

Appendix E

Proposed Amendments to the Tables of Maximum Incremental Reactivity (MIR) Values

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[Note: Amendments are shown in underline to indicate additions and ~~strikeout~~ to indicate deletions from the existing regulatory text. The symbol "*****" means that intervening text not proposed for amendment is not shown.]

Proposed Amendments to the Tables of Maximum Incremental Reactivity (MIR) Values

SUBCHAPTER 8.6. Maximum Incremental Reactivity

Article 1. Tables of Maximum Incremental Reactivity (MIR) Values

§ 94700. MIR Values for Compounds.

	<i>Organic Compound</i>	<i>MIR Value (July 18, 2001)</i>	<i>New MIR Value (October 2, 2010)</i>

	Oxygenated Organics		
619	carbon monoxide	0.06	0.056
620	formaldehyde	8.97	9.46
621	methanol	0.71	0.67
622	formic acid	0.08	0.07
623	ethylene oxide	0.04	0.04
624	acetaldehyde	6.84	6.54
625	ethanol	1.69	1.53
626	dimethyl ether	0.93	0.81
627	glyoxal	14.22	12.50
628	methyl formate	0.06	0.06
629	acetic acid	0.50	0.68
630	glycolaldehyde*	4.96	5.10
631	ethylene glycol	3.36	3.13
632	glycolic acid	2.67	2.38
633	peroxyacetic acid	12.62	0.54
634	acrolein	7.60	7.45
635	trimethylene oxide	5.22	4.56
636	propylene oxide	0.32	0.29
637	propionaldehyde	7.89	7.08
638	acetone	0.43	0.36
639	isopropyl alcohol	0.71	0.61
640	n-propyl alcohol	2.74	2.50
641	acrylic acid	11.66	11.38
642	methyl glyoxal	16.21	16.56
643	1,3-dioxolane	5.47	4.96
644	ethyl formate	0.52	0.48
645	methyl acetate	0.07	0.07
646	propionic acid	0.79	1.22

647	hydroxy acetone	3.08	3.23
648	propylene glycol	2.75	2.58
649	dimethoxy methane	1.04	0.94
650	2-methoxy ethanol	2.98	2.93
651	dimethyl carbonate; DMG	0.06	0.06
652	dihydroxy acetone	4.02	3.99
653	glycerol	3.27	3.15
654	furan	16.54	9.15
655	crotonaldehyde	10.07	9.39
656	methacrolein	6.23	6.01
657	cyclobutanone	0.68	0.62
658	methylvinyl ketone	8.73	9.65
659	tetrahydrofuran	4.95	4.31
660	1,2-epoxy butane	1.02	0.91
661	2-methyl propanal	5.87	5.25
662	butanal	6.74	5.97
663	C4 aldehydes	6.74	5.97
664	methyl ethyl ketone	1.49	1.48
665	isobutyl alcohol	2.24	2.51
666	n-butyl alcohol	3.34	2.88
667	sec-butyl alcohol	1.60	1.36
668	tert-butyl alcohol	0.45	0.41
669	diethyl ether	4.01	3.76
670	gamma-butyrolactone	1.15	0.96
671	methacrylic acid	18.78	18.50
672	methyl acrylate	12.24	11.48
673	vinyl acetate	3.26	3.20
674	hydroxyl-methacrolein	6.61	6.24
675	biacetyl; diacetyl; butanedione	20.73	20.09
676	1,4-dioxane	2.71	2.62
677	ethyl acetate	0.64	0.63
678	methyl propionate	0.71	0.66
679	n-propyl formate	0.93	0.78
680	isopropyl formate	0.42	0.37
681	isobutyric acid	1.22	1.20
682	butanoic acid	1.78	1.82
683	methoxy acetone	2.14	2.03
684	1,3-butanediol*	3.21	3.36
685	1,2-butanediol	2.21	2.52
686	1,4-butanediol	3.22	2.72
687	2,3-butanediol*	4.23	4.38
688	1-methoxy-2-propanol	2.62	2.44
689	2-ethoxy ethanol	3.78	3.71
690	2-methoxy-1-propanol	3.01	3.01
691	3-methoxy-1-propanol	4.01	3.84
692	propylene carbonate	0.25	0.28

693	methyl lactate	2.75	2.67
694	diethylene glycol	3.55	3.35
695	malic acid	7.51	6.94
696	2-methyl furan*	8.02	8.30
697	3-methyl furan*	6.64	6.90
698	cyclopentanone	1.43	1.15
699	C5 cyclic ketones	1.43	1.15
700	cyclopentanol	1.96	1.72
701	α -methyl tetrahydrofuran	4.62	3.97
702	tetrahydropyran	3.81	3.22
703	2-methyl-3-butene-2-ol	5.12	4.91
704	2,2-dimethylpropanal; pivaldehyde	5.40	4.89
705	3-methylbutanal; isovaleraldehyde	5.52	4.97
706	pentanal; valeraldehyde	5.76	5.08
707	C5 aldehydes	5.76	5.08
708	2-pentanone	3.07	2.81
709	3-pentanone	1.45	1.24
710	C5 ketones	3.07	2.81
711	methyl isopropyl ketone	1.64	1.65
712	2-pentanol	1.74	1.61
713	3-pentanol	1.73	1.63
714	pentyl alcohol	3.35	2.83
715	isoamyl alcohol; 3-methyl-1-butanol	2.73	3.16
716	2-methyl-1-butanol	2.60	2.40
717	ethyl isopropyl ether	3.86	3.74
718	methyl n-butyl ether	3.66	3.15
719	methyl tert-butyl ether; MTBE	0.78	0.73
720	ethyl acrylate	8.78	7.77
721	methyl methacrylate	15.84	15.61
722	glutaraldehyde	4.79	4.31
723	lumped C5+ unsaturated carbonyl species*	6.18	6.38
724	2,4-pentanedione	1.02	1.01
725	tetrahydro-2-furanmethanol; tetrahydrofurfuryl alcohol	3.54	3.31
726	ethyl propionate	0.79	0.77
727	isopropyl acetate	1.12	1.07
728	methyl butyrate	1.18	1.09
729	methyl isobutyrate	0.70	0.61
730	n-butyl formate	0.95	0.83
731	propyl acetate	0.87	0.78
732	3-methyl butanoic acid	4.26	4.23
733	2,2-dimethoxy-propane	0.52	0.48
734	1-ethoxy-2-propanol	3.25	3.09
735	2-propoxy-ethanol	3.52	3.30
736	3-ethoxy-1-propanol	4.24	4.09
737	3-methoxy-1-butanol	0.97	3.87
738	2-methoxyethyl acetate	1.18	1.15

739	ethyl lactate	2.74	2.48
740	methyl isopropyl carbonate	0.69	0.62
741	2-(2-methoxyethoxy) ethanol	2.90	2.66
742	pentaerythritol	2.42	2.17
743	phenol	1.82	2.76
744	2-ethyl furan*	6.85	7.09
745	2,5-dimethyl furan*	7.60	7.88
746	cyclohexanone	1.64	1.35
747	C6 cyclic ketones	1.64	1.35
748	mesityl oxide; 2-methyl-2-penten-4-one	17.37	6.51
749	cyclohexanol	2.25	1.95
750	hexanal	4.98	4.35
751	C6 aldehydes	4.98	4.35
752	4-methyl-2-pentanone	4.34	3.88
753	methyl n-butyl ketone	3.55	3.14
754	methyl tert-butyl ketone	0.78	0.65
755	C6 ketones	3.55	3.14
756	1-hexanol	2.74	2.69
757	2-hexanol	2.46	2.08
758	4-methyl-2-pentanol; methyl isobutyl carbinol	2.89	2.64
759	di-n-propyl ether	3.24	3.08
760	ethyl n-butyl ether	3.86	3.48
761	ethyl tert-butyl ether	2.11	2.01
762	methyl tert-amyl ether; TAME	2.14	1.69
763	diisopropyl ether	3.56	3.52
764	ethyl methacrylate*	12.15	12.47
765	ethyl butyrate	1.25	1.17
766	isobutyl acetate	0.67	0.62
767	methyl pivalate	0.39	0.35
768	n-butyl acetate	0.89	0.83
769	n-propyl propionate	0.93	0.84
770	sec-butyl acetate	1.43	1.32
771	tert-butyl acetate; tBAc	0.20	0.18
772	diacetone alcohol	0.68	0.60
773	methyl pentanoate; methyl valerate*	1.00	1.05
774	1,2-dihydroxyhexane	2.75	2.55
775	2-methyl-2,4-pentanediol	1.04	1.45
776	ethylene glycol diethyl ether; 1,2-diethoxyethane	2.84	2.95
777	acetal (1,1-diethoxyethane)	3.68	3.58
778	1-propoxy-2-propanol; propylene glycol n-propyl ether	2.86	2.68
779	2-butoxy ethanol	2.90	2.90
780	3-methoxy-3-methyl-butanol	1.74	2.88
781	n-propoxy propanol	3.84	3.77
782	hydroxypropyl acrylate	5.56	4.90
783	1-methoxy-2-propyl acetate	1.71	1.70

784	2-ethoxyethyl acetate	1.90	1.84
785	2-methoxy-1-propyl acetate	1.12	1.12
786	methoxypropanol acetate	1.97	1.86
787	2-(2-ethoxyethoxy) ethanol	3.19	3.26
788	dipropylene glycol isomer (1-[2-hydroxypropyl]-2-propanol)	2.48	2.31
789	dimethyl succinate	0.23	0.23
790	ethylene glycol diacetate	0.72	0.66
791	adipic acid; hexanedioic acid	3.37	3.08
792	triethylene glycol	3.44	3.25
793	benzaldehyde	0.00	0.00
794	C7 alkyl phenols	2.34	2.40
795	<i>m</i> -cresol	2.34	2.40
796	<i>p</i> -cresol	2.34	2.40
797	<i>o</i> -cresol	2.34	2.40
798	benzyl alcohol*	4.98	5.11
799	methoxybenzene; anisole*	6.49	6.66
800	C7 cyclic ketones	1.44	1.18
801	heptanal	4.23	3.69
802	C7 aldehydes	4.23	3.69
803	2-methyl-hexanal	3.97	3.54
804	2-heptanone	2.80	2.36
805	2-methyl-3-hexanone	1.79	1.53
806	di-isopropyl ketone	1.63	1.31
807	C7 ketones	2.80	2.36
808	5-methyl-2-hexanone	2.10	2.41
809	3-methyl-2-hexanone	2.81	2.55
810	1-heptanol	2.21	1.84
811	dimethylpentanol; 2,3-dimethyl-1-pentanol	2.51	2.23
812	4,4-diethyl-3-oxahexane; <i>tert</i> -amyl ethyl ether; TAEE	2.03	1.95
813	<i>n</i> -butyl acrylate	5.52	5.02
814	isobutyl acrylate	5.05	4.72
815	butyl propionate	0.89	0.84
816	amyl acetate; <i>n</i> -pentyl acetate	0.96	0.84
817	<i>n</i> -propyl butyrate	1.17	1.05
818	isoamyl acetate; 3-methyl-butyl acetate	1.18	1.09
819	2-methyl-1-butyl acetate	1.17	1.08
820	methyl hexanoate*	0.96	1.02
821	1- <i>tert</i> -butoxy-2-propanol	1.71	1.61
822	2- <i>tert</i> -butoxy-1-propanol	1.81	1.81
823	<i>n</i> -butoxy-2-propanol; propylene glycol <i>n</i> -butyl ether	2.70	2.72
824	ethyl 3-ethoxy propionate	3.61	3.58
825	diisopropyl carbonate	1.04	0.98
826	2-(2-propoxyethoxy) ethanol	3.00	2.85
827	dipropylene glycol methyl ether; 1-methoxy-2-(2-hydroxypropoxy) propane	2.21	1.98

828	dipropylene glycol methyl ether; 2-(2-methoxypropoxy)-1-propanol	2.70	2.58
829	1,2-propylene glycol diacetate	0.94	0.61
830	dimethyl glutarate	0.51	0.42
831	2-[2-(2-methoxyethoxy) ethoxy] ethanol	2.62	2.58
832	tolualdehyde	0.00	0.00
833	4-vinyl phenol*	1.43	1.50
834	2,4-dimethyl phenol*	2.07	2.12
835	2,5-dimethyl phenol*	2.07	2.12
836	3,4-dimethyl phenol*	2.07	2.12
837	2,3-dimethyl phenol*	2.07	2.12
838	2,6-dimethyl phenol*	2.07	2.12
839	C8 alkyl phenols	2.07	2.12
840	β -phenethyl alcohol; 2-phenyl ethyl alcohol*	4.41	4.53
841	C8 cyclic ketones	1.25	1.05
842	2-butyl tetrahydrofuran	2.53	2.13
843	octanal	3.65	3.16
844	C8 aldehydes	3.65	3.16
845	2-octanone	1.66	1.40
846	C8 ketones	1.66	1.40
847	1-octanol	2.01	1.43
848	2-ethyl-1-hexanol	2.20	2.00
849	2-octanol	2.16	1.97
850	3-octanol	2.57	2.28
851	4-octanol	3.07	2.23
852	5-methyl-1-heptanol	1.95	1.79
853	di-isobutyl ether	1.29	1.20
854	di-n-butyl ether	3.17	2.84
855	2-phenoxyethanol; ethylene glycol phenyl ether	3.61	4.49
856	butyl methacrylate	9.09	8.70
857	isobutyl methacrylate	8.99	8.62
858	hexyl acetates*	0.74	0.80
859	2,3-dimethylbutyl acetate	0.84	0.75
860	2-methylpentyl acetate	1.11	0.98
861	3-methylpentyl acetate	1.31	1.07
862	4-methylpentyl acetate	0.92	0.82
863	isobutyl isobutyrate	0.61	0.60
864	n-butyl butyrate	1.12	1.08
865	n-hexyl acetate	0.87	0.69
866	methyl amyl acetate; 4-methyl-2-pentanol acetate	1.46	1.35
867	n-pentyl propionate	0.79	0.71
868	2-ethyl hexanoic acid	3.49	3.32
869	methyl heptanoate*	0.76	0.82
870	2-ethyl-1,3-hexanediol	2.62	2.05
871	2-n-hexyloxyethanol	2.45	2.09
872	2,2,4-trimethyl-1,3-pentanediol	1.74	1.54

873	phthalic anhydride*	2.50	2.58
874	methylparaben; 4-hydroxybenzoic acid, methyl ester*	1.66	1.71
875	2-butoxyethyl acetate	1.67	1.62
876	2-methoxy-1-(2-methoxy-1-methylethoxy)-propane; dipropylene glycol dimethyl ether	2.09	2.02
877	2-(2-butoxyethoxy)-ethanol	2.87	2.39
878	dipropylene glycol ethyl ether	2.75	2.72
879	dimethyl adipate	1.95	1.80
880	2-(2-ethoxyethoxy) ethyl acetate	1.50	1.48
881	2-[2-(2-ethoxyethoxy) ethoxy] ethanol	2.66	2.46
882	tetraethylene glycol	2.84	2.51
883	cinnamic aldehyde*	4.68	4.84
884	cinnamic alcohol*	0.84	0.89
885	2,3,5-trimethyl phenol*	1.86	1.90
886	2,3,6-trimethyl phenol*	1.86	1.90
887	C9 alkyl phenols	1.86	1.90
888	isophorone; 3,5,5-trimethyl-2-cyclohexenone	10.58	4.63
889	C9 cyclic ketones	1.13	0.94
890	2-propyl cyclohexanone	1.71	1.54
891	4-propyl cyclohexanone	2.08	1.85
892	1-nonene-4-one	3.39	3.14
893	trimethyl cyclohexanol	2.17	1.86
894	2-nonanone	1.30	1.08
895	di-isobutyl ketone; 2,6-dimethyl-4-heptanone	2.94	2.68
896	C9 ketones	1.30	1.08
897	dimethyl heptanol; 2,6-dimethyl-2-heptanol	1.07	0.94
898	2,6-dimethyl-4-heptanol	2.37	2.09
899	1-phenoxy-2-propanol	1.73	1.60
900	2,4-dimethylpentyl acetate	0.98	0.92
901	2-methylhexyl acetate	0.89	0.69
902	3-ethylpentyl acetate	1.24	1.10
903	3-methylhexyl acetate	1.01	0.89
904	4-methylhexyl acetate	0.91	0.82
905	5-methylhexyl acetate	0.79	0.59
906	isoamyl isobutyrate	0.89	0.82
907	n-heptyl acetate	0.73	0.65
908	methyl octanoate*	0.64	0.69
909	1-(butoxyethoxy)-2-propanol	2.08	1.93
910	dipropylene glycol n-propyl ether isomer #1	2.13	2.00
911	dipropylene glycol methyl ether acetate isomer #1	1.41	1.38
912	dipropylene glycol methyl ether acetate isomer #2	1.58	1.52
913	dipropylene glycol methyl ether acetate isomers	1.49	1.45
914	2-[2-(2-propoxyethoxy) ethoxy] ethanol	2.46	2.17
915	tripropylene glycol*	2.07	2.18
916	2,5,8,11-tetraoxatridecan-13-ol	2.15	1.97
917	glyceryl triacetate	0.57	0.55

918	anethol; <i>p</i> -propenyl-anisole*	0.76	0.80
919	C10-alkyl phenols	1.68	1.73
920	camphor*	0.45	0.49
921	α -terpineol	5.16	4.63
922	citronellol; 3,7-dimethyl-6-octen-1-ol*	5.63	5.79
923	hydroxycitronella*; hydroxycitronellal	2.50	2.61
924	C10-cyclic ketones	1.02	0.86
925	menthol	1.70	1.43
926	linalool*	5.28	5.43
927	2-decanone	1.06	0.90
928	C10 ketones	1.06	0.90
929	8-methyl-1-nonanol; isodecyl alcohol	1.23	1.06
930	1-decanol	1.22	1.06
931	3,7-dimethyl-1-octanol	1.42	1.20
932	di- <i>n</i> -pentyl ether	2.64	2.15
933	1,2-diacetyl benzene*	2.17	2.25
934	2,4-dimethylhexyl acetate	0.93	0.76
935	2-ethyl-hexyl acetate	0.79	0.66
936	3,4-dimethyl-hexyl acetate	1.16	0.87
937	3,5-dimethyl-hexyl acetate	1.09	0.99
938	3-ethyl-hexyl acetate	1.03	0.91
939	3-methyl-heptyl acetate	0.76	0.67
940	4,5-dimethyl-hexyl acetate	0.86	0.68
941	4-methyl-heptyl acetate	0.72	0.66
942	5-methyl-heptyl acetate	0.73	0.61
943	<i>n</i> -octyl acetate	0.64	0.57
944	geraniol*	4.97	5.12
945	methyl nonanoate*	0.54	0.59
946	2-(2-ethylhexyloxy) ethanol	1.71	1.55
947	propylparaben*; 4-hydroxybenzoic acid, propyl ester	1.40	1.44
948	2-(2-hexyloxyethoxy) ethanol	2.03	1.84
949	glycol ether DPnB; dipropylene glycol <i>n</i> -butyl ether; 1-(2-butoxy-1-methylethoxy)-2-propanol)	1.96	1.83
950	2-(2-butoxyethoxy) ethyl acetate	1.38	1.38
951	2-[2-(2-butoxyethoxy) ethoxy] ethanol	2.24	1.96
952	tripropylene glycol monomethyl ether	1.90	1.92
953	C11-alkyl phenols	1.54	1.58
954	2-ethyl-hexyl acrylate	2.42	2.52
955	2,3,5-trimethyl-hexyl acetate	0.86	0.85
956	2,3-dimethyl-heptyl acetate	0.84	0.71
957	2,4-dimethyl-heptyl acetate	0.88	0.68
958	2,5-dimethyl-heptyl acetate	0.86	0.78
959	2-methyloctyl acetate	0.63	0.52
960	3,5-dimethyl-heptyl acetate	1.01	0.81
961	3,6-dimethyl-heptyl acetate	0.87	0.78
962	3-ethyl-heptyl acetate	0.71	0.63

963	4,5-dimethyl-heptyl acetate	0.96	0.69
964	4,6-dimethyl-heptyl acetate	0.83	0.78
965	4-methyloctyl acetate	0.68	0.61
966	5-methyloctyl acetate	0.67	0.56
967	n-nonyl acetate	0.58	0.52
968	methyl decanoate*	0.48	0.53
969	C12-alkyl phenols	1.42	1.46
970	2,6,8-trimethyl-4-nonanone; isobutyl heptyl ketone	1.86	1.66
971	trimethylnonanol, threo+erythro; 2,6,8-trimethyl-4-nonanol	1.55	1.33
972	3,6-dimethyl-octyl acetate	0.88	0.79
973	3-isopropyl-heptyl acetate	0.71	0.54
974	4,6-dimethyl-octyl acetate	0.85	0.76
975	methyl undecanoate*	0.45	0.50
976	1-hydroxy-2,2,4-trimethylpentyl-3-isobutyrate	0.92	0.89
977	3-hydroxy-2,2,4-trimethylpentyl-1-isobutyrate	0.88	0.77
978	2,2,4-trimethyl-1,3-pentanediol monoisobutyrate and isomers (texanol®)	0.89	0.81
979	substituted C7 ester (C12)	0.92	0.81
980	substituted C9 ester (C12)	0.89	0.81
981	diethylene glycol mono-(2-ethylhexyl) ether*	1.46	1.56
982	diethyl phthalate*	1.56	1.62
983	dimethyl sebacate	0.48	0.43
984	diisopropyl adipate	1.42	1.28
985	3,6,9,12-tetraoxa-hexadecan-1-ol	1.90	1.72
986	triethyl citrate*	0.66	0.70
987	3,5,7-trimethyl-octyl acetate	0.83	0.66
988	3-ethyl-6-methyl-octyl acetate	0.80	0.63
989	4,7-dimethyl-nonyl acetate	0.64	0.50
990	methyl dodecanoate; methyl laurate	0.53	0.47
991	tripropylene glycol n-butyl ether*	1.55	1.64
992	amyl cinnamal*	3.06	3.16
993	isobornyl methacrylate	8.64	5.51
994	2,3,5,7-tetramethyl-octyl acetate	0.74	0.62
995	3,5,7-trimethyl-nonyl acetate	0.76	0.62
996	3,6,8-trimethyl-nonyl acetate	0.72	0.59
997	methyl tridecanoate*	0.40	0.45
998	hexyl cinnamal*	2.86	2.96
999	2,6-di-tert-butyl-p-cresol*	1.15	1.18
1000	2-ethyl-hexyl benzoate*	0.93	0.98
1001	2,4,6,8-tetramethyl-nonyl acetate	0.63	0.51
1002	3-ethyl-6,7-dimethyl-nonyl acetate	0.76	0.61
1003	4,7,9-trimethyl-decyl acetate	0.55	0.42
1004	methyl myristate; methyl tetradecanoate	0.47	0.43
1005	methyl cis-9-pentadecenoate*	1.63	1.80
1006	methyl cis-9-hexadecenoate; methyl palmitoleate*	1.63	1.70

1007	methyl pentadecanoate*	0.42	0.47
1008	2,3,5,6,8-pentamethyl-nonyl acetate	0.74	0.65
1009	3,5,7,9-tetramethyl-decyl acetate	0.58	0.48
1010	5-ethyl-3,6,8-trimethyl-nonyl acetate	0.77	0.77
1011	dibutyl phthalate*	1.20	1.25
1012	2,2,4-trimethyl-1,3-pentanediol diisobutyrate*	0.34	0.38
1013	methyl hexadecanoate; methyl palmitate*	0.40	0.44
1014	methyl <i>cis</i> -9-heptadecenoate*	1.56	1.62
1015	methyl heptadecanoate; methyl margarate*	0.38	0.42
1016	methyl linolenate; methyl <i>cis,cis,cis</i> -9,12,15-octadecatrienoate*	1.77	2.32
1017	methyl linoleate; methyl <i>cis,cis</i> -9,12-octadecadienoate*	1.48	1.84
1018	methyl <i>cis</i> -9-octadecenoate; methyl oleate*	1.48	1.54
1019	methyl octadecanoate; methyl stearate*	0.36	0.40
	<i>Oxygenated Organics</i>		
	<i>Alcohols</i>		
619	<u>methanol</u>	<u>0.71</u>	<u>0.67</u>
620	<u>ethanol</u>	<u>1.69</u>	<u>1.53</u>
621	<u>isopropyl alcohol</u>	<u>0.71</u>	<u>0.61</u>
622	<u>n-propyl alcohol</u>	<u>2.74</u>	<u>2.50</u>
623	<u>isobutyl alcohol</u>	<u>2.24</u>	<u>2.51</u>
624	<u>n-butyl alcohol</u>	<u>3.34</u>	<u>2.88</u>
625	<u>sec-butyl alcohol</u>	<u>1.60</u>	<u>1.36</u>
626	<u>tert-butyl alcohol</u>	<u>0.45</u>	<u>0.41</u>
627	<u>cyclopentanol</u>	<u>1.96</u>	<u>1.72</u>
628	<u>2-pentanol</u>	<u>1.74</u>	<u>1.61</u>
629	<u>3-pentanol</u>	<u>1.73</u>	<u>1.63</u>
630	<u>n-pentyl alcohol</u>	<u>3.35</u>	<u>2.83</u>
631	<u>isoamyl alcohol; 3-methyl-1-butanol</u>	<u>2.73</u>	<u>3.16</u>
632	<u>2-methyl-1-butanol</u>	<u>2.60</u>	<u>2.40</u>
633	<u>cyclohexanol</u>	<u>2.25</u>	<u>1.95</u>
634	<u>1-hexanol</u>	<u>2.74</u>	<u>2.69</u>
635	<u>2-hexanol</u>	<u>2.46</u>	<u>2.08</u>
636	<u>4-methyl-2-pentanol; methyl isobutyl carbinol</u>	<u>2.89</u>	<u>2.64</u>
637	<u>1-heptanol</u>	<u>2.21</u>	<u>1.84</u>
638	<u>dimethylpentanol; 2,3-dimethyl-1-pentanol</u>	<u>2.51</u>	<u>2.23</u>
639	<u>1-octanol</u>	<u>2.01</u>	<u>1.43</u>
640	<u>2-ethyl-1-hexanol</u>	<u>2.20</u>	<u>2.00</u>
641	<u>2-octanol</u>	<u>2.16</u>	<u>1.97</u>
642	<u>3-octanol</u>	<u>2.57</u>	<u>2.28</u>
643	<u>4-octanol</u>	<u>3.07</u>	<u>2.23</u>
644	<u>5-methyl-1-heptanol</u>	<u>1.95</u>	<u>1.79</u>
645	<u>trimethyl cyclohexanol</u>	<u>2.17</u>	<u>1.86</u>
646	<u>dimethylheptanol; 2,6-dimethyl-2-heptanol</u>	<u>1.07</u>	<u>0.94</u>
647	<u>2,6-dimethyl-4-heptanol</u>	<u>2.37</u>	<u>2.09</u>

648	<u>menthol</u>	<u>1.70</u>	<u>1.43</u>
649	<u>8-methyl-1-nonanol; isodecyl alcohol</u>	<u>1.23</u>	<u>1.06</u>
650	<u>1-decanol</u>	<u>1.22</u>	<u>1.06</u>
651	<u>3,7-dimethyl-1-octanol</u>	<u>1.42</u>	<u>1.20</u>
652	<u>trimethylnonanol,threo +erythro; 2,6,8-trimethyl-4-nonanol</u>	<u>1.55</u>	<u>1.33</u>
	<u>Aldehydes</u>		
653	<u>formaldehyde</u>	<u>8.97</u>	<u>9.46</u>
654	<u>acetaldehyde</u>	<u>6.84</u>	<u>6.54</u>
655	<u>propionaldehyde</u>	<u>7.89</u>	<u>7.08</u>
656	<u>2-methyl propanal</u>	<u>5.87</u>	<u>5.25</u>
657	<u>butanal</u>	<u>6.74</u>	<u>5.97</u>
658	<u>C4 aldehydes</u>	<u>6.74</u>	<u>5.97</u>
659	<u>2,2-dimethylpropanal; pivaldehyde</u>	<u>5.40</u>	<u>4.89</u>
660	<u>3-methylbutanal; isovaleraldehyde</u>	<u>5.52</u>	<u>4.97</u>
661	<u>pentanal; valeraldehyde</u>	<u>5.76</u>	<u>5.08</u>
662	<u>C5 aldehydes</u>	<u>5.76</u>	<u>5.08</u>
663	<u>glutaraldehyde</u>	<u>4.79</u>	<u>4.31</u>
664	<u>hexanal</u>	<u>4.98</u>	<u>4.35</u>
665	<u>C6 aldehydes</u>	<u>4.98</u>	<u>4.35</u>
666	<u>heptanal</u>	<u>4.23</u>	<u>3.69</u>
667	<u>C7 aldehydes</u>	<u>4.23</u>	<u>3.69</u>
668	<u>2-methyl-hexanal</u>	<u>3.97</u>	<u>3.54</u>
669	<u>octanal</u>	<u>3.65</u>	<u>3.16</u>
670	<u>C8 aldehydes</u>	<u>3.65</u>	<u>3.16</u>
671	<u>glyoxal</u>	<u>14.2</u>	<u>12.5</u>
672	<u>methyl glyoxal</u>	<u>16.2</u>	<u>16.5</u>
673	<u>acrolein</u>	<u>7.60</u>	<u>7.45</u>
674	<u>crotonaldehyde</u>	<u>10.0</u>	<u>9.39</u>
675	<u>methacrolein</u>	<u>6.23</u>	<u>6.01</u>
676	<u>hydroxyl-methacrolein</u>	<u>6.61</u>	<u>6.24</u>
677	<u>benzaldehyde</u>	<u>0.00</u>	<u>0.00</u>
678	<u>tolualdehyde</u>	<u>0.00</u>	<u>0.00</u>
	<u>Carboxylic Acids and Oxides</u>		
679	<u>carbon monoxide</u>	<u>0.06</u>	<u>0.05</u>
680	<u>ethylene oxide</u>	<u>0.04</u>	<u>0.03</u>
681	<u>propylene oxide</u>	<u>0.32</u>	<u>0.29</u>
682	<u>1,2-epoxy butane</u>	<u>1.02</u>	<u>0.91</u>
683	<u>formic acid</u>	<u>0.08</u>	<u>0.06</u>
684	<u>acetic acid</u>	<u>0.50</u>	<u>0.68</u>
685	<u>glycolic acid</u>	<u>2.67</u>	<u>2.38</u>
686	<u>peroxyacetic acid</u>	<u>12.6</u>	<u>0.54</u>
687	<u>acrylic acid</u>	<u>11.6</u>	<u>11.3</u>
688	<u>propionic acid</u>	<u>0.79</u>	<u>1.22</u>
689	<u>methacrylic acid</u>	<u>18.7</u>	<u>18.5</u>
690	<u>isobutyric acid</u>	<u>1.22</u>	<u>1.20</u>

691	<u>butanoic acid</u>	<u>1.78</u>	<u>1.82</u>
692	<u>malic acid</u>	<u>7.51</u>	<u>6.94</u>
693	<u>3-methyl butanoic acid</u>	<u>4.26</u>	<u>4.23</u>
694	<u>adipic acid; hexanedioic acid</u>	<u>3.37</u>	<u>3.08</u>
695	<u>2-ethyl hexanoic acid</u>	<u>3.49</u>	<u>3.32</u>
696	<u>methyl acrylate</u>	<u>12.2</u>	<u>11.4</u>
697	<u>vinyl acetate</u>	<u>3.26</u>	<u>3.20</u>
698	<u>2-methyl-3-butene-2-ol</u>	<u>5.12</u>	<u>4.91</u>
699	<u>ethyl acrylate</u>	<u>8.78</u>	<u>7.77</u>
700	<u>methyl methacrylate</u>	<u>15.8</u>	<u>15.6</u>
701	<u>ethyl methacrylate*</u>	<u>12.1</u>	<u>12.4</u>
702	<u>hydroxypropyl acrylate</u>	<u>5.56</u>	<u>4.90</u>
703	<u>n-butyl acrylate</u>	<u>5.52</u>	<u>5.02</u>
704	<u>isobutyl acrylate</u>	<u>5.05</u>	<u>4.72</u>
705	<u>butyl methacrylate</u>	<u>9.09</u>	<u>8.70</u>
706	<u>isobutyl methacrylate</u>	<u>8.99</u>	<u>8.62</u>
707	<u>α-terpineol</u>	<u>5.16</u>	<u>4.63</u>
708	<u>2-ethyl-hexyl acrylate</u>	<u>2.42</u>	<u>2.52</u>
709	<u>isobornyl methacrylate</u>	<u>8.64</u>	<u>5.51</u>
710	<u>furan</u>	<u>16.5</u>	<u>9.15</u>
711	<u>2-methyl furan*</u>	<u>8.02</u>	<u>8.30</u>
712	<u>3-methyl furan*</u>	<u>6.64</u>	<u>6.90</u>
713	<u>2-ethyl furan*</u>	<u>6.85</u>	<u>7.09</u>
714	<u>2,5-dimethyl furan*</u>	<u>7.60</u>	<u>7.88</u>
	<i><u>Esters of Carboxylic Acids</u></i>		
715	<u>methyl formate</u>	<u>0.06</u>	<u>0.06</u>
716	<u>ethyl formate</u>	<u>0.52</u>	<u>0.48</u>
717	<u>methyl acetate</u>	<u>0.07</u>	<u>0.07</u>
718	<u>gamma-butyrolactone</u>	<u>1.15</u>	<u>0.96</u>
719	<u>ethyl acetate</u>	<u>0.64</u>	<u>0.63</u>
720	<u>methyl propionate</u>	<u>0.71</u>	<u>0.66</u>
721	<u>n-propyl formate</u>	<u>0.93</u>	<u>0.78</u>
722	<u>isopropyl formate</u>	<u>0.42</u>	<u>0.37</u>
723	<u>ethyl propionate</u>	<u>0.79</u>	<u>0.77</u>
724	<u>isopropyl acetate</u>	<u>1.12</u>	<u>1.07</u>
725	<u>methyl butyrate</u>	<u>1.18</u>	<u>1.09</u>
726	<u>methyl isobutyrate</u>	<u>0.70</u>	<u>0.61</u>
727	<u>n-butyl formate</u>	<u>0.95</u>	<u>0.83</u>
728	<u>propyl acetate</u>	<u>0.87</u>	<u>0.78</u>
729	<u>ethyl butyrate</u>	<u>1.25</u>	<u>1.17</u>
730	<u>isobutyl acetate</u>	<u>0.67</u>	<u>0.62</u>
731	<u>methyl pivalate</u>	<u>0.39</u>	<u>0.35</u>
732	<u>n-butyl acetate</u>	<u>0.89</u>	<u>0.83</u>
733	<u>n-propyl propionate</u>	<u>0.93</u>	<u>0.84</u>
734	<u>sec-butyl acetate</u>	<u>1.43</u>	<u>1.32</u>
735	<u>tert-butyl acetate; tBAC</u>	<u>0.20</u>	<u>0.18</u>

736	<u>methyl pentanoate; methyl valerate*</u>	<u>1.00</u>	<u>1.05</u>
737	<u>butyl propionate</u>	<u>0.89</u>	<u>0.84</u>
738	<u>amyl acetate; n-pentyl acetate</u>	<u>0.96</u>	<u>0.84</u>
739	<u>n-propyl butyrate</u>	<u>1.17</u>	<u>1.05</u>
740	<u>isoamyl acetate; 3-methyl-butyl acetate</u>	<u>1.18</u>	<u>1.09</u>
741	<u>2-methyl-1-butyl acetate</u>	<u>1.17</u>	<u>1.08</u>
742	<u>methyl hexanoate*</u>	<u>0.96</u>	<u>1.02</u>
743	<u>ethyl 3-ethoxy propionate</u>	<u>3.61</u>	<u>3.58</u>
744	<u>hexyl acetates*</u>	<u>0.74</u>	<u>0.80</u>
745	<u>2,3-dimethylbutyl acetate</u>	<u>0.84</u>	<u>0.75</u>
746	<u>2-methylpentyl acetate</u>	<u>1.11</u>	<u>0.98</u>
747	<u>3-methylpentyl acetate</u>	<u>1.31</u>	<u>1.07</u>
748	<u>4-methylpentyl acetate</u>	<u>0.92</u>	<u>0.82</u>
749	<u>isobutyl isobutyrate</u>	<u>0.61</u>	<u>0.60</u>
750	<u>n-butyl butyrate</u>	<u>1.12</u>	<u>1.08</u>
751	<u>n-hexyl acetate</u>	<u>0.87</u>	<u>0.69</u>
752	<u>methyl amyl acetate; 4-methyl-2-pentanol acetate</u>	<u>1.46</u>	<u>1.35</u>
753	<u>n-pentyl propionate</u>	<u>0.79</u>	<u>0.71</u>
754	<u>methyl heptanoate*</u>	<u>0.76</u>	<u>0.82</u>
755	<u>2,4-dimethylpentyl acetate</u>	<u>0.98</u>	<u>0.92</u>
756	<u>2-methylhexyl acetate</u>	<u>0.89</u>	<u>0.69</u>
757	<u>3-ethylpentyl acetate</u>	<u>1.24</u>	<u>1.10</u>
758	<u>3-methylhexyl acetate</u>	<u>1.01</u>	<u>0.89</u>
759	<u>4-methylhexyl acetate</u>	<u>0.91</u>	<u>0.82</u>
760	<u>5-methylhexyl acetate</u>	<u>0.79</u>	<u>0.59</u>
761	<u>isoamyl isobutyrate</u>	<u>0.89</u>	<u>0.82</u>
762	<u>n-heptyl acetate</u>	<u>0.73</u>	<u>0.65</u>
763	<u>methyl octanoate*</u>	<u>0.64</u>	<u>0.69</u>
764	<u>2,4-dimethylhexyl acetate</u>	<u>0.93</u>	<u>0.76</u>
765	<u>2-ethyl-hexyl acetate</u>	<u>0.79</u>	<u>0.66</u>
766	<u>3,4-dimethyl-hexyl acetate</u>	<u>1.16</u>	<u>0.87</u>
767	<u>3,5-dimethyl-hexyl acetate</u>	<u>1.09</u>	<u>0.99</u>
768	<u>3-ethyl-hexyl acetate</u>	<u>1.03</u>	<u>0.91</u>
769	<u>3-methyl-heptyl acetate</u>	<u>0.76</u>	<u>0.67</u>
770	<u>4,5-dimethyl-hexyl acetate</u>	<u>0.86</u>	<u>0.68</u>
771	<u>4-methyl-heptyl acetate</u>	<u>0.72</u>	<u>0.66</u>
772	<u>5-methyl-heptyl acetate</u>	<u>0.73</u>	<u>0.61</u>
773	<u>n-octyl acetate</u>	<u>0.64</u>	<u>0.57</u>
774	<u>methyl nonanoate*</u>	<u>0.54</u>	<u>0.59</u>
775	<u>2,3,5-trimethyl-hexyl acetate</u>	<u>0.86</u>	<u>0.85</u>
776	<u>2,3-dimethyl-heptyl acetate</u>	<u>0.84</u>	<u>0.71</u>
777	<u>2,4-dimethyl-heptyl acetate</u>	<u>0.88</u>	<u>0.68</u>
778	<u>2,5-dimethyl-heptyl acetate</u>	<u>0.86</u>	<u>0.78</u>
779	<u>2-methyloctyl acetate</u>	<u>0.63</u>	<u>0.52</u>
780	<u>3,5-dimethyl-heptyl acetate</u>	<u>1.01</u>	<u>0.81</u>
781	<u>3,6-dimethyl-heptyl acetate</u>	<u>0.87</u>	<u>0.78</u>

<u>782</u>	<u>3-ethyl-heptyl acetate</u>	<u>0.71</u>	<u>0.63</u>
<u>783</u>	<u>4,5-dimethyl-heptyl acetate</u>	<u>0.96</u>	<u>0.69</u>
<u>784</u>	<u>4,6-dimethyl-heptyl acetate</u>	<u>0.83</u>	<u>0.78</u>
<u>785</u>	<u>4-methyloctyl acetate</u>	<u>0.68</u>	<u>0.61</u>
<u>786</u>	<u>5-methyloctyl acetate</u>	<u>0.67</u>	<u>0.56</u>
<u>787</u>	<u>n-nonyl acetate</u>	<u>0.58</u>	<u>0.52</u>
<u>788</u>	<u>methyl decanoate*</u>	<u>0.48</u>	<u>0.53</u>
<u>789</u>	<u>3,6-dimethyl-octyl acetate</u>	<u>0.88</u>	<u>0.79</u>
<u>790</u>	<u>3-isopropyl-heptyl acetate</u>	<u>0.71</u>	<u>0.54</u>
<u>791</u>	<u>4,6-dimethyl-octyl acetate</u>	<u>0.85</u>	<u>0.76</u>
<u>792</u>	<u>methyl undecanoate*</u>	<u>0.45</u>	<u>0.50</u>
<u>793</u>	<u>3,5,7-trimethyl-octyl acetate</u>	<u>0.83</u>	<u>0.66</u>
<u>794</u>	<u>3-ethyl-6-methyl-octyl acetate</u>	<u>0.80</u>	<u>0.63</u>
<u>795</u>	<u>4,7-dimethyl-nonyl acetate</u>	<u>0.64</u>	<u>0.50</u>
<u>796</u>	<u>methyl dodecanoate; methyl laurate</u>	<u>0.53</u>	<u>0.47</u>
<u>797</u>	<u>2,3,5,7-tetramethyl-octyl acetate</u>	<u>0.74</u>	<u>0.62</u>
<u>798</u>	<u>3,5,7-trimethyl-nonyl acetate</u>	<u>0.76</u>	<u>0.62</u>
<u>799</u>	<u>3,6,8-trimethyl-nonyl acetate</u>	<u>0.72</u>	<u>0.59</u>
<u>800</u>	<u>methyl tridecanoate*</u>	<u>0.40</u>	<u>0.45</u>
<u>801</u>	<u>2,4,6,8-tetramethyl-nonyl acetate</u>	<u>0.63</u>	<u>0.51</u>
<u>802</u>	<u>3-ethyl-6,7-dimethyl-nonyl acetate</u>	<u>0.76</u>	<u>0.61</u>
<u>803</u>	<u>4,7,9-trimethyl-decyl acetate</u>	<u>0.55</u>	<u>0.42</u>
<u>804</u>	<u>methyl myristate; methyl tetradecanoate</u>	<u>0.47</u>	<u>0.43</u>
<u>805</u>	<u>methyl cis-9-pentadecenoate*</u>	<u>1.63</u>	<u>1.80</u>
<u>806</u>	<u>methyl cis-9-hexadecenoate; methyl palmitoleate*</u>	<u>1.63</u>	<u>1.70</u>
<u>807</u>	<u>methyl pentadecanoate*</u>	<u>0.42</u>	<u>0.47</u>
<u>808</u>	<u>2,3,5,6,8-pentamethyl-nonyl acetate</u>	<u>0.74</u>	<u>0.65</u>
<u>809</u>	<u>3,5,7,9-tetramethyl-decyl acetate</u>	<u>0.58</u>	<u>0.48</u>
<u>810</u>	<u>5-ethyl-3,6,8-trimethyl-nonyl acetate</u>	<u>0.77</u>	<u>0.77</u>
<u>811</u>	<u>dimethyl carbonate; DMC</u>	<u>0.06</u>	<u>0.06</u>
<u>812</u>	<u>propylene carbonate</u>	<u>0.25</u>	<u>0.28</u>
<u>813</u>	<u>methyl lactate</u>	<u>2.75</u>	<u>2.67</u>
<u>814</u>	<u>2-methoxyethyl acetate</u>	<u>1.18</u>	<u>1.15</u>
<u>815</u>	<u>ethyl lactate</u>	<u>2.71</u>	<u>2.48</u>
<u>816</u>	<u>methyl isopropyl carbonate</u>	<u>0.69</u>	<u>0.62</u>
<u>817</u>	<u>1-methoxy-2-propyl acetate</u>	<u>1.71</u>	<u>1.70</u>
<u>818</u>	<u>2-ethoxyethyl acetate</u>	<u>1.90</u>	<u>1.84</u>
<u>819</u>	<u>2-methoxy-1-propyl acetate</u>	<u>1.12</u>	<u>1.12</u>
<u>820</u>	<u>methoxypropanol acetate</u>	<u>1.97</u>	<u>1.86</u>
<u>821</u>	<u>dimethyl succinate</u>	<u>0.23</u>	<u>0.23</u>
<u>822</u>	<u>ethylene glycol diacetate</u>	<u>0.72</u>	<u>0.66</u>
<u>823</u>	<u>1,2-propylene glycol diacetate</u>	<u>0.94</u>	<u>0.61</u>
<u>824</u>	<u>diisopropyl carbonate</u>	<u>1.04</u>	<u>0.98</u>
<u>825</u>	<u>dimethyl glutarate</u>	<u>0.51</u>	<u>0.42</u>
<u>826</u>	<u>2-butoxyethyl acetate</u>	<u>1.67</u>	<u>1.62</u>
<u>827</u>	<u>dimethyl adipate</u>	<u>1.95</u>	<u>1.80</u>

828	<u>2-(2-ethoxyethoxy) ethyl acetate</u>	<u>1.50</u>	<u>1.48</u>
829	<u>dipropylene glycol n-propyl ether isomer #1</u>	<u>2.13</u>	<u>2.00</u>
830	<u>dipropylene glycol methyl ether acetate isomer #1</u>	<u>1.41</u>	<u>1.38</u>
831	<u>dipropylene glycol methyl ether acetate isomer #2</u>	<u>1.58</u>	<u>1.52</u>
832	<u>dipropylene glycol methyl ether acetate isomers</u>	<u>1.49</u>	<u>1.45</u>
833	<u>glyceryl triacetate</u>	<u>0.57</u>	<u>0.55</u>
834	<u>2-(2-butoxyethoxy) ethyl acetate</u>	<u>1.38</u>	<u>1.38</u>
835	<u>substituted C7 ester (C12)</u>	<u>0.92</u>	<u>0.81</u>
836	<u>1-hydroxy-2,2,4-trimethylpentyl-3-isobutyrate</u>	<u>0.92</u>	<u>0.89</u>
837	<u>3-hydroxy-2,2,4-trimethylpentyl-1-isobutyrate</u>	<u>0.88</u>	<u>0.77</u>
838	<u>2,2,4-trimethyl-1,3-pentanediol monoisobutyrate and isomers (texanol®)</u>	<u>0.89</u>	<u>0.81</u>
839	<u>substituted C9 ester (C12)</u>	<u>0.89</u>	<u>0.81</u>
840	<u>dimethyl sebacate</u>	<u>0.48</u>	<u>0.43</u>
841	<u>diisopropyl adipate</u>	<u>1.42</u>	<u>1.28</u>
	<u><i>Glycols, Ethers, and Glycol Ethers</i></u>		
842	<u>dimethyl ether</u>	<u>0.93</u>	<u>0.81</u>
843	<u>ethylene glycol</u>	<u>3.36</u>	<u>3.13</u>
844	<u>propylene glycol</u>	<u>2.75</u>	<u>2.58</u>
845	<u>dimethoxy methane</u>	<u>1.04</u>	<u>0.94</u>
846	<u>glycerol</u>	<u>3.27</u>	<u>3.15</u>
847	<u>1,3-butanediol*</u>	<u>3.21</u>	<u>3.36</u>
848	<u>1,2-butanediol</u>	<u>2.21</u>	<u>2.52</u>
849	<u>1,4-butanediol</u>	<u>3.22</u>	<u>2.72</u>
850	<u>2,3-butanediol*</u>	<u>4.23</u>	<u>4.38</u>
851	<u>pentaerythritol</u>	<u>2.42</u>	<u>2.17</u>
852	<u>1,2-dihydroxyhexane</u>	<u>2.75</u>	<u>2.55</u>
853	<u>2-methyl-2,4-pentanediol</u>	<u>1.04</u>	<u>1.45</u>
854	<u>2-ethyl-1,3-hexanediol</u>	<u>2.62</u>	<u>2.05</u>
855	<u>trimethylene oxide</u>	<u>5.22</u>	<u>4.56</u>
856	<u>1,3-dioxolane</u>	<u>5.47</u>	<u>4.96</u>
857	<u>2-methoxy ethanol</u>	<u>2.98</u>	<u>2.93</u>
858	<u>tetrahydrofuran</u>	<u>4.95</u>	<u>4.31</u>
859	<u>diethyl ether</u>	<u>4.01</u>	<u>3.76</u>
860	<u>1,4-dioxane</u>	<u>2.71</u>	<u>2.62</u>
861	<u>1-methoxy-2-propanol</u>	<u>2.62</u>	<u>2.44</u>
862	<u>2-ethoxy-ethanol</u>	<u>3.78</u>	<u>3.71</u>
863	<u>2-methoxy-1-propanol</u>	<u>3.01</u>	<u>3.01</u>
864	<u>3-methoxy-1-propanol</u>	<u>4.01</u>	<u>3.84</u>
865	<u>diethylene glycol</u>	<u>3.55</u>	<u>3.35</u>
866	<u>α-methyl tetrahydrofuran</u>	<u>4.62</u>	<u>3.97</u>
867	<u>tetrahydropyran</u>	<u>3.81</u>	<u>3.22</u>
868	<u>ethyl isopropyl ether</u>	<u>3.86</u>	<u>3.74</u>
869	<u>methyl n-butyl ether</u>	<u>3.66</u>	<u>3.15</u>
870	<u>methyl t-butyl ether</u>	<u>0.78</u>	<u>0.73</u>
871	<u>tetrahydro-2-furanmethanol; tetrahydrofurfuryl alcohol</u>	<u>3.54</u>	<u>3.31</u>

872	<u>2,2-dimethoxy-propane</u>	<u>0.52</u>	<u>0.48</u>
873	<u>1-ethoxy-2-propanol</u>	<u>3.25</u>	<u>3.09</u>
874	<u>2-propoxy-ethanol</u>	<u>3.52</u>	<u>3.30</u>
875	<u>3-ethoxy-1-propanol</u>	<u>4.24</u>	<u>4.09</u>
876	<u>3-methoxy-1-butanol</u>	<u>0.97</u>	<u>3.87</u>
877	<u>2-(2-methoxyethoxy) ethanol</u>	<u>2.90</u>	<u>2.66</u>
878	<u>di-n-propyl ether</u>	<u>3.24</u>	<u>3.08</u>
879	<u>ethyl n-butyl ether</u>	<u>3.86</u>	<u>3.48</u>
880	<u>ethyl tert-butyl ether</u>	<u>2.11</u>	<u>2.01</u>
881	<u>methyl tert-amyl ether; TAME</u>	<u>2.14</u>	<u>1.69</u>
882	<u>diisopropyl ether</u>	<u>3.56</u>	<u>3.52</u>
883	<u>ethylene glycol diethyl ether; 1,2-diethoxyethane</u>	<u>2.84</u>	<u>2.95</u>
884	<u>acetal (1,1-diethoxyethane)</u>	<u>3.68</u>	<u>3.58</u>
885	<u>1-propoxy-2-propanol; propylene glycol n-propyl ether</u>	<u>2.86</u>	<u>2.68</u>
886	<u>2-butoxy-ethanol</u>	<u>2.90</u>	<u>2.90</u>
887	<u>3-methoxy-3-methyl-butanol</u>	<u>1.74</u>	<u>2.88</u>
888	<u>n-propoxy-propanol</u>	<u>3.84</u>	<u>3.77</u>
889	<u>2-(2-ethoxyethoxy) ethanol</u>	<u>3.19</u>	<u>3.26</u>
890	<u>dipropylene glycol isomer (1-[2-hydroxypropyl]-2-propanol)</u>	<u>2.48</u>	<u>2.31</u>
891	<u>triethylene glycol</u>	<u>3.41</u>	<u>3.25</u>
892	<u>4,4-diethyl-3-oxahexane; tert-amyl ethyl ether; TAEE</u>	<u>2.03</u>	<u>1.95</u>
893	<u>1-tert-butoxy-2-propanol</u>	<u>1.71</u>	<u>1.61</u>
894	<u>2-tert-butoxy-1-propanol</u>	<u>1.81</u>	<u>1.81</u>
895	<u>n-butoxy-2-propanol; propylene glycol n-butyl ether</u>	<u>2.70</u>	<u>2.72</u>
896	<u>2-(2-propoxyethoxy) ethanol</u>	<u>3.00</u>	<u>2.85</u>
897	<u>dipropylene glycol methyl ether; 1-methoxy-2-(2-hydroxypropoxy)-propane</u>	<u>2.21</u>	<u>1.98</u>
898	<u>dipropylene glycol methyl ether; 2-(2-methoxypropoxy)-1-propanol</u>	<u>2.70</u>	<u>2.58</u>
899	<u>2-[2-(2-methoxyethoxy) ethoxy] ethanol</u>	<u>2.62</u>	<u>2.58</u>
900	<u>2-butyl tetrahydrofuran</u>	<u>2.53</u>	<u>2.13</u>
901	<u>di-isobutyl ether</u>	<u>1.29</u>	<u>1.20</u>
902	<u>di-n-butyl ether</u>	<u>3.17</u>	<u>2.84</u>
903	<u>2-n-hexyloxyethanol</u>	<u>2.45</u>	<u>2.09</u>
904	<u>2,2,4-trimethyl-1,3-pentanediol</u>	<u>1.74</u>	<u>1.54</u>
905	<u>2-methoxy-1-(2-methoxy-1-methylethoxy)-propane; dipropylene glycol dimethyl ether</u>	<u>2.09</u>	<u>2.02</u>
906	<u>2-(2-butoxyethoxy)-ethanol</u>	<u>2.87</u>	<u>2.39</u>
907	<u>dipropylene glycol ethyl ether</u>	<u>2.75</u>	<u>2.72</u>
908	<u>2-[2-(2-ethoxyethoxy) ethoxy] ethanol</u>	<u>2.66</u>	<u>2.46</u>
909	<u>tetraethylene glycol</u>	<u>2.84</u>	<u>2.51</u>
910	<u>2-(2-ethylhexyloxy) ethanol</u>	<u>1.71</u>	<u>1.55</u>
911	<u>1-(butoxyethoxy)-2-propanol</u>	<u>2.08</u>	<u>1.93</u>
912	<u>2-[2-(2-propoxyethoxy) ethoxy] ethanol</u>	<u>2.46</u>	<u>2.17</u>
913	<u>tripropylene glycol*</u>	<u>2.07</u>	<u>2.18</u>

914	<u>2,5,8,11-tetraoxatridecan-13-ol</u>	<u>2.15</u>	<u>1.97</u>
915	<u>di-n-pentyl ether</u>	<u>2.64</u>	<u>2.15</u>
916	<u>2-(2-hexyloxyethoxy) ethanol</u>	<u>2.03</u>	<u>1.84</u>
917	<u>glycol ether DPnB; dipropylene glycol n-butyl ether; 1-(2-butoxy-1-methylethoxy)-2-propanol)</u>	<u>1.96</u>	<u>1.83</u>
918	<u>2-[2-(2-butoxyethoxy) ethoxy] ethanol</u>	<u>2.24</u>	<u>1.96</u>
919	<u>tripropylene glycol monomethyl ether</u>	<u>1.90</u>	<u>1.92</u>
920	<u>diethylene glycol mono-(2-ethylhexyl) ether*</u>	<u>1.46</u>	<u>1.56</u>
921	<u>tripropylene glycol n-butyl ether*</u>	<u>1.55</u>	<u>1.64</u>
	<u>Ketones</u>		
922	<u>acetone</u>	<u>0.43</u>	<u>0.36</u>
923	<u>cyclobutanone</u>	<u>0.68</u>	<u>0.62</u>
924	<u>methyl ethyl ketone</u>	<u>1.49</u>	<u>1.48</u>
925	<u>cyclopentanone</u>	<u>1.43</u>	<u>1.15</u>
926	<u>C5 cyclic ketones</u>	<u>1.43</u>	<u>1.15</u>
927	<u>2-pentanone</u>	<u>3.07</u>	<u>2.81</u>
928	<u>3-pentanone</u>	<u>1.45</u>	<u>1.24</u>
929	<u>C5 ketones</u>	<u>3.07</u>	<u>2.81</u>
930	<u>methyl isopropyl ketone</u>	<u>1.64</u>	<u>1.65</u>
931	<u>2,4-pentanedione</u>	<u>1.02</u>	<u>1.01</u>
932	<u>cyclohexanone</u>	<u>1.61</u>	<u>1.35</u>
933	<u>C6 cyclic ketones</u>	<u>1.61</u>	<u>1.35</u>
934	<u>4-methyl-2-pentanone; methyl isobutyl ketone</u>	<u>4.31</u>	<u>3.88</u>
935	<u>methyl n-butyl ketone</u>	<u>3.55</u>	<u>3.14</u>
936	<u>methyl tert-butyl ketone</u>	<u>0.78</u>	<u>0.65</u>
937	<u>C6 ketones</u>	<u>3.55</u>	<u>3.14</u>
938	<u>C7 cyclic ketones</u>	<u>1.41</u>	<u>1.18</u>
939	<u>2-heptanone</u>	<u>2.80</u>	<u>2.36</u>
940	<u>2-methyl-3-hexanone</u>	<u>1.79</u>	<u>1.53</u>
941	<u>di-isopropyl ketone</u>	<u>1.63</u>	<u>1.31</u>
942	<u>C7 ketones</u>	<u>2.80</u>	<u>2.36</u>
943	<u>5-methyl-2-hexanone</u>	<u>2.10</u>	<u>2.41</u>
944	<u>3-methyl-2-hexanone</u>	<u>2.81</u>	<u>2.55</u>
945	<u>C8 cyclic ketones</u>	<u>1.25</u>	<u>1.05</u>
946	<u>2-octanone</u>	<u>1.66</u>	<u>1.40</u>
947	<u>C8 ketones</u>	<u>1.66</u>	<u>1.40</u>
948	<u>C9 cyclic ketones</u>	<u>1.13</u>	<u>0.94</u>
949	<u>2-propyl cyclohexanone</u>	<u>1.71</u>	<u>1.54</u>
950	<u>4-propyl cyclohexanone</u>	<u>2.08</u>	<u>1.85</u>
951	<u>2-nonanone</u>	<u>1.30</u>	<u>1.08</u>
952	<u>di-isobutyl ketone; 2,6-dimethyl-4-heptanone</u>	<u>2.94</u>	<u>2.68</u>
953	<u>C9 ketones</u>	<u>1.30</u>	<u>1.08</u>
954	<u>C10 cyclic ketones</u>	<u>1.02</u>	<u>0.86</u>
955	<u>2-decanone</u>	<u>1.06</u>	<u>0.90</u>
956	<u>C10 ketones</u>	<u>1.06</u>	<u>0.90</u>
957	<u>2,6,8-trimethyl-4-nonanone; isobutyl heptyl ketone</u>	<u>1.86</u>	<u>1.66</u>

958	<u>biacetyl; diacetyl; butanedione</u>	<u>20.7</u>	<u>20.0</u>
959	<u>methylvinyl ketone</u>	<u>8.73</u>	<u>9.65</u>
960	<u>mesityl oxide; 2-methyl-2-penten-4-one</u>	<u>17.3</u>	<u>6.51</u>
961	<u>isophorone; 3,5,5-trimethyl-2-cyclohexenone</u>	<u>10.5</u>	<u>4.63</u>
962	<u>1-nonene-4-one</u>	<u>3.39</u>	<u>3.14</u>
963	<u>hydroxy acetone</u>	<u>3.08</u>	<u>3.23</u>
964	<u>dihydroxy acetone</u>	<u>4.02</u>	<u>3.99</u>
965	<u>methoxy-acetone</u>	<u>2.14</u>	<u>2.03</u>
966	<u>diacetone alcohol</u>	<u>0.68</u>	<u>0.60</u>
	<u>Phenols</u>		
967	<u>phenol</u>	<u>1.82</u>	<u>2.76</u>
968	<u>C7 alkyl phenols</u>	<u>2.34</u>	<u>2.40</u>
969	<u>m-cresol</u>	<u>2.34</u>	<u>2.40</u>
970	<u>p-cresol</u>	<u>2.34</u>	<u>2.40</u>
971	<u>o-cresol</u>	<u>2.34</u>	<u>2.40</u>
972	<u>4-vinyl phenol*</u>	<u>1.43</u>	<u>1.50</u>
973	<u>2,4-dimethyl phenol*</u>	<u>2.07</u>	<u>2.12</u>
974	<u>2,5-dimethyl phenol*</u>	<u>2.07</u>	<u>2.12</u>
975	<u>3,4-dimethyl phenol*</u>	<u>2.07</u>	<u>2.12</u>
976	<u>2,3-dimethyl phenol*</u>	<u>2.07</u>	<u>2.12</u>
977	<u>2,6-dimethyl phenol*</u>	<u>2.07</u>	<u>2.12</u>
978	<u>C8 alkyl phenols</u>	<u>2.07</u>	<u>2.12</u>
979	<u>2,3,5-trimethyl phenol*</u>	<u>1.86</u>	<u>1.90</u>
980	<u>2,3,6-trimethyl phenol*</u>	<u>1.86</u>	<u>1.90</u>
981	<u>C9 alkyl phenols</u>	<u>1.86</u>	<u>1.90</u>
982	<u>C10 alkyl phenols</u>	<u>1.68</u>	<u>1.73</u>
983	<u>C11 alkyl phenols</u>	<u>1.54</u>	<u>1.58</u>
984	<u>C12 alkyl phenols</u>	<u>1.42</u>	<u>1.46</u>
985	<u>2-phenoxyethanol; ethylene glycol phenyl ether</u>	<u>3.61</u>	<u>4.49</u>
986	<u>1-phenoxy-2-propanol</u>	<u>1.73</u>	<u>1.60</u>
987	<u>2,6-di-tert-butyl-p-cresol*</u>	<u>1.15</u>	<u>1.18</u>
	<u>Other Oxygenated Organics</u>		
988	<u>glycolaldehyde*</u>	<u>4.96</u>	<u>5.10</u>
989	<u>lumped C5+ unsaturated carbonyl species*</u>	<u>6.18</u>	<u>6.38</u>
990	<u>benzyl alcohol*</u>	<u>4.98</u>	<u>5.11</u>
991	<u>methoxybenzene; anisole*</u>	<u>6.49</u>	<u>6.66</u>
992	<u>β-phenethyl alcohol; 2-phenyl ethyl alcohol*</u>	<u>4.41</u>	<u>4.53</u>
993	<u>phthalic anhydride*</u>	<u>2.50</u>	<u>2.58</u>
994	<u>methylparaben; 4-hydroxybenzoic acid, methyl ester*</u>	<u>1.66</u>	<u>1.71</u>
995	<u>cinnamic aldehyde*</u>	<u>4.68</u>	<u>4.84</u>
996	<u>cinnamic alcohol*</u>	<u>0.84</u>	<u>0.89</u>
997	<u>anethol; p-propenyl-anisole*</u>	<u>0.76</u>	<u>0.80</u>
998	<u>camphor*</u>	<u>0.45</u>	<u>0.49</u>
999	<u>citronellol; 3,7-dimethyl-6-octen-1-ol*</u>	<u>5.63</u>	<u>5.79</u>
1000	<u>hydroxycitronella*; hydroxycitronellal</u>	<u>2.50</u>	<u>2.61</u>
1001	<u>linalool*</u>	<u>5.28</u>	<u>5.43</u>

<u>1002</u>	<u>1,2-diacetyl benzene*</u>	<u>2.17</u>	<u>2.25</u>
<u>1003</u>	<u>geraniol*</u>	<u>4.97</u>	<u>5.12</u>
<u>1004</u>	<u>propylparaben*; 4-hydroxybenzoic acid, propyl ester</u>	<u>1.40</u>	<u>1.44</u>
<u>1005</u>	<u>diethyl phthalate*</u>	<u>1.56</u>	<u>1.62</u>
<u>1006</u>	<u>3,6,9,12-tetraoxa-hexadecan-1-ol</u>	<u>1.90</u>	<u>1.72</u>
<u>1007</u>	<u>triethyl citrate*</u>	<u>0.66</u>	<u>0.70</u>
<u>1008</u>	<u>amyl cinnamal*</u>	<u>3.06</u>	<u>3.16</u>
<u>1009</u>	<u>hexyl cinnamal*</u>	<u>2.86</u>	<u>2.96</u>
<u>1010</u>	<u>2-ethyl-hexyl benzoate*</u>	<u>0.93</u>	<u>0.98</u>
<u>1011</u>	<u>dibutyl phthalate*</u>	<u>1.20</u>	<u>1.25</u>
<u>1012</u>	<u>2,2,4-trimethyl-1,3-pentanediol diisobutyrate*</u>	<u>0.34</u>	<u>0.38</u>
<u>1013</u>	<u>methyl hexadecanoate; methyl palmitate*</u>	<u>0.40</u>	<u>0.44</u>
<u>1014</u>	<u>methyl cis-9-heptadecenoate*</u>	<u>1.56</u>	<u>1.62</u>
<u>1015</u>	<u>methyl heptadecanoate; methyl margarate*</u>	<u>0.38</u>	<u>0.42</u>
<u>1016</u>	<u>methyl linolenate; methyl cis,cis,cis-9,12,15-octadecatrienoate*</u>	<u>1.77</u>	<u>2.32</u>
<u>1017</u>	<u>methyl linoelate; methyl cis,cis-9,12-octadecadienoate*</u>	<u>1.48</u>	<u>1.84</u>
<u>1018</u>	<u>methyl cis-9-octadecenoate; methyl oleate*</u>	<u>1.48</u>	<u>1.54</u>
<u>1019</u>	<u>methyl octadecanoate; methyl stearate*</u>	<u>0.36</u>	<u>0.40</u>

* This reactive organic compound was added to the Table of MIR Values on October 2, 2010, and may be used in aerosol coating products after this date, as specified in section 94522(hj)(23)(B), title 17, California Code of Regulations

** ULMIR (as defined in section 94521(a)(781), title 17, California Code of Regulations.)

NOTE: Authority cited: Sections 39600, 39601, and 41712, Health and Safety Code.
Reference: Sections 39002, 39600, 40000 and 41712, Health and Safety Code

