

# Engineering Plastics

가 100

가

500Kg/cm2

5

Nylon(Polyamide, PA)/PBT (Polybutylene Terephthalate)/PC(Polycarbonate)/POM (Polyacetal)/MPPE(Modified Polyphenylene Oxide)

Base resin Compounding, Alloy

80

“21

Compounding

”“ ”

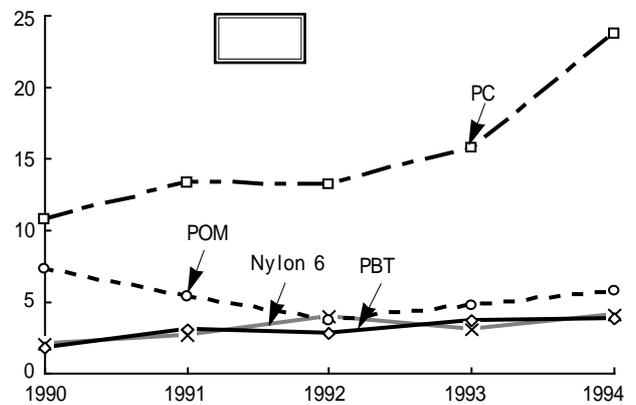
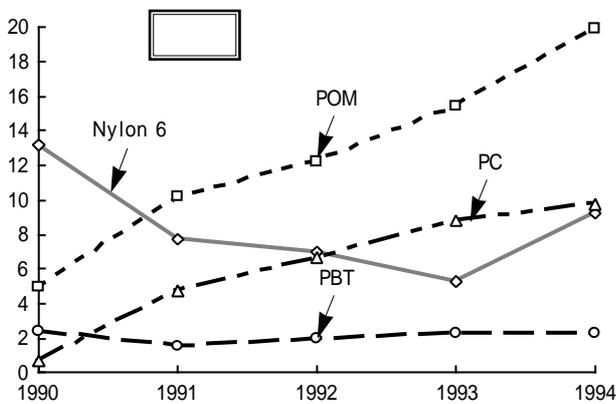
Nylon, PBT

가

가

EP

( : 1000M/T)



Engineering Plastic

( : M/T, %)

1991

1992

1993

1994

1995

Nylon 6	13,200	2.1	13,500	2.3	13,800	2.2	14,100	2.2	14,200	0.7
Nylon 66	7,500	13.5	8,600	14.7	9,700	12.8	10,600	9.3	11,800	11.3
PBT	13,400	9.2	14,600	8.9	15,800	8.2	17,800	12.6	19,400	9.0
PC	12,500	11.5	14,200	13.6	15,600	9.9	17,600	12.8	20,420	16.0
POM	17,900	2.5	18,100	1.1	18,800	3.9	19,400	3.2	20,000	3.1
MPPE	9,500	16.3	7,300	26.3	6,250	14.4	5,930	5.1	6,640	12
	74,000	6.5	76,300	3.1	79,950	4.8	85,430	6.9	92,460	8.2

) Compounding

Nylon PBT

80 90

가 GNP 5000 가

Compounding System Alloy  
가

94

### Nylon6, Nylon66

1938 Dupont Nylon Polyamide( Nylon)  
(-CONH-) 가 가 가  
가 가 ( )

가 Acid Nylon Nylon6 Nylon6 Nylon66  
Nylon Nylon6 가 가 , ,

Nylon66  
Nylon

1950

1981

Nylon6

Nylon 2 8500 , 1 1700 , Dupont 7000  
ENPLA 7000 , LG 6000 , 3000 6 3200

94 Nylon6 1 4100 , Nylon66 1 600 2 4700

94 5000 Nylon6 40%(5640 ),  
Nylon 94 31%(4370 ), LG 14%(1980 ), ENPLA가 7%(990 ), 8% Nylon66  
28%(2970 ), 21%(2230 ), Dupont 29%(3040 ), 22%

Nylon6 Nylon66 Nylon6 가  
1 3% 가 , Nylon66 50%  
가 Nylon6 가 10%

가 Nylon6 95 94 0.7% 가 1 4200 , Nylon66 11.3% 가 1 1300

Nylon PBT  
가

Nylon 94 가 Base resin Kg 2300 2400 , Compounding 2500 2700  
 Off grade 2000

94 Nylon 가  
 Kg 200 300

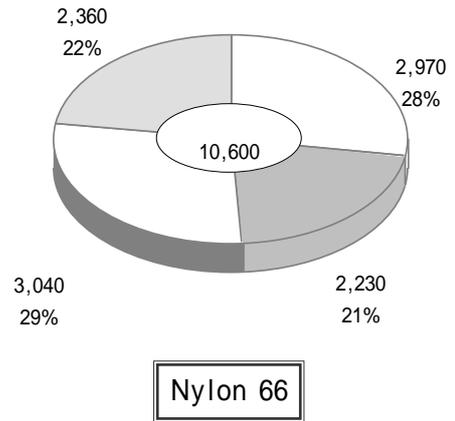
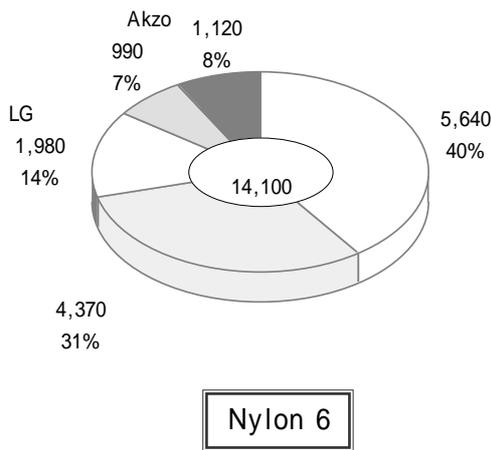
Nylon (1994) ( : M/T, %)

Nylon 6		Nylon 66	
3,400	24.3	5,400	50.9
2,800	20	2,600	24.5
5,000	35.7	2,100	19.8
2,900	20	500	4.8
14,100	100	10,600	100

PBT ( : M/T)

1991	1992	1993	1994
8,730	11,060	10,600	12,460
3,102	2,789	3,748	3,854
11,832	13,849	14,348	16,314
10,300	11,810	12,050	13,950
1,495	2,007	2,275	2,308
11,795	13,817	14,325	16,258

Nylon (1994) ( : M/T)



PBT

PBT 1971 가 , Celanese 가 ,  
 가 , 가 PBT  
 가 80  
 PBT DMT ( ) TPA ( )  
 LG , DMT , TPA  
 PBT DMT , 1,4 BD , BASF  
 TPA  
 PBT Compounding ( PBT) 가 가  
 PBT 30% 가  
 PBT LG , , , ,

LG 6000 3000  
 ( PBT PET )  
 PBT LG 1 2900 42% 5420 ,  
 2320 (18%), 가 1680 (13%), 1550 (12%),  
 1000  
 PBT 가 2000 가  
 PBT 94 Compounding 1 2900 Alloy  
 1 7500  
 PBT 가 64%, 가 28%, 가 8%  
 PBT 7 8%  
 PBT PBT/PC Alloy , PP 가

PBT (1992) ( : M/T)

	CAPA		CAPA		CAPA		CAPA
G,E	102,000	BASF	10,000	Poly Plastic	18,000	LG	6,000
BASF	8,100	CIBA-GEIGY	9,000	TeiJin	10,000		3,000
Hoechst	59,000	HULS	13,000	Toray	15,000		3,000
Celanese		ENICHEM	7,500	Mitsubishi Kasei	8,000		3,000
		DSM	13,500				3,000
			4,000		4,000	Ind.	3,000
						ENPLA	1,500
	169,100		65,000		64,000		22,500

PBT 가 94 7% 가 PBT 가  
 95 2 30% GF, 가 Kg 2800 3000 가  
 3300  
 PBT 가 Alloy PBT/PC Alloy PBT/ABS  
 Alloy 가 가 PBT/PC Alloy  
 Alloy 60% GE Plastics  
 GE Plastics PBT 가 PBT  
 PBT PC PBT/PC Alloy System System  
 Alloy 가  
 PBT/PC Alloy Specialty  
 1 5000 20% 가  
 PBT/PC Alloy 가

PC

PC 가 가

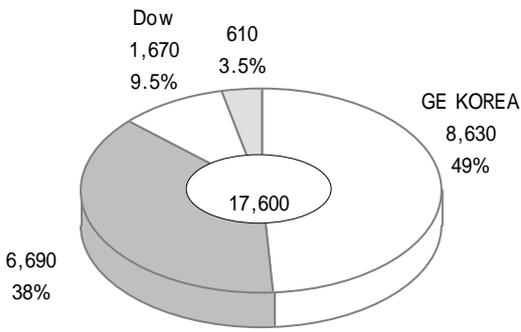
PC Bisphenol A Posgen, NaOH  
Compounding  
가 가

PC S/W cover connector, LAMP, LENS ,  
PC가 80 GE , 80

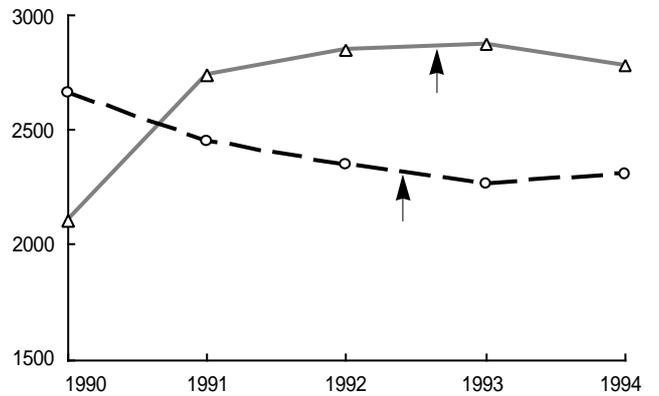
GE 89 5 PC Compounding Base resin , 가  
50:50 50%

PC 94 GE가 8630 49% ,  
가 6690 38% , DOW가 1670 9.5%  
GE Alloy ,

PC (1994) ( : M/T)



PC 가 ( : /MT)



PC Compounding Alloy PC LG  
 , LG PBT/PC PC/ABS Alloy  
 6690 2000 LG Alloy  
 Compounding  
 94 PC 1 7600 93 12.8% 가 , PC 가  
 10% 가  
 95 PC 가 16% ,  
 PC/PBT, PC/ABS, PC/PU Alloy  
 PC Compounding 가 GE Kg 2700~3300 , Kg 2500~2800  
 10% 가  
 PC 2000 10% 가

가

가

MPPO

MPPO 1965 GE 9000 PPO 가 가  
 PPO 가 200 가 가  
 가 PPO 가 가  
 가 , 가 가  
 가 가 가 PPO  
 HIPS Alloy Modifide Polyphenylene Oxide  
 MPPO PPO PS 가  
 가  
 1960 MPPO가 Noryl GE  
 PPO PPE MPPE(Modifide Polyphenylene Ether)가 Asahi chemical가  
 Xyron Brand Name 1980

MPPO (1994) ( : M/T, %)

POM ( : M/T)

Brand Name			M/S		
GE	Korea	Noryl	6,000	4,980	84
	BASF	Hyoryl	5,000	710	12
		Goldryl	1,000	150	2.5
		-	-	90	1.5
			12,000	5,930	100

1991	1992	1993	1994
17,230	22,770	24,830	27,690
5,415	3,794	4,708	5,818
22,645	26,564	29,538	33,508
12,485	14,306	14,092	13,582
10,178	12,275	15,456	19,888
22,663	26,581	29,548	33,470

) + ,

POM (1993) ( : M/T, %)

29,400(30)	16,560(24)	39,520(38)	3,948(21)
44,100(45)	2,070 (3)	18,720(18)	7,144(38)
24,500(25)	50,370(73)	45,760(44)	7,708(41)
98,000	69,000	104,000	18,800

MPPO 87 GE Asahi chemical 87  
 BASF , BASF 5000 Compounding  
 89 GE Plastics Korea가 6000  
 가  
 ENPLA Pilot  
 Compounding

PPO PPE 96 PPE  
 MPPO 40%, 30%, OA 16%, 14%  
 MPPO 94 5930 91 10%  
 가 Kg 3000 3200  
 MPPO 2000 ABS PS  
 94 ABS 가  
 GR  
 MPPO  
 95 MPPO 20% , 6640  
 MPPO A/S  
 GE가 84% , 4980 BASF가 12% 710 ,  
 가 2.5% 1.5%  
 95 PPE base resin  
 95 GE  
 BASF  
 POM  
 POM , , , , 가  
 POM 가 21%, 38%, 16%,  
 20%, 가 5%  
 87 POM 88  
 Mitsubishi Gas Chemical , Polyacetal Copolymer 1  
 2  
 POM Hoechst Celance, Asahi chemical  
 가  
 POM ( LG )가  
 , 1 POM  
 POM LG ,  
 55%, LG 30%, 15% 가  
 Dupont Polyplastics 90 7000  
 5000 30% 90 4944 92 1 2275 , 94 1 9888  
 90 400% 가  
 94 POM 1 9400 90 1 6000 5%  
 가  
 POM 가가 Alloy가 ,  
 88 가 7000 90 PS  
 70%  
 95 POM 94 3% 가 , 2 가

