

THE LINDE GROUP

Linde

Dichlorosilane (DCS). SiH₂Cl₂

Product information Dichlorosilane is a silicon precursor for epitaxial silicon, silicon germanium, silicon nitride, silicon oxide, silicon carbide and metal silicide thin films.

Characteristics Flammable. Liquefied gas with pungent odor. Highly corrosive in humid conditions. Gas density is heavier than air.

Physical data	Molecular weight	[g/mol]	101.01			
	Boiling point	at 1.013 bar [°C]	8.3	at 14.5 psi [°F]	46.96	
	Density	at 1.013 bar, 15 °C [kg/m³]	4.426	at 1 atm., 70 °F [lb/ft³]		
	Vapor pressure	at 0 °C [bar]	0.73	at 32 °F [psi]	10.59	
			1.52	at 70 °F [psi]	22.9	
	Flammability range in	air (% volume)	4.1 ~ 98.8			

Product specification	Purity grade	Typical purity	Typical impurities					
			SiH ₃ Cl	Acceptor (B+Al)	Donor (P+As)	Other Chlorosilane	Resitivity	
	2.0N	≥99%	2500 ppm	0.1 ppb	0.3 ppb	<1 %	> 400 Ω/cm	

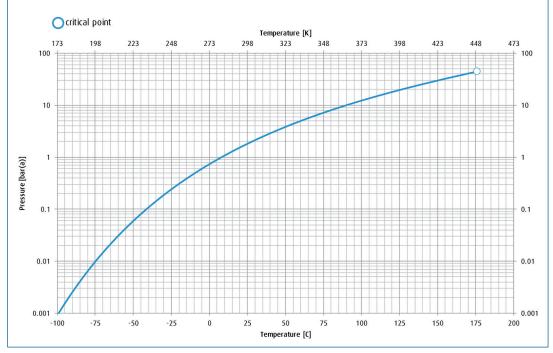
Shipping information	UN number	CAS number	EC number	DOT label	Hazard labels required
	2189	4109-96-0	223-888-3	Poison Gas, Corrosive, Flammable	ADR Class 2, 2TFC DOT Class 2.3

→ Dichlorosilane. Product datasheet.

Packaging information	Package options	Cylinder designa- tion	Cylinder internal volume	Cylinder material	Cylinder diameter	Cylinder height to valve outlet	Cylinder tare weight	Fill contents	Pressure (psig) @ 70°	Valve outlet ⁽²⁾	Valve material
US	Cylinder	204	44L	Steel	9.8 in	53 in	135 lb	90 lb	9	CGA 678/ CGA 636	SS
	Cylinder	84	16L	Steel	7 in	32 in	63 lb	30 lb	9	CGA 678/ CGA 636	SS
	Cylinder	34	8L	Steel	8.75 in	19.5 in	28 lb	10 lb	9	CGA 678/ CGA 636	SS
EU	Cylinder	50L	50L	Steel	237 mm	1530 mm	63 kg	45 kg	9	DIN5	SS
	Cylinder	47L	47L	Stainless Steel	230 mm	1320 mm	60 kg	42 kg	9	DIN5	SS
	Cylinder	10L	10L	Steel/ Stainless Steel	140 mm	880 mm	24 kg	9 kg	9	DIN5	SS
	Cylinder	2L	2L	Steel	104 mm	370 mm	6 kg	1.5 kg	9	DIN5	SS

Please inquire about other package size availability





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.

Please visit <u>www.linde.com/electronics</u> for Linde Electronics sales offices information.