

ELECTRONIC GAS

HALOCARBON-41 (Methyl Fluoride) CH₃F

Methyl fluoride is a colorless, flammable gas with an ether-like odor. It is used in plasma etching of silicon compound films. It is shipped as a liquefied gas under its own vapor pressure.

Container Information			
CYLINDER SIZE	CONTENTS		Pressure @ 21.1°C Valve Outlet
	LB	KG	
044	25	11.3	538 psig CGA-350 / DISS-716
016	6	2.7	DOT Shipping Description: Methyl Fluoride, 2.1, UN 2454 DOT Shipping Labels DOT Guide No. Flammable Gas 22
7X	57g		CAS Registry No. 593-53-3

Specifications		
COMPONENT METHYL FLUORIDE	VLSI 99.99% min	ELECTRONIC 99.9% min
Nitrogen	< 50 ppm	< 150 ppm
Oxygen	< 20 ppm	< 50 ppm
Tetrafluoromethane	< 10 ppm	< 10 ppm
Water	< 10 ppm	< 20 ppm
SHELF LIFE: 2 years		

Physical Properties	
Molecular Weight	34.03
Flammability Limits in air	Not determined
Specific Gravity, Gas @ 70°F(21.1°C), 1 atm(Air=1)	1.195
Density, Gas @ 70°F(21.1°C), 1 atm	0.088lbs/ft ³ (1.41g/l)
Specific Volume, Gas @ 70°F(21.1°C), 1 atm	11.36ft ³ /lb (0.709l/g)
Melting Point @ 2 atm	-223.2°F (-141.8°C)
Boiling Point @ 1 atm	-109.1°F (-78.4°C)
Critical Temperature	113°F (45°C)
Critical Pressure	852 psia (58.8 bar)
Toxicity	Non-Toxic, asphyxiant only