Dichlorosilane

SiH_2Cl_2

Grade	Semicon 2N	ULSI Plus 3N			
Purity, %	99.0(w)	99.9(w)**			
Oxygen + Argon		≤1.0 ppmv			
Nitrogen		≤1.0 ppmv			
Carbon Dioxide		≤1.0 ppmv			
Carbon Monoxide		≤1.0 ppmv			
Methane		≤1.0 ppmv			
Hydrocarbons (C_2-C_4)		≤1.0 ppmv			
Hydrogen Chloride		≤500 ppmw			
Monochlorosilane	≤0.3% w	≤250 ppmw			
Other Chlorosilanes	≤1% w				
Trichlorosilane		≤500 ppmw			
Silicon Tetrachloride		≤200 ppmw			
Resistivity, N-type, ohm-cm	> 200	> 400			
Individual Metals – Al*	≤1.0 ppbw	≤50 ppta			
As*	≤0.2 ppbw	≤50 ppta			
B*	≤0.1 ppbw	≤300 ppta			
P*	≤0.3 ppbw	≤300 ppta			
C*	≤1,000 ppbw	≤300 ppba			
Fe*	≤50 ppbw	≤2 ppbw			
Additional Metals:		Ga*	≤10 ppta	Mn	≤0.2 ppbw
		Sb*	≤10 ppta	Mo	≤0.2 ppbw
		In*	≤10 ppta	Ni	≤0.2 ppbw
		Cr	≤0.2 ppbw	Na	≤0.2 ppbw
		Cu	≤0.2 ppbw	Zn	≤0.2 ppbw
				O*	≤200 ppba

*Total deposited metals
**Total Purity excluding HCl

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

CYLINDER

Internal Volume	Liters	43.8
Cylinder Sizes >>		**QF**
Content	kg	43.1
	lbs	93
Change Point***	lbs	0.7

***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

UN Number	UN 2189
DOT Shipping Name	Dichlorosilane
DOT Classification	2.3 (Poison Gas)
DOT Label	POISON GAS, FLAMMABLE GAS
ECCN #	EAR99
Harmonized #	2827.39.9050

TECHNICAL DATA

Cylinder Pressure @NTP	8.6 psig
	1.7 atm
Specific Volume @NTP	0.24 m^3/kg
	3.83 ft^3/lb
CAS No	4109-96-0
CGA/DISS/JIS	678/636/W22-14L
Molecular Weight	101.01 g/mol

Vapor Pressure	Temp, °C	0.0	15.5	21.0	32.2	43.3
	Press, psig	-4.1	4.3	8.6	18.1	30.8
	Temp, °F	32	60	70	90	110
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	553	1056	2178	4860	8379
	Flow, scf/h	1.2	2.2	4.6	10	18

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

*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.

MATHESON
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