	2.6	321,486	2.5	308,901	2.4
	1,962,880	16.5	2,048,013	16.2	2,029,446	15.9
P E	2,712,195	22.8	2,887,555	22.8	2,982,445	23.3
L D P E	1,502,279	12.6	1,610,555	12.7	1,659,851	13.0
H D P E	1,055,016	8.9	1,102,814	8.7	1,151,496	9.0
(E V A)	154,900	1.3	173,853	1.4	171,098	1.3
P S	1,366,644	11.5	1,419,896	11.2	1,460,498	11.4
(G P · H I)	1,153,207	9.7	1,207,339	9.5	1,239,525	9.7
(F S)	213,437	1.8	212,557	1.7	220,973	1.7
A S	123,001	1.0	130,898	1.0	130,086	1.0
A B S	507,522	4.3	541,392	4.3	530,799	4.1
P P	1,719,430	14.4	1,942,054	15.4	1,957,237	15.3
	38,918	0.3	21,182	0.2	31,190	0.2
	118,266	1.0	121,675	1.0	123,850	1.0
P V C	1,973,029	16.6	2,048,823	16.2	2,055,121	16.1
P V A	152,857	1.3	160,305	1.3	166,619	0.3
	47,480	0.4	45,986	0.4	49,598	0.4
	196,464	1.6	206,340	1.6	196,021	1.5
	164,073	1.4	168,427	1.3	169,021	1.3
	94,377	0.8	114,283	0.9	129,324	1.0
	122,108	1.0	124,373	1.0	121,413	0.9
	16,769	0.1	16,065	0.1	15,832	0.1
P E T	432,721	3.6	454,639	3.6	464,108	3.6
P B T	49,101	0.4	50,893	0.4	55,520	0.4
	59,472	0.5	68,125	0.5	72,723	0.6
가	54,923	0.5	58,717	0.5	56,149	0.4
가	9,949,350	83.5	10,581,628	83.8	10,766,480	84.1
	11,912,230	100.0	12,629,641	100.0	12,795,926	100.0

【 8】

(: 10³kl)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
	37,650	38,488	39,716	42,740	44,783	46,254	47,387	48,609	49,862	51,075	52,201
	25,823	28,531	29,804	61,530	31,423	33,287	34,036	34,351	34,245	33,713	34,126
	-	-	-	-	30,760	32,722	33,474	33,800	33,701	33,173	33,588
가	-	-	-	-	483	416	382	371	364	360	358
	-	-	-	-	180	149	180	180	180	180	180
	3,153	3,223	3,354	3,469	3,739	3,837	3,984	4,155	4,421	4,698	5,096
	25,288	26,411	27,571	26,996	26,701	26,917	28,103	28,811	29,397	29,993	30,552
	27,379	29,588	32,044	34,828	37,678	39,886	41,173	42,656	44,154	45,556	46,827
	64,628	65,448	70,188	72,111	73,749	71,950	73,594	73,336	71,479	70,779	71,139
	183,922	191,690	202,676	21,674	218,072	222,131	228,277	231,918	233,549	235,814	239,941

20%가

【 10】 () (: M/T, %)

			1985	1986	1987	1988	1989	1990	1991	91/90
			138,768	142,052	153,016	157,809	161,898	154,925	160,381	3.5
			697,814	732,068	786,042	846,943	925,717	951,498	962,216	1.2
			115,007	113,577	123,465	132,979	138,149	144,034	142,519	1.1
			197,227	202,703	216,781	237,324	242,391	251,596	249,621	0.8
			1,148,816	1,190,400	1,279,304	1,375,055	1,468,155	1,502,053	1,514,737	0.8
			54,968	67,018	70,700	76,253	80,579	83,942	78,759	6.2
			1,203,784	1,257,418	1,350,004	1,451,308	1,548,734	1,585,995	1,593,496	0.5
			276,314	280,971	295,346	326,661	340,715	370,812	374,916	1.1
			92,625	88,304	92,124	105,024	114,222	119,874	116,606	2.7
			50,004	52,949	56,043	49,779	51,124	55,898	59,444	6.3
			142,629	141,253	148,167	154,803	165,346	175,772	176,050	0.2
			154,774	158,122	170,422	183,807	190,884	199,820	195,400	2.2
			440,675	448,297	497,225	505,446	522,146	536,440	517,977	3.4
			46,779	44,419	46,652	51,635	55,540	57,702	57,655	0.1
			649,520	644,607	651,367	705,120	734,610	778,435	793,538	1.9
			276,221	275,896	284,116	298,811	301,042	315,138	326,606	3.6
			130,697	148,756	169,323	170,240	167,503	173,237	185,043	6.8
			64,185	56,893	58,039	62,059	58,943	57,685	59,054	2.8
			194,882	205,649	227,362	232,299	226,446	230,922	241,097	4.4
			33,096	35,143	32,939	36,954	36,317	36,824	35,505	3.6
			225,756	211,762	217,156	227,400	242,904	238,367	219,770	7.8
			38,959	40,435	53,458	61,693	64,185	64,140	63,684	0.7
			297,811	287,340	303,553	326,047	343,406	339,331	318,959	6.0
			76,673	77,085	83,944	88,813	92,208	954,629	93,806	1.9
			113,886	121,173	117,472	89,831	95,950	104,410	110,190	5.5
			124,418	149,596	157,809	177,938	189,672	196,545	199,049	1.3
			314,976	347,854	359,225	356,582	378,830	396,584	403,045	1.6
			195,654	20,456	22,706	21,027	19,858	16,477	17,549	6.5
			48,009	49,244	53,012	59,443	66,302	68,227	70,013	2.6
			19,160	20,890	20,098	21,197	21,123	21,977	21,308	3.0
			86,734	90,590	95,816	101,667	107,283	106,681	108,870	2.1
L P . E P C D . V D			46,268	46,044	48,801	52,860	58,137	65,686	59,932	8.8
			23,029	25,557	32,045	38,748	42,491	49,905	47,868	4.3
			8,204	6,890	5,581	6,282	5,020	7,359	7,158	2.7
			-	-	-	1,788	900	293	190	35.2
			-	-	-	4,494	4,120	7,066	6,968	1.4
			228,394	234,029	248,085	268,824	289,666	301,130	294,243	2.3
			305,715	312,520	334,512	366,714	395,714	420,080	409,201	2.6
			4,390,814	4,494,936	4763,767	5,060,900	5,310,296	5,513,713	5,516,810	0.1

)

5 MSW
10% MSW
88 MSW 8% 20% MSW MSW
가
가
88 MSW 1%
PET
MSW 95 3.7% MSW 1%
SW
88 MSW 60% MSW
MSW
()
()
()
MSW
Coding System
Chip 가
가 PET, HDPE 가 가
() 가
() 가
B125(Irgatos 168 : Irganox 1010 = 2 : 1)
Chimassorb 944 (HALS)가
가
50~70 PP 35 0.15% B125
() 가
5 HDPE HALS 가
1000 Crack
, 0.1% HALS 가 8000 Crack
MSW,
Material Recycle
가
가
가