

Trifluoromethane. CHF₃. Halocarbon-23. Fluoroform.

Product information

High selective dry plasma etch of silicon nitride or silicon oxide etching.

Characteristics

Colorless, liquefied gas with an ethereal odor. Poor warning properties at low concentrations. Asphyxiant in high concentrations. Gas density is heavier than air.

Physical data

Molecular weight	[g/mol]	70.014				
Boiling point at 1.013 bar [° C]		-82.16	at 14.5 psi [° F]	-115.87		
Density at 1.013 bar, 15° C [kg/m³]		2.986	at 1 atm., 70° F [lb/ft³]	0.182		
Vapor pressure	at 0° C [bar]	24.94	at 32° F [psi]	361.8		
	at 20° C [bar]	41.97	at 70° F [psi]	625.6		
Flammability range in	air (% volume)	Non-combustible				

Product specification

Purity grade	Typical purity	Typical impu	ırities [ppm]				
		CO ₂	Other Halocarbons	H ₂ 0	Acidity (HF)	THC (CH ₄)	Air
5.0N	≥99.999 %	<10	<10	<4	<0.4	<1	<20

Contact our team for higher grade or different specification products.

Shipping information

UN number	CAS number	EC number	DOT label	Hazard labels required		
1984	75-46-7	200-872-4	Non-flammable gas	ADR Class 2, 2A DOT Class 2.2		

→ Trifluoromethane. Product datasheet.

Packaging information

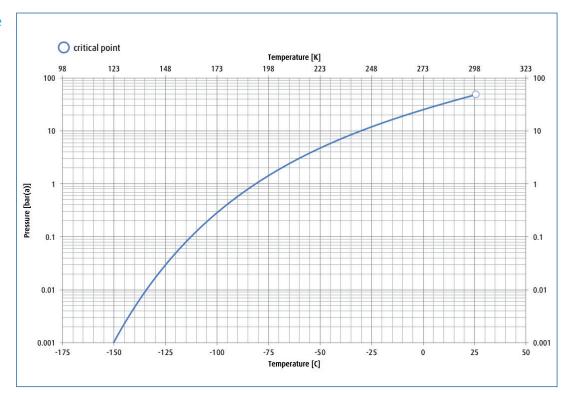
US Grade 5.0N VLSI

EU Grade 5.0N

China Grade 5.0N

Package options	Cylinder designation	Cylinder internal volume	Cylinder material	Cylinder diameter	Cylinder height to valve outlet	Cylinder tare weight	Fill contents	Pressure (psig) @ 70° F	Valve outlet	Valve material
Cylinder	302	46 L	Aluminum	9.8 in	53 in	98 lb	75 lb	635	CGA 716	SS
Cylinder	200	44 L	Steel	9 in	52 in	133 lb	70 lb	635	CGA 716	SS
Cylinder	152	29.5 L	Aluminum	8 in	49.5 in	49.5 lb	47 lb	635	CGA 716	SS
Cylinder	40 L	40 L	Aluminum	237 mm	1,275 mm	42 kg	30 kg	41.6	DIN6	SS
Other sizes available upon request										
Cylinder	47 L	47 L	Steel	237 mm	1,500 mm	65 kg	32 kg	41.8	CGA 716	SS
Cylinder	44 L	44 L	Steel	228 mm	1,320 mm	65 kg	32 kg	41.8	CGA 716	SS

Vapor pressure curve



Additional information

The information, recommendations, and data contained in this publication are intended to give basic guidance for safe handling and use of gases. For more information, please refer to Safety Data Sheets. You can locate these through the <u>Linde Safety Data Sheet Search</u>. It is essential for the safe use of gases that personnel are properly trained and are fully aware of the possible hazards. Further information and advice on any matter relating to the safe handling or use of these products may be obtained from the nearest Linde office.

Please visit <u>www.linde.com/electronics</u> for Linde Electronics sales offices information.