

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
	DOT Label	FLAMMABLE GAS	Harmonized #	2850.00.0000	Gas

TECHNICAL DATA	Cylinder Pressure	275 -1,250 psig	Critical Temperature		-3.4°C	25.8°F			
	@NTP	20.4 – 85.4 atm	Critical Pressure		49.38 atm	702.5 psia			
	Specific Volume	0.755 m ³ /kg	RFO Data	Size, mm	0.254	0.3556	0.508	0.762	1.016
	@NTP	12.1 ft ³ /lb		Size, inches	0.010	0.014	0.020	0.030	0.040
	CAS No	7803-62-5		Flow, sccm	47585	90844	187455	418169	720981
	CGA/DISS/JIS	350/632/W22-14L		Flow, scf/h	101	192	397	886	1528
	Molecular Weight	32.12	NTP = 21°C or 70°F and 101.3 kPa or 1 atm						
TLV	0.5 ppm								

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

⚠ WARNING: This product can expose you to chemicals including Carbon Monoxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

www.mathesongas.com



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