



STP-FP-245 v. 005 -

PYROSTOP 6 IEC 60376

PERFORMANCES

PYROSTOP 6 IEC 60376 is a neutral dielectric agent, non toxic and non flammable. It is used in electricity for its very good electrical arc switching characteristics. It is filled in high voltage gas insulated systems (GIS), and also in particles accelerators.

It is also used as a cover gas in magnesium foundries and avoids the inflammation of melting magnesium.

PYROSTOP 6 IEC 60376 is a stable and inert gaz. It has no aggressive impact on the materials. Its dielectric strength is higher than the air, the nitrogen or the carbon dioxide.

CLIMALIFE PYROSTOP 6 IEC 60376 complies with IEC 60376 standard.

Due to its high greenhouse warming potential, it is necessary to avoid all the emissions of this gas in the atmosphere. CLIMALIFE offers you gas transfer or recovery units, as well as a complete offer in terms of recovery and recycling of the gaz. (Please refer to advises for use).

SPECIFICATIONS

| CHARACTERISTICS | IEC 60376:2005 | | IEC 60376:2018 | |
|---------------------------------|----------------|------------|----------------|------------|
| | LIMIT VALUES | UNIT | LIMIT VALUES | UNIT |
| SF ₆ | ≥ 99.7 | % weight | > 98.5 | % volume |
| O ₂ + N ₂ | ≤ 0.2 | % weight | < 1 | % volume |
| CF ₄ | ≤ 0.24 | % weight | < 0.4 | % volume |
| H ₂ O | ≤ 25 | ppm weight | < 200 | ppm volume |
| Acidity (as HF) | ≤ 1 | ppm weight | < 7 | ppm volume |
| Mineral oil | ≤ 10 | ppm weight | < 10 | ppm weight |
| Toxicity | non toxic | - | non toxic | - |

The limit values expressed in "% weight" are equivalent to those expressed in "% volume".



CHARACTERISTICS

| | | UNIT | VALUE |
|----------------------------|---|--------------------|----------------------|
| Chemical formula | | | SF ₆ |
| Chemical name | | | Sulfur hexafluoride |
| Molar mass | | g/mol | 146.05 |
| Sulfur content | | % | 21.95 |
| Fluorine content | | % | 78.05 |
| Sublimation temperature | at 1.013 bar | °C | - 63.8 |
| Solidification temperature | at 2.26 bar | °C | - 50.8 |
| Critical temperature | | °C | 45.55 |
| Critical density | | kg/dm ³ | 0.736 |
| Relative pressure | saturation vapor at 20°C saturation vapor at 40°C | bar bar | 21.17 33.09 |
| Density of liquid | -20°C 21°C 44°C | kg/dm ³ | 1.67 1.37 0.97 |
| Density of gas | under 1.013 bar at 21,1°C under 3.039 bar at 21,1°C under 10.13 bar at 21,1°C | kg/m ³ | 6.14 18.8 69.6 |

PACKAGING

| | Bottles | | | Container |
|--------------------------------|---------|-------|-------|-----------|
| Capacity (liter) | 8 | 23 | 41.5 | 600 |
| Tare (kg) | 9 | 16 | 25 | 400 |
| Load (kg) | 8 | 23 | 42 | 624 |
| Diameter (mm) | 267 | 267 | 267 | 650 |
| Height (mm) | 250 | 547 | 924 | 2150 |
| Outflow external diameter (mm) | 21.8 | 21.8 | 21.8 | 26.1 |
| Tap: left pitch (mm) | 1.814 | 1.814 | 1.814 | 1.814 |
| Test pressure (bar) | 70 | 70 | 70 | 70 |

- Packaging technical characteristics are available upon request to the commercial department.
- Feasibility of filling packaging of the customers if they are in conformity with the legislation.
- Contact us for any other specific packaging.



STORAGE & VALIDITY

Non compatible materials: Alkaline-ferrous metals.
Recommended packaging materials: Ordinary steel.

USE CONDITIONS

PYROSTOP 6 IEC 60376 is fully adapted to the high and middle voltage electrical applications, as well as high voltage cables, current transformers, particles accelerators, X rays generators, and high frequency equipment.

The handling of **PYROSTOP 6 IEC 60376** has to be made by skilled workers, trained to the risks of the handling of pressure gases. The workers have to wear individual protection equipment (leather gloves, goggles, individual breathing equipment).

PYROSTOP 6 IEC 60376 is a liquefied gas. It has to be stored and handled carefully in respect to the pending laws regarding these products.

PYROSTOP 6 IEC 60376 is normally used in gas phase. Therefore, there is no dip tube in the bottle, except if you require it.

PYROSTOP 6 IEC 60376 is a gas which greenhouse warming potential is high. Therefore, it is strongly recommended to use gas transfer units in order to reduce as much as possible the emission in the atmosphere. INVENTEC supplies the equipment which allow the filtering of the impurities and the drying of the gas through the hydrators.

When it is used in metallurgy foundries as a cover gas, PYROSTOP 6 IEC 60376 enables to avoid the risks of inflammation of the melting white metals (magnesium and its alloys) when they are in contact with the oxygen of the air. In this case, it is used with a carrier gas (nitrogen or CO₂) in a proportion of about 1 % of **PYROSTOP 6 IEC 60376**. This percentage is adapted case by case according to the nature of the metal which has to be protected, and to the type of the casting.

PYROSTOP 6 IEC 60376 can reach a high pressure. This pressure depends on the temperature.

The transfer of **PYROSTOP 6 IEC 60376** from a cylinder to an equipment can be done only if the pressure inside the cylinder is higher than the one of your equipment.

Please refer to our user's guide.

HEALTH SAFETY ENVIRONMENT (HSE)

Consult the Material Safety Datasheet (MSDS) on the website: www.quickfds.com

This data is based on information that the manufacturer believed to be reliable and offered in good faith. In no event will Climalife be responsible for special, incidental and consequential damages. The user is responsible, to the Administrative Authorities (Regulation of the listed establishments for the protection of the environment), for the conformity of his installation.