

<MBT>

■

MBT (Mercaptobenzothiazole , 2 2000
550 가
24% 13%
10 ~ 15%
가
AKZO,
Bayer
가
MBT 40 ,
MBTS(Dibenzo thiazol disulfide / : DM) 120
300 1 ~ 2 50%
, 93 1/4 가 93 2/4
40%

가		(: M/T)					
		1990	1991	1992	1993	1994	1995
가		2,644	2,776	3,020	3,741	3,863	3,934
		3,305	3,470	3,775	3,423	3,535	3,599
		661	694	755	796	822	837
		6,610	6,940	7,550	7,960	8,220	8,370
		4,600	5,000	6,000	6,600	7,000	7,500
		55	55	40	42	42	44
		1,400	1,400	1,600	1,750	1,850	1,900
		6,055	6,573	6,640	8,392	8,892	9,444

(: M/T)			
	PPD	N-Phenyl-N-Isopropylpara-Phenylene Diamine(3C) N-(1,3-Dimethyl butyl)-N-Phenyl-Para-Phenylene Diamine(6C)	4,500
	Hydroquino-line	Polymer of 2,2,4-Trimethyl-1,2-Dihydroquinoline(RD)	2,200
가	Thiuram	Tetra methyl thiuram disulfide(TT)	2,000
	Thiazole	Mercapto benzo thiazole(M) Dibenzo thiazol disulfide(DM)	10,065 9,000
	Sulfen amide	N-Cyclo hexyl benzothiazyl sulfen amide(CZ) N-Oxydiethylene benzothiazyl sulfenamide(NBS)	2,000 2,000

가 가 500 ~ 600 가

MBT , CZ(N-Cyclohexylbenzothiazyl sulfenamide) · NS(N-tertiarybutyl benzothiazylsulfenamide) · NBS(N-Oxydiethylenebenzothiazyl sulfen amide)

MBT MBTS 0.7
 MBT 1800 , MBT · MBTS · CZ · MBS · NS 7000

MBT 93 Sumitomo , 93
 500 94

MBT
 CS2(Carbon Disulfide) · Sulfur
 가 .

. 가
 (Vulcanizing Acceler-ators)

가

가

가

가 가 가
 가 35 ~ 40%

가 MBT · MBTS · CZ · NBS · NS · TT(Tetramethyl thiuram mono sulfide) ·
 MZ(Zinc salt of mercaptobenzothiazole) · EZ · M2 · F
 가 MBT · MBTS , MZ · EZ
 MZ가 40 , EZ가

120
 M2 F MDM Di phenyl Guanidin · Hexa Methylene Tetraamine

M2 F MBT MBTS Di Phenyl Guanidin , Hexa
 Methylene Tetraamine

EZ TT Di Methylamine 가 . NBS
 NS . NBS 가 ,

NBS , NBS가

NBS NS 50
 NS 40 , NBS 15
 가 4850 4350 500 가

가 1 2000 가 80% 1
 , 92 8500 , 1000

가 , 92 9 가 가 823 , 211
 1864 , 576 가

582 , 3500 , 2628 , 73
가 51 , 35 , 208 , 49
, 가 1452 , 4700 ,
698 , 5398 .

					Monsanto	Uniroyal	Ouchi	Sanshin	Kawaguchi	n	Bayer
		Kumac	Oricel	Korcel			Nocrac	Sanceler	Accel	Soxinol	Vulkacit
2-Mercaptobenzothiazole	-	MBT	MBT	Thiotax	Naugex MBT	M	M	M	M	M	M
2,2'Dithiobisbenzothiazole	-	MBTS	MBTS	Thiofide	Naugex MBTS	DM	DM	DM	DM	DM	DM
N-Cyclohexyle-2-benzothiazole sulfenamide	-	CZ	-	Santocure	Delac S	CZ	CZ	CZ	CZ	CZ	CZ
N-t-butyl-2-benzothiazole sulfenamide	-	-	-	Santocure NS	Delac NS	NS					NS
N-oxydiethylene-2-benzothiazolyl sulfenamide	-	NBS	-	Santocure	Delac	MSA	NOB	NOS	NBS	MOZ	MOZ
Diphenylguanidine	D	-	-	DPG	-	D	D	D	D	D	D
Tetramethyl thiuram mono sulfide	TS	TS	-	Mono Thiurad	Monex	TS	TS	TS	TS	TS	Thiu/MS
Tetramethyl thiuram disulfide	TT	TT	-	Thiurad	Tuex	TT	TT	TT	TT	TT	Thiuram
Zinc salt of mercaptobenzothiazole	-	MS	-	Bantex	-	MZ	MZ	MZ	MZ	MZ	ZM
Zinc dimethyldithiocarbamate	PZ	PZ	-	Nethasan	Methazate	PZ	PZ	PZ	PZ	PZ	L
Sodium dibutyldithiocarbamate	TP	-	-	-	-	TP	-	-	-	-	-
Zinc dibutyldithiocarbamate	BZ	-	-	-	-	BZ	-	-	-	-	-
Sodium dimethyldithiocarbamate	SDD	-	-	-	-	S	-	-	-	-	-

가 90 ~ 92 40%, 50%,
가 10% .
93 47%, 43% 가 10% .
93 11 MBT 가 2100 , MBTS 가 3100

< 1993/11/1>