# Cargill **NatureCool**<sup>™</sup> Immersion Cooling Fluid

The next generation, plant based single-phase immersion cooling fluid.



### Nature derived

- Derived from 95% vegetable oil, a renewable resource
- Readily biodegradable in as little as 10 days
- Non-toxic to humans , soil and water



## Superior fire safety

- 325°C flash point
- Won't self ignite, flames out after heat source is removed



### More efficient cooling

10% higher heat capacity than synthetics

\*Compared to synthetics and bioderived hydrocarbons

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# Cargill NatureCool<sup>™</sup> 2000 Immersion Cooling Fluid

The biodegradable, high-performing and fire-safe choice for immersion cooling dielectric fluid.

Product Description: Bio-based immersion liquid for use as a dielectric coolant.

Material: 95% natural ester vegetable derived product - renewable raw material source.

### **Typical Properties:**

Property	Typical	Units of Measure	Reference Test Method
Appearance	Teal, free from sediment and suspended matter	N/A	N/A
Viscosity at 40 °C	31	mm2·s-1	ASTM D445
Viscosity at 60 °C	19	mm2·s-1	ASTM D445
Viscosity at 80 °C	12	mm2·s-1	ASTM D445
Fire Point (by COC)	355	°C	ASTM D92
Flash Point (COC)	325	°C	ASTM D92
Density at 20 °C	0.9206	(g/mL)	-
Specific Heat at 60 °C	2.3076	(kJ/kg°K)	-
Thermal Conductivity at 20 $^\circ$ C	0.1644	(W/mK)	-
Volume Expansion at 20 $^\circ \rm C$	0.00073066	(1/°C)	-
Breakdown Voltage	> 35 kV	(kV, 2.5 mm gap)	-
Acid Value	< 0.06	(mg KOH/g)	-
Biodegradability	> 99	%	-
<b>Bio-derived Content</b>	> 90	%	-

**Material Compatibility:** It is recommended to verify the chemical compatibility for each application. Some restrictions may exist with materials such as PVC's, certain silicone rubber formulations, and polyurethanes.

Storage: Store indoors in the original, closed container; out of direct sunlight at temperatures between 0 to 40 °C.

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