

# Halocarbon 23 (Trifluoromethane)



Grade	Semicon 4N5	ULSI 5N
Purity, %	99.995	99.999
Oxygen + Nitrogen	≤50 ppmv	
Oxygen + Nitrogen + Carbon Monoxide		≤20 ppmv
Carbon Dioxide		≤10 ppmv
Water	≤20 ppmv	≤5 ppmv
Other Organics		≤10 ppmv
Acidity as HCl	≤0.1 ppmw	≤0.1 ppmw

- 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
	<b>Cylinder Sizes &gt;&gt;</b>		<b>QF/QA/QB</b>
	Content	lbs	70
		kg	31.82
	Change Point*	lbs	28.2

\*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	Trifluoromethane	UN Number	UN 1984	Shipped as
	DOT Classification	2.2 (Non-Flammable Gas)	ECCN #	EAR99	Liquefied
	DOT Label	NON-FLAMMABLE GAS	Harmonized #	2903.30.2010	Gas

TECHNICAL DATA	Cylinder Pressure	610 psig
	@NTP	45.7 atm
	Specific Volume	0.343 m <sup>3</sup> /kg
	@NTP	5.5 ft <sup>3</sup> /lb
	CAS No	75-46-7
	CGA/DISS/JIS	660/716/W22-14L
Molecular Weight	70 g/mol	

Vapor Pressure	Temp, °C	0.0	15.5	21.0	32.2	43.3
	Press, psig	347	529	610	802	1040
	Temp, °F	32	60	70	90	110

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
QA	ULTRA-LINE®	23x130/134/143	9x51/52.5/56	CS	Brass
QB	ULTRA-LINE II®	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](http://www.P65Warnings.ca.gov).

