

KEC FIRE

Kectone 5112

Clean Fire Extinguishing Agent



Kectone 5112 offers a unique combination of safety, low environmental impact and extinguishing performance for special hazards fire protection, makes it a high-end brand for tier OEMs and creating value together.

- Large safe margin for occupied spaces
- Zero ozone depletion potential
- Very low global warming potential
- Clean and no residue
- Non-conductive and non-corrosive
- Minimum fire extinguishing concentration of class A 3.34% & class B 4.5%
- Low nozzle pressure

Advanced Fire Suppression

It is an advanced chemical component that enables it to rapidly extinguish fires of class A, B and C, including those fueled by flammable ordinary materials, liquids, gases, and electrical equipment etc. Its innovative properties make it highly effective in combating a wide range of fire hazards, providing reliable protection in diverse environments.

Rapid Flame Knockdown

It is optimized for rapid flame knockdown, quickly smothering fires to prevent their escalation and spread. This feature enhances the agent's effectiveness in controlling fire incidents, minimizing potential damage and protecting lives and property.

Non-Conductive and Non-Corrosive

It is non-conductive and non-corrosive, making it safe for use on energized electrical equipment. This unique characteristic allows for the safe suppression of electrical fires without posing additional risks to operators or causing damage to sensitive equipment.

User-Friendly Application

It is designed for ease of application, allowing for efficient deployment in emergency situations. Its user-friendly nature simplifies the firefighting process, enabling quick and effective response to fire incidents.

Regulatory Compliance

It meets stringent industry standards and regulatory requirements, ensuring its reliability and safety in various applications. It undergoes rigorous testing to validate its performance and adherence to quality and safety standards.

Specification

Kectone 5112 UL and FM approved has the same minimum extinguishing concentration of class A 3.34%, class B 4.5% and low nozzle pressure as 3M's NOVEC 1230, making it a REAL drop-in replacement.

Specification	Kectone 5112
Appearance	Colorless liquid
Purity	≥99.9%
Moisture	≤10ppm
Acidity	≤3ppm
Non-volatile Residue	≤100ppm
Suspended matter or sediment	None visible
Cis and trans kinetic dimer of HFP	≤1,000ppm
Thermodynamic dimer of HFP & its HF adduct	≤90ppm

Physical Properties

Properties	Kectone 5112
Chemical Formula	$\text{CF}_3\text{CF}_2\text{C}(\text{O})\text{CF}(\text{CF}_3)_2$
CAS Number	756-13-8
Molecular Weight	316.04
Boiling Point at 1 atm	49.2°C
Freezing Point	-108°C
Critical Temperature	168.66°C
Critical Pressure	1,865kPa
Critical Volume	494.5cc/mole
Critical Density	639.1 kg/m ³
Vapor Pressure at 20°C	0.326bar
Liquid Density at 20°C	1.616g/ml
Saturated Vapor Density at 20°C	4.3305kg/m ³
Specific Volume of Superheated Vapor at 1 atm and 20°C	0.0719m ³ /kg
Heat of Vaporization at boiling point	88.0kJ/kg
Specific Heat, Liquid at 25°C	1.103kJ/kg °C
Specific Heat, Vapor at constant pressure (1 atm) and 25°C	0.891kJ/kg °C
Thermal conductivity of liquid at 25°C	0.059
Liquid Viscosity at 20°C	0.524
Relative Dielectric Strength at 1 atm (N ₂ =1.0) and 25°C	2.3

Packaging

Kectone 5112 is currently available in

- 300 kg (661 lb) drums
- 1,300 kg (2,866 lb) IBC totes
- 20,000 kg (44,092 lb) ISO tanks

Transportation

Kectone 5112 is classified to common cargo, it can be transported via roads, railways, sea and air freight. Please refer to Kectone 5112's SDS for more details.