## Alkane Properties.

| Name | Formula | B.p., $^{o}$C | Density, g/mL |
|---|---|---|---|
| | | | |
| Methane | $CH_4$ | -162 | gas |
| Ethane | $CH_3CH_3$ | -90 | gas |
| Propane | $CH_3CH_2CH_3$ | -42 | gas |
| n-Butane | $CH_3(CH_2)_2CH_3$ | 0 | gas |
| n-Pentane | $CH_3(CH_2)_3CH_3$ | 36 | 0.626 |
| n-Hexane | $CH_3(CH_2)_4CH_3$ | 69 | 0.659 |
| n-Heptane | $CH_3(CH_2)_5CH_3$ | 98 | 0.684 |
| n-Octane | $CH_3(CH_2)_6CH_3$ | 126 | 0.703 |
| | | | |
| Isomers: $C_4H_{10}$ | | | |
| | | | |
| n-Butane | $CH_3(CH_2)_2CH_3$ | 0 | gas |
| 2-Methyl propane | $(CH_3)_2CHCH_3$ | -12 | gas |
| | | | |
| Isomers: $C_5H_{12}$ | | | |
| | | | |
| n-Pentane | $CH_3(CH_2)_3CH_3$ | 36 | 0.626 |
| 2-Methyl butane | $(CH_3)_2CHCH_2CH_3$ | 28 | 0.620 |
| 2,2-Dimethyl propane | $(CH_3)_4C$ | 10 | 0.615 |
| | | | |
| Isomers: $C_6H_{14}$ | | | |
| | | | |
| n-Hexane | $CH_3(CH_2)_4CH_3$ | 69 | 0.659 |
| 2-Methyl pentane | $(CH_3)_2CH(CH_2)_2CH_3$ | 60 | 0.654 |
| 3-Methyl pentane | $CH_3CH_2CH(CH_3)CH_2CH_3$ | 63 | 0.676 |
| 2,2-Dimethyl butane | $(CH_3)_3CCH_2CH_3$ | 50 | 0.649 |
| 2,3-Dimethyl butane | $(CH_3)_2CHCH(CH_3)_2$ | 58 | 0.668 |