



High-Purity HFC-23

Trifluoromethane



Properties and Classification

Appearance: Colorless and odorless gas

UN Number: 2193

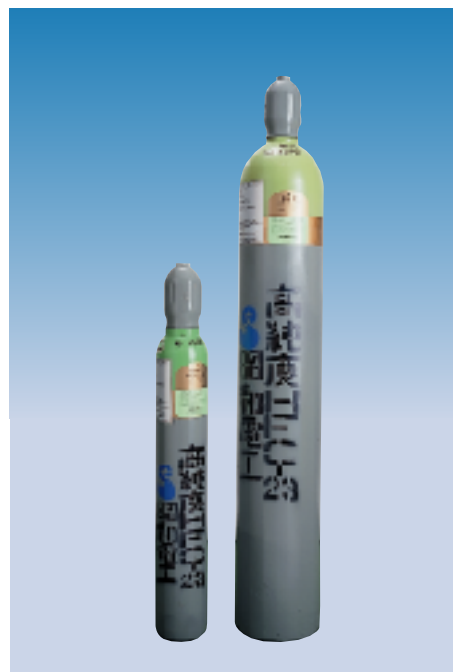
CAS Number: 75-46-7

Liquefied gas

* Refer to MSDS for detailed information on the properties and safety of the product.

Specification

Purity	vol%	Min. 99.999
Water	volppm	Max. 8
Acids as HCl	volppm	Max. 0.2
Other fluorocarbons	volppm	Max. 10
Air	volppm	Max. 20



Cylinder

Item		10L cylinder	47L cylinder
Size	Inside diameter	140mm	232mm
	Height (to the neck portion)	850mm	1370mm
	Height (with a protective cap) *	1000mm	1520mm
	Valve nozzle height (center) *	875mm	1380mm
Loading weight		8kg	35kg
Material		Manganese steel	

* Estimated values for when a standard valve is mounted on a standard cylinder.
The accuracy of these values is not guaranteed.

Valve

Nozzle size	22 mm X 14 right-hand threads
Material	BRASS

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CHF₃

Physical & Chemical Properties

Item	Unit	Data
Chemical formula		CHF ₃
Molecular weight		70.01
Boiling point	°C	-82.05
	°F	-115.6
Melting point	°C	-155
Liquid density (0° C, saturated liquid)	kg/L	1.029
Gas density (0° C, saturated liquid)	g/L	112.8
Specific gravity (air: 1)		2.417
Critical temperature	MPa	4.87
	kg/cm ²	49.7
Critical pressure	°C	25.65
Flammability		Not applicable
Toxicity		Not applicable
Latent heat of vaporization (0° C, 1013 MPa)	kJ/kg	143.4
Maximum permissible concentration (ACGIH)	ppm	—
Explosive limit (in air)		—

Temperature — Vapor Pressure Curve

