

Silane



Grade	ULSI 6N*	ULSI Plus 6N*		
Purity, %	99.9999	99.9999		
Oxygen + Argon	≤0.06 ppmv	≤0.06 ppmv	Metals	
Nitrogen	≤0.5 ppmv	≤0.5 ppmv	C	≤0.1 ppma
Carbon Dioxide	≤0.05 ppmv	≤0.05 ppmv	Fe	≤0.4 ppba
Carbon Monoxide	≤0.08 ppmv	≤0.08 ppmv	Cr	≤0.01 ppba
Hydrogen	≤20.0 ppmv	≤20.0 ppmv	Ni	≤0.2 ppba
Water	≤0.5 ppmv	≤0.5 ppmv	Cu	≤0.02 ppba
Helium	≤1.0 ppmv	≤1.0 ppmv	Zn	≤0.03 ppba
Methane	≤0.04 ppmv	≤0.04 ppmv	P	≤20 ppta
THC (Sum of C ₂ – C ₄)	≤0.1 ppmv	≤0.1 ppmv	B	≤20 ppta
Total Chlorosilanes	≤0.1 ppmv	≤0.1 ppmv	Al	≤5 ppta
Disilane	≤0.5 ppmv	≤0.5 ppmv	As	≤5 ppta
Disiloxane	≤0.05 ppmv	≤0.05 ppmv	Ga	≤5 ppta
Resistivity, N-type (ohm-cm)	>10,000	>10,000	Sb	≤5 ppta
			In	≤5 ppta
			Total Oxygenated Compounds: ≤0.2 ppma	

* Excluding Hydrogen

- A lot analysis is provided for each order. – Individual analysis is also available upon request.
- Pneumatic valves, JIS connections available upon request.

CYLINDER	Internal Volume	Liters	43.8	43.8	43.8	29.5
	Cylinder Sizes >>		QB/QF	QB/QF	QF	QH
	Content	kg	12	10	5	5
		lbs	26.4	22	11	11

SHIP	DOT Shipping Name	Silane	UN Number	UN 2203	Shipped as
	DOT Classification	2.1 (Flammable Gas)	ECCN #	EAR99	Compressed Gas
	DOT Label	FLAMMABLE GAS	Harmonized #	2850.00.0000	Gas

TECHNICAL DATA	Cylinder Pressure @NTP	275 -1,250 psig 20.4 – 85.4 atm	Critical Temperature	-3.4°C	25.8°F
	Specific Volume @NTP	0.755 m ³ /kg 12.1 ft ³ /lb	Critical Pressure	49.38 atm	702.5 psia
	CAS No	7803-62-5	RFO Data @ 1,250 psig	Size, mm	0.254 0.3556 0.508 0.762 1.016
	CGA/DISS/JIS	350/632/W22-14L		Size, inches	0.010 0.014 0.020 0.030 0.040
	Molecular Weight	32.12		Flow, sccm	47585 90844 187455 418169 720981
	TLV	0.5 ppm		Flow, scf/h	101 192 397 886 1528

NTP = 21°C or 70°F and 101.3 kPa or 1 atm

Cylinder	Treatment	Nominal Diameter (OD)xHeight*		Material of Construction	
		cm	Inches	Cylinder	Valve
QB	ULTRA-LINE II®	23x130/134/143	9x51/52.5/56	CS	SS
QF	ULTRA-LINE®	23x130/134/143	9x51/52.5/56	CS	SS
QH	ULTRA-LINE®	20x122/126/135	8x48/49.5/53	Aluminum	SS

*Height is reported as the distance from the bottom of the cylinder to the cylinder neck/ center of the valve outlet/ top of the handwheel
CS: Carbon Steel SS: Stainless Steel



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