



## CF-130 Boiling Point of 130°C (266°F)

NuGenTec FluoSolv® CF-130 is a fluorinated heat-transfer fluid used in chillers for semiconductor tooling which require high dielectric fluids as well as a wide operating temperature range. FluoSolv® CF-130 is a direct replacement for Fluorinert™\* FC-3283 and Galden®\*\* HT-135 for applications requiring chiller fluids in the 0 to 125°C operating range.

### Key Properties and Benefits:

NuGenTec FluoSolv® CF-130 meets all the critical properties as a cooling media:

- Low viscosity for the complete operating range improves heat-transfer
- Low water solubility reduces arcing
- Excellent compatibility with metals, plastics and elastomers
- Low global warming potential (GWP=160)
- Non-toxic, non-hazardous and non-flammable

Available directly from NuGenTec, Emeryville, CA. We manufacture and stock at this location. All packaging is in HDPE containers:

55 gal. net wt. = 600 lbs.      5 gal. net wt. = 50 lbs.      1 gal. net wt. = 11 lbs.

## CF-200 Boiling Point of 200°C (392°F)

FluoSolv® CF-200 is a High Performance, inert fluid suitable for use in *HEAT TRANSFER* and *DIELECTRIC APPLICATIONS* requiring:

- High thermal stability
- Good dielectric properties
- Excellent chemical inertness
- Good compatibility with metals, plastics and elastomers
- No flash or fire point, no autoignition point
- Safety

Operating temperature range: from -20°C to 190°C.

\*Fluorinert™ is a Registered Trademark of 3M or one of its affiliated companies. \*\*Galden® is a Registered Trademark of Solvay S.A. or one of its affiliated companies.

## CF-130

PHYSICAL PROPERTIES	FLUOSOLV® CF-130
Normal Boiling Point	>145°C
Pour Point	-75°C
Kinematic Viscosity @ 25°C	<2.5 cSt
Density @ 25°C	1.71 - 1.79 g/cm <sup>3</sup>
Surface Tension @ 25°C	19 dyne/cm
Specific Heat @ 25°C	0.22 cal/g °C
Thermal Conductivity @ 25°C	0.069 W/m K
Dielectric Strength @ 25°C	40 kV
Solubility of Water	<30 ppm
Volume Resistivity	3.64 E+15 (Ohm-cm)
Dielectric Constant @ 1KHz	1.94
Vapor Pressure, Pa	30-40
Coefficient of Volume Expansion	0.0014 (per deg C)
Heat Of Vaporization (J/G)	66

## CF-200

PHYSICAL PROPERTIES	FLUOSOLV® CF-200
Normal Boiling Point	200°C
Pour Point	-85°C
Kinematic Viscosity @ -20°C	11.7 cSt
Kinematic Viscosity @ 25°C	2.4 cSt
Density @ -20°C	1.89 g/cm <sup>3</sup>
Density @ 25°C	1.79 g/cm <sup>3</sup>
Surface Tension @ 25°C	19 Dyne/cm
Vapor Pressure @ 25°C	0.2 Torr
Specific Heat @ -20°C	0.200 cal/g °C
Specific Heat @ 25°C	0.232 cal/g °C
Heat of Vaporization at Boiling Point	15 cal/g
Thermal Conductivity @ -20°C	0.069 W/m K
Thermal Conductivity @ 25°C	0.065 W/m K
Dielectric Strength @ 25°C	40 kV 2.54 mm gap
Dielectric Constant @ 1KHz	1.94
Volume Resistivity @ 25°C	6x10 <sup>15</sup> Ohm-cm
Solubility of Water	14 mg/Kg
Solubility of Air	26 mlgas/100ml liq
Flash Point	None
Molecular Weight	870 amu

