

<MTBE>

# MTBE,

가 MTBE(Methyl Tertiary Butyl Ether)가

93 1

MTBE

93 1 Gasoline 0.5w% , 96 0.75w%, 98 1.0w%  
 MTBE 가 , MTBE

MTBE / (1993) ( : 1000 )									
					가				
	300	126	250	-	50	15	300	100	1,141
	300	206	200	40	50	-	300	100	1,196

## MTBE

Blending MTBE 6Volume% , 가 (Reformatted  
 2.75 ~ 3Volume% Reformer 가 (Reformatted  
 Gasoline) Utility

MTBE 가 ( : / )					
	U.S. Gulf				
			10	351.50	352.90
1990.1.	395.04	336.59	11	379.00	360.00
2	347.21	336.59	12	363.00	356.00
3	324.18	325.96	1992.1.	344.00	346.00
4	343.67	322.41	2	338.00	335.00
5	363.16	340.13	3	315.00	319.00
6	375.56	354.30	4	307.00	305.00
7	421.62	418.07	5	328.00	322.00
8	488.93	531.45	6	354.00	345.00
9	534.99	627.11	7	336.60	324.00
10	510.19	563.34	8	317.62	304.87
11	364.93	403.90	9	303.12	298.00
12	304.70	283.44	10	288.50	300.90
1991.1	313.91	329.50	11	286.37	296.25
2	296.19	304.70	12	273.25	276.75
3	302.32	321.67	1993.1	254.87	253.75
4	335.70	323.76	2	256.25	252.50
5	333.55	335.10	3	250.71	249.75
6	295.00	341.50	4	260.30	261.40
7	305.80	355.00	5	267.50	283.00
8	325.50	362.50	6	264.23	294.75
9	336.50	346.80	7	246.40	295.00

가 93 7 1

C

MTBE

FCC ( ) RFCC , Hydrocracking( )

FCC ( ) , C  
MTBE

FCC 7 MTBE  
9800 , TAME 9 8000 , 95  
5 가

MTBE 13

Hydrocracking 3

97 FCC 4

MTBE 6

FCC

97 2

5000 6 B/D

가 13 2 5000

MTBE

MMA 5 5000 , 1

MTBE 8 5 5000

MTBE , 4 MMA

93 8 2 5000

MMA

MTBE  
MTBE

95 5 MMA 4

MTBE 가 , 가 가

, 가 MTBE 가

MTBE 95 96 MTBE 0.5W%  
27 6400 MTBE 43 5000 , 15 8600 가

97 MTBE 0.75W%가 , 48 37 5000  
10 5000

가 ( 86 )			
	1991.2.2~ 1992.12.31	1993.1.1~1 95.12.31	1996.1.1
(V%)	-	55	55
(V%)	-	6	5
(G/L)	-	0.013	0.013
(G/L)	0.0013	0.0013	0.0013
(wt%)	-	0.5	0.5

가		
	1992.11.1 (CO )	1995.1.1 (OZONE )
(V%)	26	25
(V%)	1.0	1.0
(RVP) (psi)	7.8(SOUTH), 9.0(NORTH)	7.2(SOUTH), 8.1(NORTH)
(wt%)	2.7(MTBE 15 V%)	2.0(MTBE 11 V%)
	CO 41	OZONE 9
	WINTER SEASON ONLY	YEAR ROUND
	가	
	가	

MTBE ( : 1000 )												
	1990				1993				1997			
	3,800	2,290	840	6,930	10,570	2,860	2,240	15,670	18,000	6,000	8,000	32,000
	3,700	2,290	350	6,340	9,450	3,590	1,060	14,100	20,600	7,800	2,200	30,600
	100	-	490	590	1,120	730	1,180	1,570	2,600	1,800	5,800	1,400

, MTBE Raffinate -1 가  
Raffinate-1 Raffinate-1  
Raffinate-1 가 , 2 Raffinate-1  
가 Raffinate-1 , 93 7 1  
, 93 7 1 Raffinate-1 3  
Raffinate-1  
Butadiene , Isobutylene 2  
Raffinate-1 11 ~ 12  
Raffinate-1 Co-Cra-cking

GASOLITE ( : 1000BBL)							
GASOLINE	1991	12.854	9.020	3.386	3.185	1.258	29.703
	1992	13.760	10.942	3.932	4.118	1.283	34.035
	1993	14.965	12.220	5.519	5.125	1.577	39.406
	1994	15.695	12.786	5.774	5.362	1.650	41.267
	1995	16.425	13.352	6.030	5.599	1.723	43.129
	1996	17.155	14.031	6.336	5.884	1.810	45.216
	1997	17.885	14.596	6.592	6.121	1.883	47.077

Raffinate-1 6 1000 Isobutylene 3 2000 MMA  
MTBE Raffinate-1 11 가 ,  
Raffinate-1 Butadiene , Isobutylene 5 6000  
MTBE 12 Raffi-nate-1 18 ,  
1 4000 , 1000 Spot  
Rafinate-1 가 MTBE  
93 MTBE 12 6000 , 6 , 2 4000 ,  
2 4000 , 1 3000  
Raffinate-1 가 가  
1 2 가 가  
, 5 ~5 5000 , 92  
2000 ( 2 4000 ) , 93 2000 ( 2 4000 )  
4500 ( 5 4000 )

MTBE 가

MTBE가 U.S Gulf 245 92 350 40% 가 ,  
Petronas Gas 3 「 」 가  
230 가 7 275



가 가 PREMIUM 가 , MTBE 가  
 가 , MTBE가 CO  
 Butane Credit MTBE 가  
 92 가 , MTBE  
 MTBE Clean Air Act Value 가  
 \* MTBE = A + B + C  
 A : N-BUTANE(Mt, Belview) ¢/gal  
 B : GULF 가 × 0.34 ¢/gal  
 C : 40~55  
 MTBE 가 91 365 (FOB) 92 3/4 300 , 93 3 250 , 93 7 245  
 95 Reformulated Gasoline(RFG) MTBE

RAFF-1 가 ( : 1000 )							
가	72	81	86	44	58	65	58

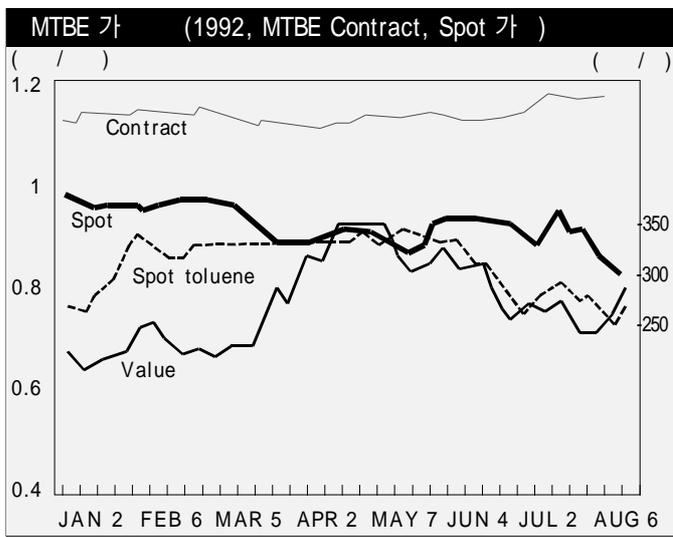
MTBE ( : 1000 , W%)							
1993	0.5	125	50	20	15	10	220
1994	0.5	130	55	22	16.5	11	235
1995	0.5	135	60.5	24.2	18	12	249.7
1996	0.5	150	66.6	26.6	20	13.2	276.4
1997	0.75	200	85	40	35	15	375

MTBE ( : )										
1993	120,000	120,000	-	-	-	-	-	-	-	240,000
1994	120,000	120,000	-	-	-	-	-	-	-	240,000
1995	120,000	120,000	150,000	-	-	-	-	-	-	390,000
1996	120,000	120,000	150,000	-	45,000	-	45,000	-	-	480,000
1997	120,000	120,000	150,000	-	45,000	-	45,000	-	-	480,000
1998	120,000	120,000	150,000	40,000	45,000	45,000	45,000	45,000	45,000	655,000

MTBE

가 26%, 46% , 92 11 1,2  
 Clean Air Act(CAA)가 MTBE 50%  
 95 3 Reformulated Gasoline(RFG)가 가 1500 가  
 MTBE , Premium Gasoline 가  
 가

50% 97 75% 가 가 . 93  
 가 , , , ,  
 87 Premium Gasoline  
 Gasoline  
 MTBE 95 27.9% 가  
 가 MTBE  
 가 가  
 90 11 (Clean Air Act) 가 (National Strategy)  
 가 ( , , ) 가  
 (Reformulated Gasoline) , , LPG,CNG,



95  
 가 , ,  
 (Reid Vapor Pressure)  
 가  
 가  
 MTBE가 가  
 가  
 가 MTBE ETBE,

MTBE , , 가  
 , 가  
 MTBE 880 , 95 24.5% 가  
 2650 가  
 가  
 MTBE 496 95 1330  
 Arco 86  
 Tenneco Mistui 100 , 92 가 Isobutanol  
 2000 ~ 4000B/D  
 95 5 B/D Jubail 2 5000B/D  
 , Yanou Red Sea 1 7000B/D  
 MTBE 17 4000B/D , 95 27.9% 가 59

5000B/D

49.3% (7.25 B/D)

, MTBE

9 8000B/D 95

100 B/D

MTBE

가

MTBE

MTBE(Metyl Tertiary Buthyl Ether)

MTBE

가

(High Octane Blending Agent)

가

가 (TEL, TML)

가

MTBE RON(Research Octane No)

MON(Motor Octane No)

117 110

가

10~15% MON 2~5

MTBE 가

가

가

TEL(Tetra Ethyl Lead), TML(Tetra Methyl Lead)

MTBE 가

TEL TML

가

가

가

가

MTBE가 가

(EPA) 3

가 EPA

TBA(Tertiry Butyl Alcohol),

(

TBA ), MTBE

< 1993/8/9>