

OPTICOOL™ HE

Description

Opticool™ HE is an advanced, high-performance, hydrocarbon-based, low-viscosity liquid immersion coolant designed for single-phase electronic cooling applications. Engineered as an enhanced version of Opticool™ CM, it incorporates a specialized formulation that boosts thermal efficiency, material compatibility, and long-term durability. With superior viscosity control, precise temperature regulation, exceptional oxidation resistance, and outstanding dielectric properties, Opticool™ HE delivers unmatched heat dissipation and reliability, making it the premier choice for sustainable, high-efficiency cooling systems.

Typical Properties	ASTM	Results
Specific Gravity @ 25°C	D-4052	0.8313
Density, 25°C, kg/mL	D-4052	831.26
Acidity, mg of KOH/100g	D-974	0.0028
Copper Corrosion 130C, 3 hr.	D-130	1b
Flash Point (PMCC), °C	D-93	198.0
Flash Point (COC), °C	D-92	202.0
Fire Point, (°C)	D-92	226.0
Pour Point, (°C)	D-97	- 37
Kinematic Viscosity, cSt @ 100 °C	D-445	3.05
Kinematic Viscosity, cSt @ 40 °C	D-445	12.22
Dielectric Breakdown, kV @ 1 mm	D-1816	24.0
Dielectric Breakdown kV @ 2 mm	D-1816	43.0
Thermal Conductivity, W/mk @ 25°C	D-7896	0.1439
Oxidation Rate (RPVOT), min	D-2272	1693
Thermal Expansion Coefficient, 1/K	D-1903	0.00078
Fluid Specific Heat J/kg-K @ 25°C	E-1269	2030.0
Natural Convection (FOM 1)	OCP 1.0	74.08
Laminar Flow (FOM 2)	OCP 1.0	32.69

* Does NOT contain fluorinated substances.

Packaging

Available in drums, totes & bulk.

No warranties, express or implied, including warranties of merchantability or fitness for a particular use are made with respect to the products described herein. Nothing contained herein shall constitute permission or a recommendation or inducement to practice any invention covered by a patent without the permission of the patent owner. Customers/users are advised to test the product in advance to make certain it is suitable for their production conditions and the use or uses of the product. The seller shall not be liable for, and the customer assumes all risk and liability for any use or handling of the product.

Date: 10/22/2025