

## COVEN FP403283

### Fluorinert Electronic Liquid

COVEN FP403283 is a transparent, colorless, heat-resistant liquid with full fluorination, perfect for various single-phase heat transfer tasks in the semiconductor manufacturing sector. Its temperature range from -50°C to 128°C makes it suitable for applications like etchers, ion implanters, and testers. Being a single compound, COVEN FP403283 maintains its composition integrity over time, preventing fluid loss and ensuring consistent transport performance.

#### FEATURE

- High insulation and good thermal stability
- Low surface tension
- Immiscible with water to avoid damaging the component  
Good material compatibility
- Low environmental impact, zero ODP
- Non-flammable

#### LIQUID PROPERTIES

Properties	COVEN FP403283
Boiling point	125°C
Appearance	Transparent liquid
Viscosity (25°C)	1.32 cst
Flash point	None
Liquid density, 25°C	1.83 g/ml
Surface tension	12.7mN/m
Saturated water content	50ppm
PH	7
ODP	0
Dielectric strength (2.5mm)	52 kV
Dielectric constant ( 1 MHz)	1.96 @1MHz
Volume resistivity	> 1.579 x 10 <sup>10</sup> Ohm-cm
Thermal conductivity 25°C	0,0834
Specific heat	1.431 J/g°C
Heat of evaporation	136 J/g°C
GWP	LOW

#### STORAGE AND TRANSPORTATION

It should be stored in a clean, dry, well-ventilated, room temperature below 40° C warehouse, away from light, to prevent high-temperature sun, away from heat sources, acids, alkalis, and oxidants, and can not be mixed with acid and alkali substances storage; Please seal it immediately after using as it is volatile.

COVEN FP403283 is colorless, transparent liquid, no flash point, non-flammable, according to non-dangerous goods transportation, should avoid violent oscillation during transportation, and avoid inversion when stacking.

#### CAUTION

Prior to utilizing this product, it is essential to review the most recent Material Safety Data Sheet, which can be obtained from sales or technical service representatives, as well as the precautionary guidelines on the product packaging. Adhere to all relevant precautions and instructions. The electronic fluorinated liquid COVEN FP403283 is both non-combustible and exceptionally resistant to heat-induced decomposition and hydrolysis while being stored or used. The Material Safety Data Sheet provides recommended handling procedures.

The electron fluorinated liquid COVEN FP403283 is environmentally friendly, as it has no ozone-depleting potential. However, it is important to note that this electronic fluorinated liquid, known as a perfluorocarbon (PFC), has a high global warming potential and can remain in the atmosphere for a long time. Therefore, it is crucial to handle it with care to prevent emissions. It is recommended that users of COVEN FP403283 take measures to minimize emissions by following proper protective practices and implementing procedures for recovery, recycling, or appropriate disposal.

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.