

KEC FIRE

Super 227

Clean Fire Extinguishing Agent



Super 227 offers a combination of safety, clean, non-conductive and high extinguishing performance for special hazards fire protection, makes it a high-end brand for OEMs.

- Safe for occupied spaces
- Zero ozone depletion potential
- High efficiency
- Clean and no residue
- non-conductive and non-corrosive
- Minimum fire extinguishing concentration of class A 5.2% & class B 6.7%
- Low nozzle pressure

Effective Fire Suppression

It is highly effective in extinguishing Class A, B, and C fires, covering a wide range of fire hazards including combustible materials, flammable liquids, and electrical equipment. Its rapid flame knockdown and suppression capabilities make it a reliable choice for protecting valuable assets and critical infrastructure.

Clean Agent Properties

It is considered a clean agent, meaning it leaves no residue or water damage after discharge. This characteristic is particularly beneficial for protecting sensitive equipment, electronics, and archives in environments where water-based fire suppression methods are impractical or pose a risk of collateral damage.

Safe for Occupants

It is non-toxic and safe for occupied spaces, allowing for its use in areas where the presence of personnel is a consideration. Its non-conductive and non-corrosive properties also make it suitable for protecting valuable electronic and electrical equipment without causing damage or posing a safety risk to operators.

Rapid Discharge and Distribution

It is designed for rapid discharge and distribution within the protected space, ensuring efficient and thorough fire suppression.

Regulatory Compliance

It complies with industry standards and regulatory requirements for fire suppression agents. Its performance and safety characteristics are rigorously tested and certified, ensuring its reliability and effectiveness in real-world fire scenarios.

Specification

Super 227 UL and FM approved has the same minimum extinguishing concentration of class A 5.2%, class B 6.7% and low nozzle pressure as Chemours' FM200, making it a REAL drop-in replacement.

Specification	Super 227
Appearance	Colorless liquid
Purity	≥99.9%
Moisture	≤10ppm
Acidity	≤3ppm
Non-volatile Residue	≤100ppm
Suspended matter or sediment	None visible

Physical Properties

Properties	Super 227
Chemical Formula	CF ₃ CHFCF ₃
CAS Number	431-89-0
Molecular Weight	170
Boiling Point at 1 atm	-16.4°C
Freezing Point	-131°C
Critical Temperature	101.7°C
Critical Pressure	2,912kPa
Critical Volume	274cc/mole
Critical Density	621kg/m ³
Vapor Pressure at 20°C	3.90bar
Liquid Density at 20°C	1410kg/m ³
Saturated Vapor Density at 20°C	31.035kg/m ³
Specific Volume of Superheated Vapor at 1 atm and 20°C	0.1374m ³ /kg
Heat of Vaporization at boiling point	132.6kJ/kg
Specific Heat, Liquid at 25°C	1.184kJ/kg °C
Specific Heat, Vapor at constant pressure (1 atm) and 25°C	0.808kJ/kg °C
Thermal conductivity of liquid at 25°C	0.069
Liquid Viscosity at 20°C	0.184
Relative Dielectric Strength at 1 atm (N ₂ =1.0) and 25°C	2

Packaging

Super 227 is currently available in

- 450 kg (992 lb) cylinders
- 1,000 kg (2,205 lb) cylinder
- 18,000 kg (39,683 lb) ISO tanks

Transportation

Super 227 is classified to dangerous cargo class 2.2 and UN 3296, it can be transported via road and sea freight, air freight with restrictions. Details please refer to Super 227's SDS.