

Deuterium

D₂

Grade	Semicon 4N5	ULSI 5N
Purity, %	99.995	99.999
Enrichment, %	99.5	99.8
Oxygen	≤ 1.0 ppmv	≤1.0 ppmv
Nitrogen	≤5.0 ppmv	≤1.0 ppmv
Carbon Dioxide	≤2.0 ppmv	≤1.0 ppmv
Carbon Monoxide	≤1.0 ppmv	≤1.0 ppmv
THC	≤ 1.0 ppmv	≤1.0 ppmv
Water + D ₂ O	≤5.0 ppmv	≤1.0 ppmv
Hydrogen*	≤150 ppmv	≤100 ppmv
Hydrogen Deuteride*	≤5,000 ppmv	≤3,000 ppmv

*Not included in over-all purity analysis

- 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 >>		QA/QF
	Content	Liters	6,000
		ft ³	212
	Cylinder Pressure**	psig	2,200
		atm	155.7

** @ NTP

SHIP	DOT Shipping Name	Deuterium Compressed	UN Number	UN 1957	Shipped as
	DOT Classification	2.1 (Flammable Gas)	ECCN #	0C004	Compressed Gas
	DOT Label	FLAMMABLE GAS	Harmonized #	2845.90.0000	

TECHNICAL DATA	Specific Volume	5.99 m ³ /kg
	@NTP	95.9 ft ³ /lb
	CAS No	7782-39-0
	CGA/DISS/JIS	350/724/W22-14L
	Molecular Weight	4.03 g/mol

Critical Temperature	-234.8°C	-390.6°F
Critical Pressure	16.9 atm	241.3 psia

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
QA	ULTRA-LINE®	23x130/134/143	9x51/52.5/56	CS	Brass
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

