



# Silane. SiH<sub>4</sub>

**Product information** Silane is a silicon precursor for many silicon-containing thin films.

**Characteristics** Pyrophoric. Colorless gas with repulsive odor. Forms white fumes at leakage.

## Physical data

<b>Molecular weight</b>	[g/mol]	32.117		
<b>Boiling point</b>	at 1.013 bar [°C]	-112.15	at 14.5 psi [°F]	-169.85
<b>Density</b>	at 1.013 bar, 15 °C [kg/m <sup>3</sup> ]	1.366	at 1 atm., 70 °F [lb/ft <sup>3</sup> ]	0.085
<b>Vapor pressure</b>	at 0 °C [bar]	-	at 32 °F [psi]	-
	at 20 °C [bar]	-	at 70 °F [psi]	-
<b>Flammability range in air (% volume)</b>		1 - 96 Pyrophoric		

## Shipping information

UN number	CAS number	EC number	DOT label	Hazard labels required
2203	7803-62-5	232-263-4	Extremely Flammable Gas	ADR Class 2, 2F DOT Class 2.1

## Product specification

Purity grade	Typical purity	Typical impurities									
		N <sub>2</sub>	O <sub>2</sub> +Ar	CO	CO <sub>2</sub>	H <sub>2</sub>	CH <sub>4</sub>	T-Cl	H <sub>2</sub> O	Al	K
5.0N	≥99.999 %	<1 ppm(v)	<1 ppm(v)	<0.5 ppm(v)	<0.5 ppm(v)	<50 ppm(v)	<0.1 ppm(v)	-	-	-	-
6.0N	≥99.9999 %	<1 ppm(v)	<1 ppm(v)	<0.1 ppm(v)	<0.1 ppm(v)	<20 ppm(v)	≤0.05 ppm(v)	<0.1 ppm(v)	0.5 ppm(v)	≤200 ppt(w)	≤500 ppt(w)
		Ca	Cr	Mn	Fe	Co	Mo	U	As	P	
5.0N	≥99.999 %	-	-	-	-	-	-	-	-	-	
6.0N	≥99.9999 %	≤500 ppt(w)	≤200 ppt(w)	≤100 ppt(w)	≤500 ppt(w)	≤100 ppt(w)	≤100 ppt(w)	≤10 ppt(w)	≤100 ppt(w)	≤100 ppt(a)	

## Packaging information

	Package options	Cylinder designation	Cylinder internal volume	Cylinder material	Cylinder diameter	Cylinder height to valve outlet	Cylinder tare weight	Fill contents	Pressure (psig) @ 70°	Valve outlet <sup>(2)</sup>	Valve material
GSC	ISO Tube Trailer (40' 8 Tube)	Tube Trailer	18,800L	Steel	24 in	60 in	18000 kg	5500 kg	1100	CGA 632	SS
	ISO Tube Trailer (20' 8 Tube)	Tube Trailer	9300L	Steel	24 in	60 in	9800 kg	2800 kg	1100	CGA 632	SS
	ISO Tube Trailer (20' 12 Tube)	Tube Trailer	13500L	Steel	24 in	60 in	14400 kg	4150 kg	1100	CGA 632	SS
	Y-Ton	470L	470L	Steel	24 in	18 in	745 kg	125 kg	1100	CGA 632	SS
China	Y-Ton	470L	470L	Steel	24 in	18 in	745 kg	120 kg	1100	CGA 632	SS
	Cylinder	47L	47L	Steel	9.3 in	53 in	60 kg	10 kg	1100	CGA 632	SS

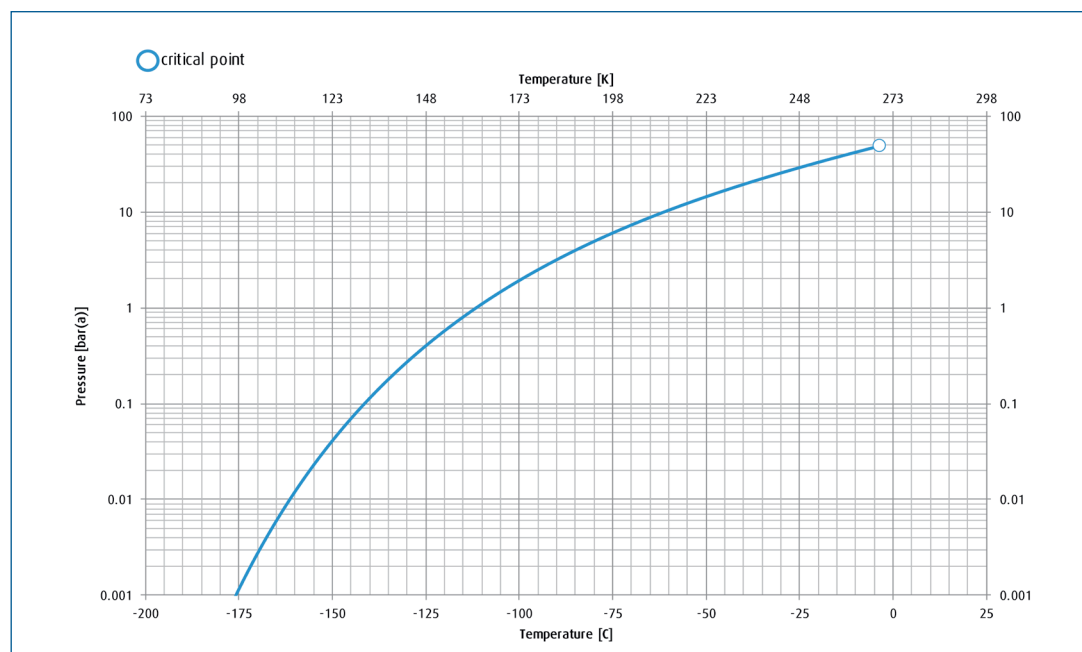
→ Silane. Product datasheet.

## Packaging information

Package options	Cylinder designation	Cylinder internal volume	Cylinder material	Cylinder diameter	Cylinder height to valve outlet	Cylinder tare weight	Fill contents	Pressure (psig) @ 70°	Valve outlet <sup>(2)</sup>	Valve material	
US	<b>Ton Container</b>	920	446L	Steel	24 in	18 in	1100 lb	220 lb	1100	CGA 632	SS
	<b>Cylinder</b>	302	46L	Aluminum	9 in	52 in	98 lb	26.4 lb	1100	CGA 632	SS
	<b>Cylinder</b>	152		Aluminum	8 in	49 in	50 lb	16.5 lb	1100	CGA 632	SS
	<b>Cylinder</b>	32	6L	Aluminum	8 in	49.5 in	49.5 lb	3.3 lb	1100	CGA 632	SS
	<b>Cylinder</b>	304	50L	Steel	9.3 in	60.2 in	140 lb	33 lb	1100	CGA 632	SS
	<b>Cylinder</b>	204	44L	Steel	9 in	52 in	133 lb	22 lb	1100	CGA 632	SS
EU	<b>Multi-Container Package</b>	12x50	600L	Steel	237 mm	1600 mm	1100 kg	168 kg	1100	CGA 632/ DIN 1	SS
	<b>Cylinder</b>	50L	50L	Steel	237 mm	1530 mm	63 kg	14 kg	1100	CGA 632/ DIN 1	SS
	<b>Cylinder</b>	10L	10L	Steel	140 mm	880 mm	12 kg	1 kg	1100	DIN 1	SS
	<b>Cylinder</b>	2L	2L	Steel	104 mm	370 mm	6 kg	0.2 kg	1100	DIN 1	SS

Please inquire about other package size availability

## Vapor pressure curve



## Additional information

The information, recommendations, and data contained in this publication are intended to give basic guidance for safe handling and use of gases. For more information, please refer to Safety Data Sheets. You can locate these through the [Linde Safety Data Sheet Search](#). It is essential for the safe use of gases that personnel are properly trained and are fully aware of the possible hazards. Further information and advice on any matter relating to the safe handling or use of these products may be obtained from the nearest Linde office.

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