

## **Technical Data Sheet**

# COVEN FP217500

#### Fluorine liquid

The COVEN FP217500 electronic fluorine solution boasts exceptional stability against heat and chemicals, along with a moderate level of solubility. It has a zero ozone depletion potential (ODP) and significantly lower global warming potential coefficient (GWP) compared to FCS and PFCS, thereby lessening its environmental impact.

### FEATURES

- This substance has low surface tension and evaporation potential, making it compatible with a wide range of materials.
- It has medium solubility and excellent electrical insulation properties.
- Offers exceptional thermal conductivity, stability, and chemical resistance.
- Its viscosity remains stable at low temperatures, and it dries without leaving water marks.
- The liquid can be distilled and reused multiple times to reduce costs.
- Environmentally friendly characteristics include being colorless, tasteless, non-toxic, with zero ozone depletion potential and a low global warming coefficient.
- It complies with environmental regulations and is safe for use due to its non-toxic nature and high allowable concentration levels over 8 hours without a flash point, ensuring a safe work environment.

### TYPICAL PROPERTIES

Properties	Range
Boiling point	130⁰С
Appearance	Transparent liquid
Odor	Ether odor
Color	Colorless
Melting point	-98ºC
Flash point	No flash point below 150°C
Density	1.626 g/ mL@ 25ºC)
Ozone depletion potential (ODP)	0
Global Warming Potential (GWP)	1 (CO2= 1; 100yrs)
Molecular weight	414
Surface Tension (dynes/cm)	16.8

Properties	Range
Viscosity (cSt)	0.8
Dielectric Strength	35 kV, 0.1" gap
Dielectric Constant	5.97
Volume Resistivity	2.2 x 10 <sup>9</sup> ohm-cm

#### **APPLICATION RANGE**

- Cleaning
- COVEN FP217500 electron fluorination liquid boiling point  $130^{\rm o}{\rm C}$  ,

It boasts high solubility and is effective for gas phase decontamination and wet cleaning. The COVEN FP217500 electron fluoridation solution features a low surface tension that allows it to infiltrate tiny crevices in precision electronics, ensuring a thorough cleaning.

This versatile solution can be used on its own or blended with other solvents, offering excellent compatibility with various metals, plastics, and rubber materials commonly found in general or electronics industries.

Particularly well-suited for semiconductor applications, automated test benches (ATE), and cryogenic control in-chip devices, this electronic fluorination solution is non-toxic, nonflammable, ozone layer-friendly (ODP value O), and more environmentally sustainable than PFC alternatives.

With its low viscosity and surface tension properties, the COVEN FP217500 electron fluoridation liquid exhibits exceptional wettability and fluidity.

### STORAGE AND TRANSPORTATION

- COVEN FP217500 should be stored in a clean and dry warehouse to prevent high temperature and sunlight, and away from heat sources, acids, strong alkalis, oxygenating agents, etc.
- COVEN FP217500 is a non-toxic, non-flammable, colorless transparent liquid. It is transported as non-dangerous goods. Avoid violent oscillation during transportation and avoid inversion when stacking.



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#### SAFETY AND PRECAUTIONS

- Normal protection and industrial hygiene regulations for chemical handling must be observed and thermal decomposition products must not be inhaled. Avoid skin contact with high-temperature materials.
- Do not eat, drink or smoke while using this product. Clean thoroughly after operation. Avoid release into the environment. Avoid contact with oxidizing agents (e.g. chlorine, chromic acid, etc.).
- When using this product, you should follow the information and recommendations provided in our chemical safety technical manual. Basic precautions for handling chemicals should also be in place.

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.

