

# Compressed Gas Data

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Name of Gas	Formula	IDLH (ppm)	STEL (ppm)	TWA/TLV (ppm)	Least perceptible odor (ppm)	Comments	Flamability limits in air (%)	Odor	Molecular weight	Boiling point at atm pres (°F)	Vapor pressure at 70°F (psia)	State as shipped
Ammonia	NH <sub>3</sub>	500	35	25	0.04-50	Toxic	15-28	Pungent, Irritating	17.03	-28.2	125.7	Liquid
Argon	Ar				NA	Asphyxiant	NA	None	39.95	-302.6		Gas
Arsine	AsH <sub>3</sub>	6		0.05	0.5-4	Toxic, Flammable	4.5-78	Garlic Like	77.95	-80.5	219.7	
Boron Trichloride	BCl <sub>3</sub>	1,000		1		Toxic	NA	Pungent, Choking	117.17	54.3	19.1	Liquid
Boron Trifluoride	BF <sub>3</sub>	100		1	1	Toxic	NA	Pungent	67.81	-147.8		Gas
Carbon Dioxide	CO <sub>2</sub>	50,000	30,000	5,000	NA	Asphyxiant	NA	None	44.01	-109.2	852.7	Gas
Carbon Monoxide	CO	1,500		35	NA	Flammable, Toxic	12.4-74.0	None	28.01	-312.7		Gas
Chlorine	Cl <sub>2</sub>	25	1	0.5	1	Corrosive, Toxic	NA	Pungent, Irritating	70.91	-29.3	99.7	Liquid
Diborane	B <sub>2</sub> H <sub>6</sub>	40		0.1	1.8-3.5	Pyrophoric, Toxic	0.8-98 <sup>c</sup>	Repulsive, Sickly Sweet	27.67	-134		
Dichlorosilane	SiH <sub>2</sub> Cl <sub>2</sub>	100	5			Flammable, Corrosive, Toxic	4.1-98.8	Pungent, Suffocating	101.01	46.8	23.7	Liquid
Disilane	Si <sub>2</sub> H <sub>6</sub>					Pyrophoric, Toxic		Repulsive, Choking	62.22	5.9	47.7	
Germane	GeH <sub>4</sub>			0.2		Toxic, Flammable		Pungent	76.62	-127		Gas
Halocarbon 14 (Tetrafluoromethane)	CF <sub>4</sub>			1,000 <sup>a</sup>		Asphyxiant	NA	Slightly Ether-Like	88	-198.4		Gas
Halocarbon 23 (Trifluoromethane)	CHF <sub>3</sub>			1,000 <sup>a</sup>		Asphyxiant	NA	Slightly Ether-Like	70.01	-115.6	649.7	Liquid
Halocarbon 32 (Difluoromethane)	CH <sub>2</sub> F <sub>2</sub>			1,000		Asphyxiant, Flammable		Slightly Ether-Like	52.02	-61	221.4	Liquid
Halocarbon 41 (Methyl Fluoride)	CH <sub>3</sub> F				NA	Flammable		None	34.03	-109.2	552.7	Liquid
Halocarbon 116 (Hexafluoroethane)	C <sub>2</sub> F <sub>6</sub>			1,000 <sup>a</sup>			NA	Slightly Ether-Like	138.01	-108.8		Liquid
Halocarbon 125 (Pentafluoroethane)	C <sub>2</sub> HF <sub>5</sub>			1,000	NA		NA	None	120.02	-54.4	181.1	Liquid
Halocarbon 134a (1,1,1,2 Tetrafluoroethane)	C <sub>2</sub> H <sub>2</sub> F <sub>4</sub>				NA		NA	None	102	-15.7	85.9	Liquid
Halocarbon 218 (Perfluoropropane)	C <sub>3</sub> F <sub>8</sub>						NA	Sweet	188.02	-34.1	114.7	Liquid
Halocarbon c318 (Octafluorocyclobutane)	C <sub>4</sub> F <sub>8</sub>				NA		NA	None	200.03	21.5	39.7	Liquid
Helium	He				NA	Asphyxiant	NA	None	4	-452.1		Gas
Hydrogen	H <sub>2</sub>				NA	Flammable	4.0-93.9	None	2.02	-423		Gas
Hydrogen Bromide	HBr	50		3	2	Corrosive, Toxic	NA	Irritating	80.91	-88.1	341.7	Liquid
Hydrogen Chloride	HCl	100		5		Corrosive, Toxic	NA	Pungent, Irritating	36.46	-121.1	619.7	Liquid
Hydrogen Fluoride	HF			3		Corrosive, Toxic	NA	Sharp, Irritating				
Methane	CH <sub>4</sub>					Flammable		Sweet, oil type	16.04	-259		
Neon	Ne				NA	Asphyxiant		None	20.18	-410.9		Gas
Nitric Oxide	NO					Toxic	NA	Slight	30.01	-241.2		Gas
Nitrogen	N <sub>2</sub>				NA	Asphyxiant	NA	None	28.01	-320.4		Gas
Nitrogen Trifluoride	NF <sub>3</sub>	2,000	15	10	>TLV?	Oxidizer, Toxic	NA	Mold-Like	71	-200		Gas
Nitrous Oxide	N <sub>2</sub> O			50		Oxidizer	NA	Slightly sweet	44.01	-127.4	759.7	Liquid
Oxygen	O <sub>2</sub>					Oxidizer	NA	None	32	-297.4		
Ozone	O <sub>3</sub>	10	0.3	0.1	0.008-0.04	Poisonous, Oxidizer	NA	Pungent				
Phosgene	COCl <sub>2</sub>	2		0.1		Poisonous		Moldy Hay, Irritating				
Phosphine	PH <sub>3</sub>	200	1	0.3	0.01-5	Pyrophoric, Poisonous	1.6-98 <sup>b</sup>	Decaying Fish	34	-125.9	499.7	
Phosphorus Pentafluoride	PF <sub>5</sub>					Corrosive	NA	Irritating				
Silane	SiH <sub>4</sub>			5		Flammable, Pyrophoric	~1-96 <sup>c</sup>	Repulsive, Choking	32.11	-168.7		Gas
Silicon Tetrachloride	SiCl <sub>4</sub>	100		5		Corrosive, Toxic	NA	Pungent, Suffocating	169.9	135.7	3.9	Liquid
Silicon Tetrafluoride	SiF <sub>4</sub>	20		3		Toxic	NA	Suffocating	104.08	-130.4		Gas
Sulfur Hexafluoride	SF <sub>6</sub>		1,250	1,000			NA	None	146.05	-82.7	320	Liquid
Trichlorosilane	SiHCl <sub>3</sub>					Flammable, Pyrophoric	6.9-86	Pungent, Suffocating				
Tungsten Hexafluoride	WF <sub>6</sub>	20		3		Corrosive	NA	None	297.84	62.96		
Xenon	Xe						NA	None	131.3	-162.6		Gas

<sup>a</sup> No formal ACGIH limit established. <sup>b</sup> Newer studies indicate that lower flammable limit may range from 1.2 to 1.8%. <sup>c</sup> Spontaneously combusts

This chart is for reference use only, see MSDS sheets for definitive data