

ELECTRONIC GAS

HALOCARBON-218 (Perfluoropropane) C₃F₈

Perfluoropropane is a colorless, non-flammable, non-toxic gas with a faintly sweet odor. It has the highest ratio of fluorine to carbon and is used for plasma etching with excellent selectivity. It is shipped as liquefied gas under its own vapor pressure.

Container Information				
CYLINDER SIZE	CONTENTS		Pressure @ 21.1°C Valve Outlet	100 psig CGA-660 / DISS-716
	LB	KG		
044	66	30	DOT Shipping Description:	Perfluoropropane, 2.2, UN 2424
016	30	13.6	DOT Shipping Labels DOT Guide No.	Non-flammable Gas 12
010	11	5.0	CAS Registry No.	76-19-7

Specifications		
COMPONENT PERFLUOROPROPANE	ULSI 99.999% min	VLSI 99.99% min
Carbon Dioxide	< 0.5 ppm	< 5 ppm
Carbon Monoxide	< 0.5 ppm	< 5 ppm
Nitrogen	< 2 ppm	< 40 ppm
Other Halocarbons	< 5 ppm	< 20 ppm
Oxygen	< 1 ppm	< 10 ppm
Water	< 1 ppm	< 10 ppm

SHELF LIFE: 2 years

Physical Properties	
Molecular Weight	188.02
Flammability Limits in air	Non-flammable
Specific Gravity, Gas @ 70°F(21.1°C), 1 atm(Air=1)	6.68
Density, Gas @ 70°F(21.1°C), 1 atm	0.495lbs/ft ³ (7.95g/l)
Specific Volume, Gas @ 70°F(21.1°C), 1 atm	2.02ft ³ /lb (0.125l/g)
Melting Point @ 2 atm	-297.4°F (-183°C)
Boiling Point @ 1 atm	-34.1°F (-36.7°C)
Critical Temperature	161.4°F (71.9°C)
Critical Pressure	389 psia (26.8 bar)
Toxicity	Non-Toxic, asphyxiant only