

Table 10-1 REFRACTIVE INDEX, DIPOLE MOMENT, AND RADIUS OF GYRATION - ORGANIC COMPOUNDS (continued)

| NO  | FORMULA  | NAME                                  | Refractive Index |           | Dipole Moment |       | Radius of Gyration |
|-----|----------|---------------------------------------|------------------|-----------|---------------|-------|--------------------|
|     |          |                                       | T, C             | Value @ T | State         | Debye |                    |
| 781 | C8H10    | p-XYLENE                              | 25.0             | 1.4932    | gas           | 0.00  | 3.831              |
| 782 | C8H10O   | m-ETHYLPHENOL                         | 25.0             | 1.5240    | —             | —     | 4.130              |
| 783 | C8H10O   | p-ETHYLPHENOL                         | 25.0             | 1.5049    | gas           | 1.41  | 4.174              |
| 784 | C8H10O   | PHENETOLE                             | 25.0             | 1.5323    | in benzene    | 1.65  | 4.279              |
| 785 | C8H10O   | 2-PHENYLETHANOL                       | 25.0             | 1.5420    | in benzene    | 1.25  | 4.069              |
| 786 | C8H10O   | 2,3-XYLENOL                           | 19.9             | 1.5320    | in benzene    | 1.39  | 4.143              |
| 787 | C8H10O   | 2,4-XYLENOL                           | 25.0             | 1.5120    | in benzene    | 1.43  | 4.128              |
| 788 | C8H10O   | 2,5-XYLENOL                           | 19.9             | 1.5371    | in benzene    | 1.41  | 4.068              |
| 789 | C8H10O   | 2,6-XYLENOL                           | 19.9             | 1.5442    | gas           | 1.77  | 4.156              |
| 790 | C8H10O   | 3,4-XYLENOL                           | 19.9             | 1.5584    | in benzene    | 1.76  | 4.318              |
| 791 | C8H11N   | N,N-DIMETHYLANILINE                   | 19.9             | 1.5588    | gas           | 1.68  | 4.076              |
| 792 | C8H11N   | o-ETHYLANILINE                        | 25.0             | 1.4959    | liquid        | 2.00  | 4.157              |
| 793 | C8H11N   | 2,4,6-TRIMETHYLPYRIDINE               | 25.0             | 1.5528    | —             | —     | 4.306              |
| 794 | C8H11NO  | p-PHENETIDINE                         | 25.0             | 1.4905    | —             | —     | 4.414              |
| 795 | C8H12    | 1,5-CYCLOOCTADIENE                    | 25.0             | 1.4641    | —             | —     | 3.732              |
| 796 | C8H12    | VINYLCYCLOHEXENE                      | 19.9             | 1.4568    | —             | —     | 3.869              |
| 797 | C8H12O4  | 1,4-CYCLOHEXANEDICARBOXYLIC ACID      | 25.0             | 1.4215    | —             | —     | 4.901              |
| 798 | C8H12O4  | DIETHYL MALEATE                       | 25.0             | 1.4105    | —             | —     | 5.242              |
| 799 | C8H14O2  | n-BUTYL METHACRYLATE                  | 25.0             | 1.4105    | in benzene    | 2.15  | 5.125              |
| 800 | C8H14O3  | BUTYRIC ANHYDRIDE                     | 25.0             | 1.4200    | —             | —     | 4.936              |
| 801 | C8H14O4  | DIETHYL SUCCINATE                     | 19.9             | 1.4266    | in benzene    | 2.16  | 5.150              |
| 802 | C8H16    | CYCLOOCTANE                           | 25.0             | 1.4563    | —             | —     | —                  |
| 803 | C8H16    | 1,1-DIMETHYLCYCLOHEXANE               | 25.0             | 1.4266    | gas           | 0.00  | 3.668              |
| 804 | C8H16    | cis-1,2-DIMETHYLCYCLOHEXANE           | 25.0             | 1.4336    | —             | —     | 3.759              |
| 805 | C8H16    | trans-1,2-DIMETHYLCYCLOHEXANE         | 25.0             | 1.4247    | gas           | 0.00  | 3.883              |
| 806 | C8H16    | cis-1,3-DIMETHYLCYCLOHEXANE           | 25.0             | 1.4206    | gas           | 0.00  | 3.972              |
| 807 | C8H16    | trans-1,3-DIMETHYLCYCLOHEXANE         | 25.0             | 1.4284    | gas           | 0.00  | 3.982              |
| 808 | C8H16    | cis-1,4-DIMETHYLCYCLOHEXANE           | 25.0             | 1.4273    | gas           | 0.00  | 3.905              |
| 809 | C8H16    | trans-1,4-DIMETHYLCYCLOHEXANE         | 25.0             | 1.4185    | gas           | 0.00  | 3.907              |
| 810 | C8H16    | ETHYLCYCLOHEXANE                      | 25.0             | 1.4307    | gas           | 0.00  | 3.932              |
| 811 | C8H16    | 2-ETHYL-1-HEXENE                      | 25.0             | 1.4132    | —             | —     | 4.579              |
| 812 | C8H16    | 1-METHYL-1-ETHYLCYCLOPENTANE          | 25.0             | 1.4248    | gas           | 0.00  | 3.773              |
| 813 | C8H16    | 1-OCTENE                              | 25.0             | 1.4062    | liquid        | 0.34  | 4.457              |
| 814 | C8H16    | trans-2-OCTENE                        | 25.0             | 1.4107    | —             | —     | 4.375              |
| 815 | C8H16    | trans-3-OCTENE                        | 25.0             | 1.4102    | liquid        | 0.00  | 4.415              |
| 816 | C8H16    | trans-4-OCTENE                        | 25.0             | 1.4093    | liquid        | 0.00  | 4.419              |
| 817 | C8H16    | n-PROPYLCYCLOPENTANE                  | 25.0             | 1.4239    | gas           | 0.00  | 4.135              |
| 818 | C8H16    | 2,4,4-TRIMETHYL-1-PENTENE             | 25.0             | 1.4060    | —             | —     | 3.994              |
| 819 | C8H16    | 2,4,4-TRIMETHYL-2-PENTENE             | 25.0             | 1.4135    | —             | —     | 4.136              |
| 820 | C8H16O   | 2-ETHYLHEXANAL                        | 21.9             | 1.4152    | in benzene    | 2.66  | 4.862              |
| 821 | C8H16O   | 1-OCTANAL                             | 25.0             | 1.4156    | —             | —     | 4.681              |
| 822 | C8H16O   | 2-OCTANONE                            | 25.0             | 1.4133    | in benzene    | 2.72  | 4.892              |
| 823 | C8H16O2  | n-BUTYL n-BUTYRATE                    | 25.0             | 1.4029    | —             | —     | 5.887              |
| 824 | C8H16O2  | n-HEXYL ACETATE                       | 25.0             | 1.4073    | liquid        | 1.80  | 5.160              |
| 825 | C8H16O2  | ISOBUTYL ISOBUTYRATE                  | 19.9             | 1.3990    | —             | —     | 4.768              |
| 826 | C8H16O2  | n-OCTANOIC ACID                       | 25.0             | 1.4261    | liquid        | 1.15  | 5.211              |
| 827 | C8H16O4  | DIETHYLENE GLYCOL ETHYL ETHER ACETATE | 19.9             | 1.4213    | —             | —     | 5.692              |
| 828 | C8H18    | 2,2-DIMETHYLHEXANE                    | 25.0             | 1.3910    | gas           | 0.00  | 4.392              |
| 829 | C8H18    | 2,3-DIMETHYLHEXANE                    | 25.0             | 1.3988    | gas           | 0.00  | 4.363              |
| 830 | C8H18    | 2,4-DIMETHYLHEXANE                    | 25.0             | 1.3929    | gas           | 0.00  | 4.267              |
| 831 | C8H18    | 2,5-DIMETHYLHEXANE                    | 25.0             | 1.3900    | gas           | 0.00  | 4.452              |
| 832 | C8H18    | 3,3-DIMETHYLHEXANE                    | 25.0             | 1.3978    | gas           | 0.00  | 3.717              |
| 833 | C8H18    | 3,4-DIMETHYLHEXANE                    | 25.0             | 1.4018    | gas           | 0.00  | 4.230              |
| 834 | C8H18    | 3-ETHYLHEXANE                         | 25.0             | 1.3992    | gas           | 0.00  | 4.571              |
| 835 | C8H18    | 3-ETHYL-2-METHYLPENTANE               | 25.0             | 1.4055    | —             | —     | 3.928              |
| 836 | C8H18    | 3-METHYL-3-ETHYLPENTANE               | 25.0             | 1.3926    | gas           | 0.00  | 4.570              |
| 837 | C8H18    | 2-METHYLHEPTANE                       | 25.0             | 1.3961    | gas           | 0.00  | 4.490              |
| 838 | C8H18    | 3-METHYLHEPTANE                       | 25.0             | 1.3955    | gas           | 0.00  | 4.520              |
| 839 | C8H18    | 4-METHYLHEPTANE                       | 25.0             | 1.3951    | gas           | 0.00  | 4.546              |
| 840 | C8H18    | n-OCTANE                              | 25.0             | 1.4007    | gas           | 0.00  | 3.913              |
| 841 | C8H18    | 2,2,3-TRIMETHYLPENTANE                | 25.0             | 1.3890    | gas           | 0.00  | 3.913              |
| 842 | C8H18    | 2,2,4-TRIMETHYLPENTANE                | 25.0             | 1.4052    | gas           | 0.00  | 4.091              |
| 843 | C8H18    | 2,3,3-TRIMETHYLPENTANE                | 25.0             | 1.4020    | gas           | 0.00  | 3.960              |
| 844 | C8H18    | 2,3,4-TRIMETHYLPENTANE                | 25.0             | 1.4020    | gas           | 0.00  | 4.061              |
| 845 | C8H18    | 2,2,3,3-TETRAMETHYLBUTANE             | 25.0             | 1.3968    | gas           | 1.17  | 4.797              |
| 846 | C8H18O   | DI-n-BUTYL ETHER                      | 25.0             | 1.3930    | —             | —     | 4.373              |
| 847 | C8H18O   | DI-sec-BUTYL ETHER                    | 19.9             | 1.3946    | —             | —     | 4.014              |
| 848 | C8H18O   | DI-tert-BUTYL ETHER                   | 25.0             | 1.4290    | in benzene    | 1.76  | 4.809              |
| 849 | C8H18O   | 2-ETHYL-1-HEXANOL                     | 25.0             | 1.4276    | in benzene    | 1.65  | 4.787              |
| 850 | C8H18O   | 1-OCTANOL                             | 25.0             | 1.4241    | liquid        | 1.61  | 4.898              |
| 851 | C8H18O   | 2-OCTANOL                             | 25.0             | 1.3867    | in benzene    | 0.92  | 4.534              |
| 852 | C8H18O2  | DI-n-BUTYL PEROXIDE                   | 49.9             | 1.4433    | in benzene    | 4.47  | 5.482              |
| 853 | C8H18O2S | DI-n-BUTYL SULFONE                    | 25.0             | 1.4115    | —             | —     | 5.511              |
| 854 | C8H18O3  | DIETHYLENE GLYCOL DIETHYL ETHER       | 19.9             | 1.4306    | —             | —     | 5.106              |
| 855 | C8H18O3  | DIETHYLENE GLYCOL MONOBUTYL ETHER     | 25.0             | 1.4209    | in benzene    | 2.24  | 5.414              |
| 856 | C8H18O4  | TRIETHYLENE GLYCOL DIMETHYL ETHER     | 25.0             | 1.4570    | in dioxane    | 3.25  | 5.602              |
| 857 | C8H18O5  | TETRAETHYLENE GLYCOL                  | —                | —         | —             | —     | —                  |