

## **Technical Data Sheet**

## **COVEN FP217100**

#### **ELECTRON FLUORIDE FLUID**

The COVEN FP217100 boasts a remarkable combination of low surface tension and impressive wettability, making it ideal for applications such as serving as a solvent in anti-fingerprint coatings for electronic display screens or as a wetting agent in cosmetics. Furthermore, its exceptional performance and broad compatibility with various materials allow it to be utilized as a liquid cooling medium and cleaning agent component in semiconductor manufacturing processes like semiconductor dry etching, wafer testing, and packaging testing.

#### **PRODUCT FEATURES**

- Characteristics: lacks color and scent, does not dissolve in water, exhibits strong thermal stability and exceptional properties, possesses low surface tension and high wettability.
- Benefits: eco-friendly and hygienic, offers effective insulation, does not harm delicate electronic devices or components, and can solubilize flux and oil to some extent.

Property	Value
Freezing point	-135 ℃
Specific Heat (25°C)	1.409 J•g-1•K <sup>-1</sup>
Surface Tension	13.72 mN·m-1
Dielectric Constant (MHz)	8.98
LC50 (4h)	> 20477 mg·m- <sup>3</sup>
ODP	0

#### **PHYSICAL PROPERTIES**

Property	Value
Appearance	Colorless
Odor	Slight ether odor
Liquid Density	1.51 g·mL-1
КВ	7.67
Boiling Point	59°C
Vapor Pressure (25°C)	31.97 kPa
Volume Resistivity	2.053×10 <sup>10</sup> <b>Ω·</b> mm
Flash Point	No
Latent heat of vaporization	114 kJ•kg⁻¹
Thermal Conductivity (25°C)	0.0644 W·m-1·K <sup>-1</sup>
Kinematic Viscosity (25°C)	0.5005 mm2·s-1
Dielectric Strength (2.5 mm)	≥28.1 kV
Dielectric Loss, MHz)	0.00024
GWP	320

#### MAIN APPLICATION

- Solvent for anti-fingerprint coating such as electronic display screen;
- · Cleaning agent for electronic products;
- Cosmetic wetting agent;
- Heat transfer cooling medium for semiconductor dry etching, wafer testing, packaging, etc.

#### **STORAGE AND TRANSPORTATION**

- CONVEN FP217100 should be stored in a clean, dry warehouse, protected from high temperature insolation, away from heat sources, away from acids, strong alkalis, oxidants, etc.
- CONVEN FP217100 is a colorless and transparent liquid. It is transported as a non-dangerous product. Avoiding violent vibration during transportation and avoiding upside-down when stacking.
- CONVEN FP217100 is volatile. Pay attention to the tightness of the product during storage and transportation.

The data contained in this bulletin is provided only as a guide for evaluation/consideration. These material characteristics are typical properties that are based on a limited number of samples tested in the laboratory. We cannot assume responsibility for results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any product or method. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide.



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#### **SAFETY AND PRECAUTION**

- The local regulations on normal protection and industrial hygiene related to chemical handling must be observed, and thermal decomposition products must not be inhaled. Avoiding skin contact with hot substances.
- 2. Do not eat, drink or smoke when using this product. Wash thoroughly after operation. Avoiding release to the environment. Avoid contact with oxidants (such as chlorine, chromic acid, etc.).
- 3. When using this product, you should follow the information and recommendations provided in our "Chemical Safety Data Sheet".
- When using this product, make sure the room is well ventilated.

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