Properties of Other Light Molecules Compared to Water

NOTE: Standard Atmospheric Pressure and Temperature are assumed unless noted otherwise (760mm Mercury and 20C)

Compound	Formula	Molecular Weight (rounded)	State	Boiling Point	Freezing Point	Soluble in Water	Other Properties
Water	H_2O	18	Liquid	100C	0C		Heat of condensation, 540C; Heat of Fusion, 80C.
Methane	CH_4	16	Gas	-161.6C	-182.5C	Slightly	Toxic; Flammable
Carbon Monoxide	CO	28	Gas	-190C	-207C	Slightly	Toxic
Carbon Dioxide	CO_2	44	Gas	NA	-78.5 Sublime[8]	Yes	Animals exhale it; Plants use it; Dry Ice.
Acetylene	C_2H_2	26	Gas	-84C	-81.8 at 890mm pressure	Slightly	Flammable
Methanol	CH_3OH	32	Liquid	64.5C	-97.8C	Yes	Toxic
Lithium Hydride	LiH	8	Solid	Decom-poses	680C	Yes; Decom-poses	Unstable in the presence of water
Boron Nitride	BN	25	Solid	NA	3000C Sublime		hygroscopic (attracts water)
Hydrochloric Acid	HCl	36	Gas[9]	-85C	114C	Yes	Corrosive
Hydrofluoric Acid	HF	20	Gas	19.5C	-83C	Yes	Corrosive
Hydrogen Sulfide	H_2S	34	Gas	-60.2C	-83.8C	Yes	Toxic
Nitrogen	N_2	28	Gas	-195.5C	-210C	Slightly	80% of air; toxic at high levels
Oxygen	O_2	32	Gas	-183C	-218C	Yes	20% of air; corrosive at high levels; promotes combustion.

[8] Sublime means the solid transitions directly into a gas without first becoming a liquid.

[9] The familiar hydrochloric acid, (aka muriatic acid), liquid is actually a gas dissolved in water.