

# Disilane



Grade	Semicon 3N	ULSI 4N8
Purity, %	99.9	99.998
Oxygen + Argon		≤1 ppmv
Nitrogen		≤2 ppmv
Carbon Dioxide	≤1 ppmv	≤1 ppmv
Methane	≤1 ppmv	≤1 ppmv
Water	≤1 ppmv	≤1 ppmv
Air	≤5 ppmv	
Chlorosilanes		≤0.2 ppmv
Higher Silanes*		≤50 ppmv
Siloxanes		≤5 ppmv
Silane	≤1000 ppmv	≤1000 ppmv*
Resistivity, N-type		>1000 ohm-cm

\*Not included in over-all purity analysis.

- 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	17.1	7.3
	<b>Cylinder Sizes &gt;&gt;</b>		<b>QF</b>	<b>GF</b>	<b>UF</b>
	Content	kg	5	3	2
		lbs	11	6.6	4.4
	Change Point**	lbs	0.9	0.3	0.1

\*\*Recommended Cylinder Change Point at NTP, based on Phase Break, or the amount of product left in the cylinder when the liquid phase has completely evaporated and only gaseous product is left (estimate based on ideal gas behavior).

SHIP	DOT Shipping Name	Compressed Gas Flammable, NOS (Disilane)	UN Number	UN 1954
	DOT Classification	2.1 (Flammable Gas)	ECCN #	EAR99
	DOT Label	FLAMMABLE GAS	Shipped as	Liquefied Gas

TECHNICAL DATA	Cylinder Pressure	33 psig
	@NTP	3.35 atm
	Specific Volume	0.35 m <sup>3</sup> /kg
	@NTP	5.6 ft <sup>3</sup> /lb
	CAS No	1590-87-0
	CGA/DISS/JIS	350/632/W22-14L
Molecular Weight	62.22 g/mol	

Critical Temperature	159°C	317.9°F
Critical Pressure	52.3 atm	744 psia

RFO Data	Size, mm	0.254	0.3556	0.508	0.762	1.016
	Size, inches	0.010	0.014	0.020	0.030	0.040
	Flow, sccm	1412	2696	5564	12411	21399
	Flow, scf/h	3.0	5.7	12	26	45

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
QF	ULTRA-LINE®	23x130/134/143	9x51/52.5/56	CS	SS
GF	ULTRA-LINE®	23x66/70/79	9x26/27.5/31	CS	SS
UF	ULTRA-LINE®	15x51/55/64	6x19/20.5/24	CS	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

