

SILANE - (SiH₄)

Electronic - 4.0

DESCRIPTION : A colorless, spontaneously flammable, high-pressure gas.	APPLICATIONS : Polycrystalline deposition for interconnects or masking; growth of epitaxial silicon; chemical vapor deposition of silicon dioxide, silicon nitride, silicon carbide, and refractory metal silicides; implantation silicon sources; amorphous silicon devices such as photosensitive drums or solar cells.	ADR Item No. : 2, 1 F
		ADR Label 2.1 Flammable gas
		MSDS REFERENCE : 107
		CHEMICAL ABSTRACTS : 7803-62-5
		UN No. : 2203

PRODUCT		PRESSURE BARG	VALVE TYPE	VALVE OUTLET DIN 477 No	VALVE MATERIALS OF CONSTRUCTION
CYLINDER	CONTENTS				
50H	8 kg	62	Diaphragm	1	316L SS
50H	16 kg	105	Diaphragm	1	316L SS

PRODUCT CHARACTERISTICS	PRAXAIR SPECIFICATIONS	METHOD OF ANALYSIS (SEE KEY)
MINIMUM PURITY	99,99 %	
Argon (Ar)	≤ 15 ppm	S
Carbon Dioxide (CO ₂)	≤ 1 ppm	S
Carbon Monoxide (CO)	≤ 1 ppm	S
Chlorosilanes	≤ 1 ppm	Q
Helium (He)	≤ 30 ppm	A
Hydrogen (H ₂)	≤ 200 ppm	S
Methane (CH ₄)	≤ 1 ppm	S
Nitrogen (N ₂)	≤ 20 ppm	S
Oxygen (O ₂)	≤ 1 ppm	S
Water (H ₂ O)	≤ 3 ppm	E
Resistivity	>5000 Ohm.cm	Note#1

See back for explanation of notes and key

- ◆ Cylinder sizes, contents, valve types and valve connections other than those indicated above are available on request.
- ◆ All expressions for concentration are for gas phase, by volume unless otherwise noted.
- ◆ MSDS Ref.: More detailed Safety Information can be obtained from the Material Safety Data Sheet No. 107

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1. Measured by N-type

Key to Analytical Techniques

A	Gas Chromatograph with Thermal Conductivity Detector	D	Specific Oxygen Analyzer	K	Gas Chromatograph - Photo Ionization	P	Gas Chromatograph with Methanizer Carbonizer
B	Gas Chromatograph with Flame Ionization Detector	E	Specific Water Analyzer	L	Gas Chromatograph - Flame Photometric	Q	Gas Chromatograph with Electrolytic Conductivity
C	Gas Chromatograph with Ultrasonic Detector	F	Total Hydrocarbon Analyzer	M	Mass Spectrometry	R	Gas Chromatograph with Reduction Gas Analyzer
		G	Infrared	N	Wet Chemical	S	Gaschromatograph with High Frequency Discharge Detector
		H	Proprietary	O	Gas Chromatograph with Discharge Ionization Detector		
		I	Gas Chromatograph with Helium Ionization Detector				
		J	Flame Ionization with Methanizer				