

## COVEN 217300

### ELECTRONICS FLUORIDE FLUID

As science and technology advance, electronic devices are becoming increasingly integrated, making their cleanliness crucial for proper functionality. Historically, the electronics sector relied on CFCs for cleaning, but these substances are being phased out due to their harmful effects on the ozone layer and contribution to global warming. Their temporary replacement, HCFCs, also poses problems because of its chlorine content. In light of these challenges, Gluditec has introduced a series of hydrofluoroether solvents. Distinct from HCFCs and other interim solutions, the COVEN 217300 solvent stands out as a sustainable choice thanks to its superior eco-friendly properties. This development addresses the demand for precision cleaning solutions that are effective, safe, and compliant with environmental standards.

### PRODUCT FEATURES

- Colorless and smell, poses no fire risk, does not dissolve in water, maintains stability under varying temperatures, possesses a high mass per unit volume, exhibits minimal resistance to flow due to low surface tension and kinematic viscosity, and is highly compatible with various materials.
- Harmless to the environment and does not contribute to ozone depletion. It can be utilized with existing cleaning machinery without the necessity for additional investment in equipment or significant alterations to the existing workflow.

### PHYSICAL PROPERTIES

Property	Value
Appearance	Colorless
Freezing point	-79.95°C
Flash Point	No
Boiling Point (1atm)	100.5°C
Liquid Density (25°C)	1.656 g·mL <sup>-1</sup>
Critical Temperature	205°C
Critical Pressure	No date
Latent heat of vaporization	97.99 kJ·kg <sup>-1</sup>
Vapor Pressure (20°C)	4.5 kPa
Dielectric Loss (1 MHz)	0.00037
Kinematic Viscosity (25°C)	0.7214 mm <sup>2</sup> ·s <sup>-1</sup>
Thermal Conductivity (25°C)	0.062 W·m <sup>-1</sup> ·K <sup>-1</sup>
Volume Resistivity (25°C)	≥1.221x10 <sup>11</sup> Ω·mm
Specific Heat	1.199 J·g <sup>-1</sup> ·K <sup>-1</sup>
Surface Tension (25°C)	15.01 mN·m <sup>-1</sup>
Coefficient of Volume Expansion (25 °C)	14.60×10 <sup>-6</sup>

Property	Value
Dielectric Strength (2.5 mm)	25.3 kV
ODP	0
Refractive Index	1.279
Dielectric Constant (1 MHz)	7.16
GWP	200

### MAIN APPLICATIONS

- Substances such as solvents, bleach, water-free liquids, substances for removing flux, and materials for conducting heat are utilized.
- They are employed in the purification of electronic devices and laser discs by eradicating particles and detritus.
- These agents are also used to cleanse optical systems, intricate components, precision electronic devices, and medical apparatus.
- Additionally, they serve as thinning agents for solvents and lubricants, as well as solvents designed for specific uses.

### STORAGE AND TRANSPORTATION

- Store COVEN 217300 in a spotless, moisture-free environment at temperatures under 40°C, shielded from direct sunlight and extreme heat, and distanced from sources of heat, acids, potent bases, oxidizers, and similar substances.
- This substance is a clear, colorless liquid that does not ignite or burn easily. It is classified for transport as a safe material.
- Ensure it is kept stable without harsh shaking during transit and never invert the containers during storage or movement.

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#### SAFETY AND PRECAUTIONS

- It is imperative to adhere to regional rules on standard safety and workplace cleanliness while managing chemicals. Breathing in the by-products of thermal breakdown should be avoided, as well as preventing direct contact of the skin with heated materials. Consumption of food, drinks, or smoking during product application is prohibited.
- Ensure thorough cleansing post-use. The release of this substance into the natural environment must be prevented. Interactions with oxidizing agents (like chlorine and chromic acid, for example) should be avoided;
- Ensure adherence to guidelines and advice presented in our Chemical Safety Data Sheet while handling this product. Basic safety measures for chemical handling must also be implemented; Ensure adequate ventilation in the area where this product is being used.

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.