



Clean Gas FC-14

Clean Gas Tetrafluoromethane



Technical Data

Appearance: Colorless and odorless gas

UN Number: 1982

CAS Number: 75-73-0

Compressed gas

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

Specification

Purity	vol%	Min. 99.9997
O ₂ + Ar	volppm	Max. 2.0
N ₂	volppm	Max. 10
CH ₄	volppm	Max. 0.5
CO	volppm	Max. 0.5
CO ₂	volppm	Max. 0.7
H ₂ O	volppm	Max. 0.5
Acids as HF	volppm	Max. 0.1
SF ₆	volppm	Max. 0.2
CHF ₃	volppm	Max. 0.6
Other fluorocarbons	volppm	Max. 2.0
Particle	Not smaller than 0.1 micrometer	Max. 60/C.F.



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
Loading weight		5kg	30kg
Material		Manganese steel (Clean-S-treated)	

* 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	SUS316L

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CF₄

Physical & Chemical Properties

Item	Unit	Data
Chemical formula		CF ₄
Molecular weight		88.01
Boiling point		- 128.0
Melting point		- 184
Specific gravity (air: 1)		3.04
Liquid density	kg/L	1.633
Gas density (127.9° C, saturated liquid)	g/L	7.666
Critical temperature		- 45.55
Critical pressure	MPa	3.74
	kg/cm ²	38.1
Flammability		Not applicable
Toxicity		Not applicable
Latent heat of vaporization (0° C, 1013 MPa)	kJ/kg	135.9
Maximum permissible concentration (ACGIH)	ppm	—
Explosive limit (in air)		—

Temperature - Vapor Pressure Curve

