



High-Purity FC-C318

Octafluorocyclobutane



Properties and Classification

Appearance: Colorless and odorless gas

UN Number: 1976

CAS Number: 115-25-3

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. 10 |
| Acids as HF | volppm | Max. 1 |
| Other fluorocarbons | volppm | Max. 4 |
| N ₂ +O ₂ | 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 | | 5kg, 10kg | 30kg, 50kg |
| 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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Physical & Chemical Properties

| Item | Unit | Data |
|--|--------------------|----------------|
| Chemical formula | | C_4F_8 |
| Molecular weight | | 200.03 |
| Boiling point | °C | -5.75 |
| | °F | -21.5 |
| Melting point | °C | -41.4 |
| Liquid density (0° C, saturated liquid) | kg/L | 1.6 |
| Gas density (0° C, saturated liquid) | g/L | 12.03 |
| Specific gravity (air: 1) | | 6.9 |
| Critical temperature | °C | 115.22 |
| Critical pressure | MPa | 2.7 |
| | kg/cm ² | 27.5 |
| Flammability | | Not applicable |
| Toxicity | | Not applicable |
| Latent heat of vaporization (0° C, 1013 MPa) | kJ/kg | 246.7 |
| Maximum permissible concentration (ACGIH) | ppm | — |
| Explosive limit (in air, 35° C, 101.3 kPa) | | — |

Temperature — Vapor Pressure Curve

