



700 Kingsland Drive
PO Box 1928
Batavia, IL 60510
USA

Phone: (630) 232-7966
Fax: (630) 232-7968
www.Radcoind.com

HEAT TRANSFER FLUIDS

XCELTHERM® CA Plus

XCELTHERM® CA Plus is targeted for use in heat transfer fluid applications that require prolonged life in systems that are open to the atmosphere and subject to accelerated oxidation up to 450° F. Our advanced mineral base oils and proprietary inhibitor package enables Radco to offer a superior product for the Die Casting, Injection Molding and Extruder Markets.

ASTM D2272 Oxidation Stability of Steam Turbine Oils (RPVOT)		
Product	Minutes to failure	Total Acid Number change
Typical Hot Oil	38.1	3.42
XCELTHERM® CA Plus	1958.9	0.61

Key Operating Temperatures	XCELTHERM® CA Plus	
Maximum Bulk Fluid Operating Temperature	450°F	232°C
Maximum Film Temperature	500°F	260°C
Flash Point (PMCC)(ASTM D93)(min)	345°F	174°C
Flash Point (COC)(ASTM D92)(min)	380°F	193°C
Fire Point (ASTM D92)(min)	417°F	214°C
Autoignition Temperature (min)	660°F	349°C
Pour Point (max)	-27°F	-33°C
Pumpability, at 300 mm ² /s (cSt)	10°F	-12°C
Normal Boiling Point, 10% fraction (min)	669°F	354°C

Physical Properties	XCELTHERM® CA Plus	
Composition	Radco-engineered hydrogenated white oil with proprietary additive package	
Odor	Faint, oily	
Appearance	Clear, Orange liquid	
Average Molecular Weight	350 g/mol	
Moisture Content (ppm) (max)	100 ppm	
Critical Temperature	1007°F	542°C
Critical Pressure	220 psia	1516 kPa
Critical Density	17.5 lb/ft ³	16.0 kg/m ³
Kinematic Viscosity at 40°C (104°F)	16.8 cSt	
Coefficient of Thermal Expansion at 200°C(392°F)	0.000495/°F	0.000892/°C
Heat of Vaporization, at Maximum use Temperature	211.7 kJ/kg (91 BTU/lb)	
Heat of Combustion	46,520 kJ/kg (20,000 BTU/lb)	
Density at 25°C (77°F)	7.1 lbs/gal	850.4 kg/m ³

Data represents typical laboratory samples and are not guaranteed for all samples.
XCELTHERM® is a registered trademark of Radco Industries, Inc.