

# Difluoromethane $\text{CH}_2\text{F}_2$

Giga Class Grade: 99.999%



## Description

Difluoromethane, also known as Halocarbon 32, is used as a source of fluorine CF free radicals for process etch during RF plasma processing. It is flammable and not regarded as toxic under normal conditions.

Physical Constants	
Chemical formula	$\text{CH}_2\text{F}_2$
Molecular weight	52.024
Specific volume @ +70°F (+21.1°C)	7.435 ft <sup>3</sup> /lb, 0.464 m <sup>3</sup> /kg
Flammability range	14% to 31% in air
Critical pressure	845.57 psia, 58.3 bar
Critical temperature	+173.21°F, +78.45°C
Specific gravity @ 70°F, 1 atm (Air=1)	1.796

Maximum Impurities	
COMPONENT	CONCENTRATION (ppmv)
Carbon Dioxide	<0.5
Carbon Tetrafluoride	<0.5
Moisture	<0.5
Nitrogen	<5.0
Other Fluorocarbons	<3.0
Oxygen	<1.0
THC (as Methane)	<0.5

Cylinder Specifications*			Contents		Pressure	
Cylinder	Valve Outlet Options		Pounds	KG	PSIG	BAR
2	CGA 350	DISS 724	60	27.3	185	13.8

\*Additional cylinder sizes and/or valve outlets are available.

[www.spectragases.com](http://www.spectragases.com)

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