

PET

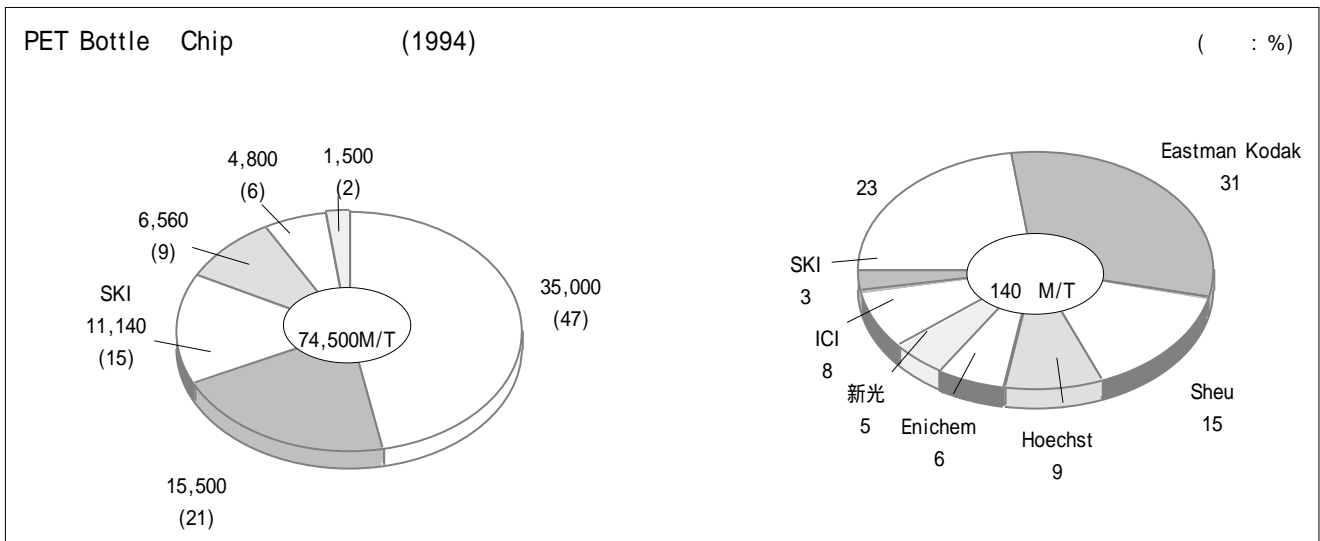
PET Polyester PET melt-phase resin, reactor-grade Polyester chip
 plastic Polyester, solid-state(bottle) resin, PET Engineering
 PET Ethylene Glycol(EG) Dimethyl Terephthalate(DMT), EG Terephthalic Acid
 (TPA) 2 bis-(2-hydroxyethyl) -terephthalate(BHET)
 PET 가
 EG가

PET (: 1000M/T)			
Shell	Point Pleasant, WV	70	94
	Wellmant	45	95
	Point Pleasant, WV	75	96
Eastman	Mexico	64	96
Nan Ya	Lake City, SC	90	95
Hoechst-Celanese	Mexico	60	94
Wellman	Florence SC	36	94
Belpak	Mogileo, Belarus	25	Eastman
CIS	Bashkir, Russia	30	Dupont
Eastman	Cadiz, Spain	60	96
	Cleveland, UK	60	94
Hoechst	Portugal	8	95
	Frankfurt, Germany	15	94
La Seda	Spain	55	

PET () (: 1000M/T, %)					
		Bottle		EP	
	(3.5)	(8.5)	(1.5)	(12)	(5)
1991	1,562.6	757	248.6	8.6	2,576.8
1996	1,857.5	1,129.5	267.6	15.9	3,270.5
	(3.5)	(14)	(4~5)	(9~10)	(6)
1991	950	310	215	10	1,485
1996	1,130	595	270	16	2,011
	(4)	(9)	(5)	(10~11)	(5)
1991	740	135	225	16	1,116
1996	900	210	285	26	1,421

) ()

PET melt-phase PET 1 1.06 DMT 0.87 TPA가
 가 , (Intrinsic Viscosity, IV)
 , bottle, EP
 melt-phase PET IV 0.6 solid-state PET IV 0.72
 PET 가 가



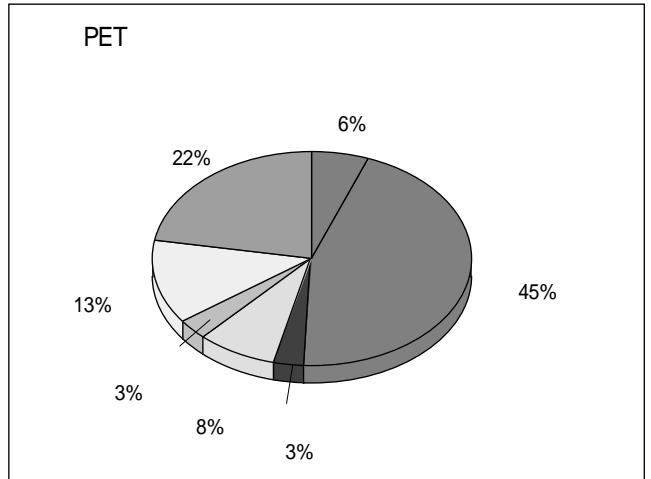
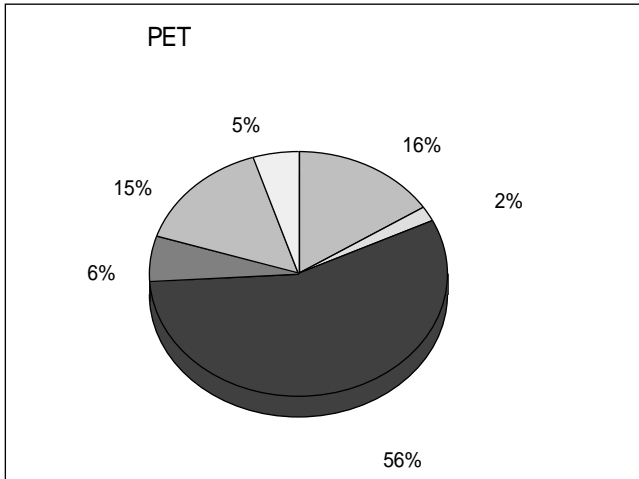
EG , 가 ,
 PET , chip

Solid-state PET Chip		(: 1000M/T)					
		1993	1994	1995	1996	1997	1998
		62	69	78	87	95	104
		159	184	210	290	290	290
		97	115	132	203	195	186
		166	195	221	246	273	300
		181	184	188	193	196	218
		15	11	33	53	77	83
		68	85	105	129	152	179
		42	51	56	72	112	117
		26	34	49	57	40	62
		18	24	30	35	41	46
		187	216	234	243	238	269
		169	192	204	208	197	223
		70	109	127	147	178	210
		20	36	121	316	371	405
		50	73	6	169	193	195
		860	1,070	1,206	1,357	1,522	1,687
		995	1,127	1,247	1,597	1,833	2,021
		135	57	41	240	311	334
		76	101	125	145	167	189
		49	97	102	106	143	195
		27	4	23	39	24	6
EU		528	667	756	853	946	1,036
		534	579	596	719	1,082	1,169
		6	88	160	134	136	133
AUS		37	38	39	42	45	48
		37	38	39	42	45	48
		77	101	125	142	164	190
		37	39	78	131	147	151
		40	62	47	11	17	39
		1,962	2,459	2,812	3,183	3,583	3,989
		2,204	2,514	2,832	3,667	4,411	4,834
		242	55	20	484	828	845

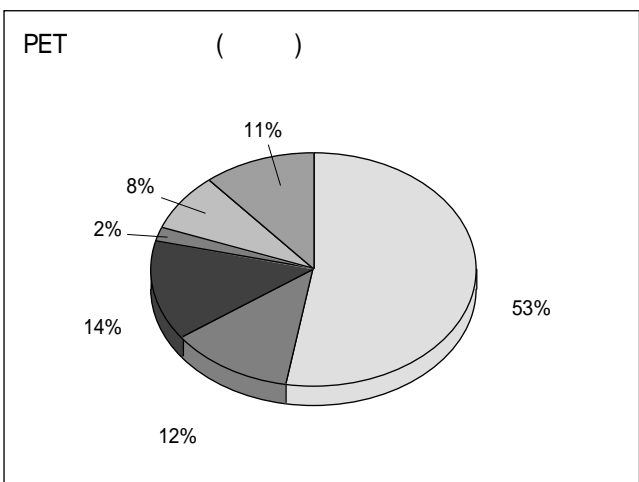
) PCI

PET Bottle		(1994) (: 1000 /)			
		ASB-650	3	2,000	NR
		CORPO B-40	2	7,200	PR, NR
		CORPO B-80	1	7,000	PR, HPR
		ASB-NHT	1	600	PR, HPR
		SIDEL SRF	2	5,400	
		ASB-250	2	400	NR
		ASB-650	2	2,200	NR
		CORPO B-40	1	3,600	PR
		CORPO B-80	2	21,600	PR, HPR
		ASB-NHT	1	600	HR, HPR
		SIDOT FILL	1	3,000	HR
		ASB-650	1	700	
		SIDEL SRF	2	5,400	HR
		CORPO B-40	1	7,200	PR
		CORPO B-80	2	7,200	PR/HPR
		CORPO BT-60	1	3,600	HR
		SIDEL SBO	1	3,600	HR
		ASB-650	1	800	NR
		CORPO B-40	1	3,600	PR
		CORPO B-40	1	3,600	NR
		CORPO B-40	1	3,600	PR
		CORPO B-40	1	3,600	PR
			31	96,000	
		ASB-250	1	600	NR
		ASB-NHT	3	2,400	NR
		CM-RHBW	4	14,000	PR, NR
		SIDEL	2	12,000	PR, HPR
		SBO 10/14	1	3,000	PR, HR
		SIDOT FILL	2	6,000	HR
		CORPO BT-60	1	3,000	HR
			14	41,000	
		CM-RHBW	1	3,600	PR
		CM-2000	1	1,200	NR
		SIDEL	1	6,000	PR, HPR
		OBM	2	6,000	HR
			5	16,800	
		CM-RHBW	2	7,200	PR
		CORPO-80	1	7,200	PR
			3	14,400	
			1	800	NR
			9	11,800	NR
			10	12,600	
			6	5,600	NR
			4	4,400	NR
			10	10,000	
				87,400	
				278,200	

PET , , 5~6%
 20~25%
 91 257 6800 96 327 500 5% 가
 91 148 5000 111 6000 96 201 1000
 142 1000 .



90 PET 가 27
 1 6500 PET
 95 57 , Bottle 28 6500
 3 6500 Bottle PET 60 6500 , 90
 23%



PET (1994)		(: , 1000)		
	1.5	627,871	1.8	116
	1.25	11,437	0.5	9,017
	0.5	69,724	0.25	5,494
	0.35	16,940		16,458
		725,972		31,085
	1.8	72,291	1.8	30,418
	0.75	64,391	1.0	56,328
	0.64	26,926	0.5	200
	0.36	830		16,120
		4,184		103,066
		168,622		1,864
	1.8	74,366	1.8	6,082
	1.5	9,338	0.9	39,509
	0.9	27,001	0.5	21,404
	0.5	17,717		79,750
		64,952		148,609
		193,374		1,370,728

2000

PET

2~3%

Bottle

10%

가 가

4~6%

PET (1994) (: 1000)							
	HR 1.5	HR 2.0	PR 1.5	PR 1.25	PR 0.5	PR 0.35	HPR 1.5
						16,940	16,940
	178,363	538	171,652	1,742	14,006		31,731
	4,165		39,940				44,105
	24,571		60,000	9,695	6,146		4,855
			38,108				38,108
	41,203		55,375		9,632		7,627
	248,302	538	365,075	11,437	29,784	16,940	44,213

15~18% , 가 2000 PET 가 95 20%
 20% 가 10%
 PET 가가

PET

PET

56.8%, Bottle 35.0%, 8.2%

PET (1994) (: 1000)					
	1.8	0.75	0.64	0.36	
		8,085			8,085
	13,985	635	7,150		21,770
	31,010	21,692	3,099		1,417
	26,286		15,180	830	42,296
		22,950	1,020		1,667
	1,013	11,029	477		1,100
	72,294	64,391	26,926	830	4,184

PET (1994) (: 1000)					
	1.8	0.9	1.5	0.5	
	16,464	10,050			27,531
	27,059	4,606	9,338		16,030
	10,690	1,470		5,133	266
	731				14,129
	8,960	5,788		2,849	17,597
	10,462	5,087		9,735	6,996
	74,366	27,001	9,338	17,717	64,952

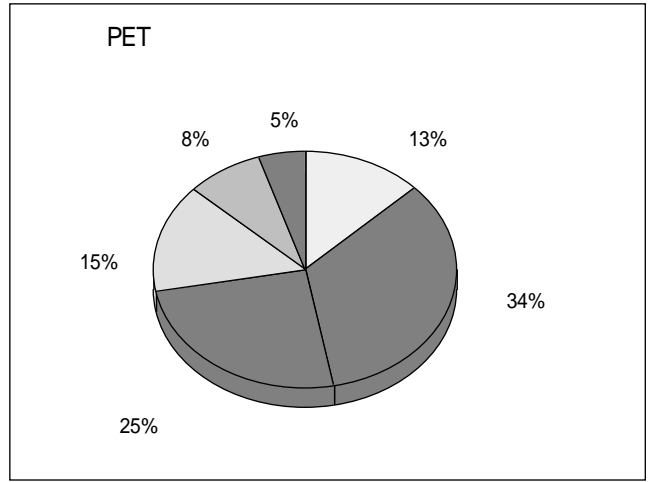
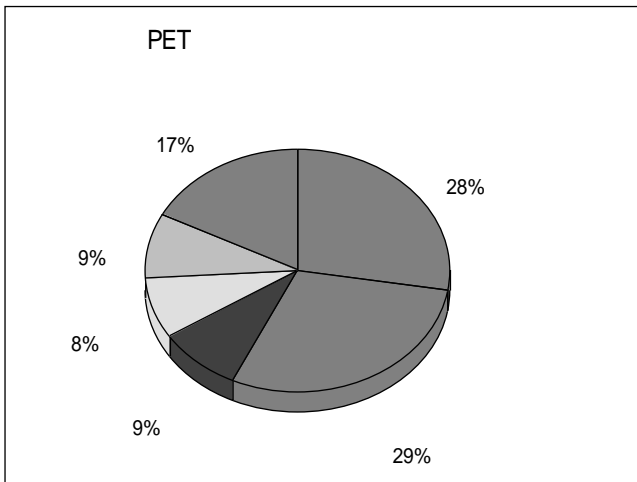
Bottle , 94.3%, 4.3%, 1.4% 가

PET 93 melt-phase 300 5000 , solid-state 94 3800
 melt-phase 175 1000 , solid-state 34 1000 melt-phase 497 4000 ,
 solid-state 21
 94 PET

가

PET 가 , PTA 89 , 91 92
 606 가 93 , 94 642

754 17.5%
 94 PTA 95
 가 가
 PET resin 가 92 755 93 910 94 1370
 45.7% 가
 Solid-state PET resin 가 PET resin 100~150 solid-state
 PET resin 가 가 1100
 94 가 1350
 PET resin 가 PET resin 가 가
 10% 가 가



Bottle

Bottle chip solid-state PET resin melt-phase PET (crystallisation)
 1 Bottle chip 1.003 melt-phase PET 가
 Bottle chip SKI , , 4
 94 Bottle chip 17 8800 , 93 20% 가
 SKI 6 5000 , 4 3000 , 4 2000 , 2 8800
 94 , 1 7500 ,
 1 500 , 1 2000 가
 Bottle chip 94 7 4500 140%
 Bottle chip 50% 가
 가
 94 , .
 94 PET Bottle 3 5000 46.9% 가
 1 5500 20.8%, SKI 1 1140 14.9%, 6560 8.8%,
 4800 6.4%

PET bottle chip 350 , SKI 가 80 , 100

PET bottle chip 가

95 PET bottle chip , 94 , 245 9000 , 251 4000

94 94 11 5000 19 2000

95 , EU 31 가

15% Debottlenecking 가 283 2000 , 281 2000 94

PET bottle chip ,

95 가 23%, 12%, 17%, EU 13% 가 . 1.5 90

94 1.5 550 PET bottle 10% PET bottle 가

가 PET bottle chip 가

PET bottle 가 PET bottle

96 PET bottle chip 가 96 , EU 97

PET Bottle

PET bottle 75 Dupont , , 가 ,

> PET> PET>

PET bottle (PR) PET가 가 (HR), (HPR), (NR) Hot filling

60PSI , 85~90

10%

PET bottle 94 16.1%, 3.1%, 40.0%, 40.8%

40%, 34%, 5.2%, 20.8%

200

PET bottle 91 9510 94 1 7900 가, 가 29%

PET bottle

10% 90

가 , 91 94 13% 3% 가

가 91 94 10% PET bottle 가

PET bottle 91 94 7.6%

가 94 3/4 가

94 PET bottle 가 6~7%

94 가 10%

PET bottle 94 2 7820 9600

, 30%

가 4100 , 가 1680 , 1440

1 1000 PET bottle 가

가 가 5

PET 7 2500 53%, 1 6800 12%, 1 9000 14%

가 PET

94 3 9800 56%, 4400 6%,

1 15%, 3800 5%, 1 1300 16%

1 9000 5700 29%, 1700 9%,

1400 8%

1 6800 , 2100 34%, 4200 25%, 2500

15%

PET 13 6 2500 45% ,

1 7000 13%, 1 8%, 8000 6%

PET 33 3840 chip 가 11 499 가 가

3 1

가 1 가 60