

Nitrogen



Grade	Semicon 5N	ULSI 6N
Purity, %	99.999	99.9999
Oxygen	≤3.0 ppmv	≤200 ppbv
Carbon Dioxide	≤1.0 ppmv	≤100 ppbv
Carbon Monoxide	≤1.0 ppmv	≤200 ppbv
Methane	≤1.0 ppmv	≤100 ppbv
Water	≤3.0 ppmv	≤500 ppbv

- 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	49.0	43.8	2.3
	Cylinder Sizes >>		QK	QF/QA/QB	JF/JB
	Content	Liters	8,500	7,220	310
		ft ³	300	255	11
Cylinder Pressure*	psig	2,640	2,490	2,000	
	atm	186.6	176.1	141.6	

* @ NTP

SHIP	DOT Shipping Name	Nitrogen Compressed	UN Number	UN 1066	Shipped as
	DOT Classification	2.2 (Non-Flammable Gas)	ECCN #	EAR99	Compressed Gas
	DOT Label	NON-FLAMMABLE GAS			

TECHNICAL DATA	Specific Volume	0.86 m ³ /kg
	@NTP	13.8 ft ³ /lb
	CAS No	7727-37-9
	CGA/DISS/JIS	580/718/W22-14R
	Molecular Weight	28.01 g/mol

Critical Temperature	-122.4°C	-188.4°F
Critical Pressure	50 atm	711.5 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
QK	ULTRA-LINE®	23.5x140/144/153	9.25x55/56.5/60	CS	SS
QF	ULTRA-LINE®	23x130/134/143	9x51/52.5/56	CS	SS
QA	ULTRA-LINE II®	23x130/134/143	9x51/52.5/56	CS	Brass
QB	ULTRA-LINE II®	23x130/134/143	9x51/52.5/56	CS	SS
JF	ULTRA-LINE®	10x33/37/46	4x13/14.5/18	CS	SS
JB	ULTRA-LINE II®	10x33/37/46	4x13/14.5/18	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



MATHESON

ask...The Gas Professionals™