

APPENDIX

Maximum Incremental Reactivity Values Used in This Paper (Proposed by CARB in July 1952)

	MIR (g O3/g NMOG)
Ethane	0.250
Propane	0.480
2-Methylpropane	1.210
n-Butane	1.020
2,2-Dimethylpropane	0.370
2-Methylbutane	1.380
n-Pentane	1.040
2,2-Dimethylbutane	0.820
Cyclopentane	2.380
2,3-Dimethylbutane	1.070
2-Methylpentane	1.530
3-Methylpentane	1.520
n-Hexane	0.980
2,2-Dimethylpentane	1.400
Methylcyclopentane	2.820
2,4-Dimethylpentane	1.780
2,2,3-Trimethylbutane	1.320
Cyclohexane	1.280
2-Methylhexane	1.080
2,3-Dimethylpentane	1.510
Cyclohexane	1.400
c-1,3-Dimethylcyclopentane	1.850
t-1,3-Dimethylcyclopentane	1.850
2,2,4-Trimethylpentane	0.930
n-Heptane	0.810
Methylcyclohexane	1.850
2,5-Dimethylhexane	1.630
Ethylcyclopentane	2.310
3,3-Dimethylhexane	1.200
2,3,4-Trimethylpentane	1.600
2,3-Dimethylhexane	1.320
2-Methylheptanes	0.960
4-Methylheptanes	1.200
3-Methylheptane	0.990
Di/Trimethylcyclic C5/C6	1.940
2,2,5-Trimethylhexane	0.970
Octane	0.610
t-1,3-Dimethylcyclohexane	1.850
2,4-Dimethylheptane	1.340
c-1,2-Dimethylcyclohexane	1.940
3,5-Dimethylheptane	1.140
2-Methyloctane	1.140
3-Methyloctane	1.140
n-Nonane	0.540
2,2-Dimethyloctane	1.010
2,4-Dimethyloctane	1.010
Branched C10's	1.010
Branched C10's	1.010
3-Methylnonane	1.010
n-Decane	0.470
n-Undecane	0.420
n-Dodecane	0.380

	MIR (g O3/g NMOG)
Ethene	7.290
Ethyne	0.500
Propene	9.400
Propadiene	7.290
Propyne	4.100
2-Methylpropene	5.310
1-Butene	8.910
1,3-Butadiene	10.890
1-2-Butene	9.940
1-Butyne	9.240
c-2-Butene	9.940
3-Methyl-1-Butene	6.220
2-Butyne	9.240
1-Pentene	6.220
2-Methyl-1-Butene	4.900
2-Methyl-1,3-Butadiene	9.080
1-2-Pentene	8.800
c-2-Pentene	8.800
2-Methyl-2-Butene	6.410
Cyclopentadiene	7.660
Cyclopentene	7.660
4-Methyl-1-Pentene	4.420
3-Methyl-1-Pentene	4.420
1-3-Hexene	6.690
1-2-Hexene	6.690
3-Methyl-1-2-Pentene	6.690
2-Methyl-2-Pentene	6.690
c-3-Hexene	6.690
c-2-Hexene	6.690
3-Methyl-c-2-Pentene	6.690
3-Methylcyclopentene	5.690
3-Methyl-1-Hexene	3.480
1-2/1-3-Heptene	5.530
2-Methyl-Hexene	5.530
c-2-Heptene	5.530
1-Methylcyclohexene	5.520
1-4-Octene	5.290

	MIR (g O3/g NMOG)
Benzene	0.420
Toluene	2.730
Ethylbenzene	2.700
M-Xylene	8.160
P-Xylene	6.600
Styrene	2.220
O-Xylene	6.460
Isopropylbenzene	2.240
n-Propylbenzene	2.120
1,3-Methylethylbenzene	7.200
1,4-Methylethylbenzene	7.200
1,3,5-Trimethylbenzene	10.120
1,2-Methylethylbenzene	7.200
1,2,4-Trimethylbenzene	8.830
Iso-Butylbenzene	1.890
1,2,3-Trimethylbenzene	8.850
Indane	1.060
1,3-Diethylbenzene	6.450
1,4-Diethylbenzene	6.450
1,2-Diethylbenzene	6.450
1-Methyl-2-Propylbenzene	6.450
1,4-Dimethylethylbenzene	9.070
1,2-Dimethyl-2-Ethylbenzene	9.070
1,3-Dimethyl-2-Ethylbenzene	9.070
1,2,4,5-Tetramethylbenzene	9.070
1,2,3,5-Tetramethylbenzene	9.070
Methylindane	1.060
1,2,3,4-tetramethylbenzene	9.070
Methyl t-Butyl Ether	0.620
Ethyl t-Butyl Ether	1.980
Methanol	0.560
Ethanol	1.340
Formaldehyde	7.150
Acetaldehyde	5.520
Acrolein	6.770
Propionaldehyde	6.530
Acetone	0.560

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