



climalife®

STP-FP-299 v. 002 - 02/11/2021

FK-5-1-12



The **FK-5-1-12** is UL Recognized (EX16326) as a Clean Agent for Fire Extinguishers and Extinguishing System Units.

PERFORMANCES

The FK-5-1-12 is a fluorinated ketone which meets with the F-Gas regulations with a low GWP (less than 1). Therefore, it is an ideal choice for its buyers and for the planet.

It is efficient in the most sensitive environments, such as data centers, banks, hospitals, museums etc... where valuable goods could be damaged by water extinguisher.

FK-5-1-12 leaves no residue on equipment and has a high dielectric strength. Faced with the gradual reduction of HFCs on the market, this extinguishing agent succeeds and perfectly replaces HFC 227ea, significantly reducing its impact on the global warming.

The FK-5-1-12 is available in 217L drum and 1000L IBC.

The FK-5-1-12 is accompanied by our following Engineering & Services offer:

- Tailor-made regeneration of used extinguishing agents
- Dismantling of installations (emptying, disconnection of cylinders from the network, waste treatment, etc.)
- Emptying, recovery and treatment of used heat transfer fluids
- Maintenance and periodic inspection of pressurized packaging
- Packaging / Logistics.

SPECIFICATIONS

Standard Characteristics	Limit values
Appearance	Clear
Suspended matter or sediment	None
Purity	≥ 99.9 % weight
Moisture content	≤ 10 ppm weight
Acidity (HCl)	≤ 3 ppm weight
Non-volatile residue	≤ 100 ppm weight



CHARACTERISTICS

		Units	Values
Chemical formula			C₆F₁₂O
Chemical name			1,1,1,2,2,4,5,5,5- Nonfluoro-4-(Trifluoromethyl)-3-Pentanone
Molecular weight		g/mol	316
Boiling point	at 1.013 bar	°C	49.2
Liquid density	at 20°C at 50°C	kg/dm ³ kg/dm ³	1.61 1.51
Absolute pressure	saturation vapor at 20°C saturation vapor at 50°C	bar bar	0.3 1.0
Critical temperature		°C	168.7
Critical pressure		bar	18.6
Water solubility	in FK-5-1-12 at 25°C	% weight	< 0.001
Lower Flammability limit Upper Flammability limit	in the air at 20°C below 1.013 bar	% volume	non-flammable
Auto-ignition temperature		°C	none

PACKAGING

	Drum	IBC
Capacity (liter)	217	1000
Tare (kg)	22	From 40 to 60
Load (kg)	250	1100
Diameter (mm)	585	1000/1200
Height (mm)	880	1170
Opening 1 (mm)	2"	150
Opening 2 (mm)	¾"	50

- 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 AND SHELF LIFE

Precautions for handling and storage:

French plants are controlled by the regulation of listed Establishments and have to comply with it (or with the local legislation).

- All packaging will be stored in a dry, well ventilated, easily accessible place, sheltered from sunlight and bad weather, away from any ignition source.
- It is recommended to store all packaging either in a specific place or isolated and sheltered by a fence.
- All packaging and piping will be grounded to discharge static electricity.
- Leak detectors, put at ground level, will be connected to an audible alarm, which will trigger in the event of leaks.
- The whole equipment will be tested with an appropriate leak detector before use.

Climalife can study the set up and assembling of your storage tanks, piping, and pumps, according to the prevailing regulations.

Shelf life: unlimited (if appropriate storage conditions).



CONDITIONS OF USE

Please refer to the Material Safety Data Sheet (MSDS) before using the product.

Workers handling the product should be trained about risks and preventive measures.

The product is compatible with:

COMPATIBILITY
Plastics: <ul style="list-style-type: none">▪ Polyethylene
Elastomers: <ul style="list-style-type: none">▪ Nitrile▪ Butyl rubber▪ Neoprene
Metals: <ul style="list-style-type: none">▪ Stainless steel▪ Ordinary steel

The information above is intended as a guide only. We assume no liability for its accuracy on its use. The user should make its own tests under its conditions in order to determine the suitability of any compound in a peculiar application.

Handle:

- **away from heat sources** (*flames or hot metallic surfaces*)
- **in cool and aired premises**

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.