



STP-FP-243 v. 005 -

PYROSTOP N37

PERFORMANCES

PYROSTOP N37 is a neutral dielectric agent, non toxic and non flammable, which 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 N37** 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.

INVENTEC PYROSTOP N37 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 proposes 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	≥ 99,97	% weight	≥ 99.9	% volume
O ₂ + N ₂	≤ 0.01	% weight	≤ 0.05	% volume
CF ₄	≤ 0.02	% weight	≤ 0.04	% volume
H ₂ O	≤ 15	ppm weight	≤ 120	ppm volume
Acidity (as HF)	≤ 0.3	ppm weight	≤ 3	ppm volume
Hydrolyzable fluorides (as HF)	≤ 1	ppm weight	≤ 10	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	bar	21.17
	saturation vapor at 40°C	bar	33.09
Density of liquid	-20°C	kg/dm ³	1.67
	21°C		1.37
	44°C		0.97
Density of gas	under 1.013 bar at 21,1°C	kg/m ³	6.14
	under 3.039 bar at 21,1°C		18.8
	under 10.13 bar at 21,1°C		69.6

PACKAGING

	Bottles			Container
Capacity (liter)	8	23	41	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)	21.7	21.7	21.7	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 N37 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 N37** 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 N37 is a liquefied gas. It has to be stored and handled carefully in respect to the pending laws regarding these products.

PYROSTOP N37 is normally used in gas phase. Therefore, there is no dip tube in the bottle, except if you require it.

PYROSTOP N37 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 N37 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 N37**. 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 N37 can reach a high pressure. This pressure depends on the temperature.

The transfer of **PYROSTOP N37** 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.