



EUROTHERM® FG ULTRA

Premium Food Grade Synthetic Thermic Fluid
with NSF HT1 Approval.

Temperature Range

-20°C to 320°C | -4°F to 608°F



ABOUT **PRODUCT**

EUROTHERM FG ULTRA is a food-grade heat transfer fluid designed for closed-loop systems up to 320°C. Compliant with FDA 21 CFR 178.3570, it ensures safety, purity, and high-performance thermal efficiency for food industry applications.



TYPICAL **PROPERTIES**

Appearance	Clear bright liquid
Composition	Modified hydrogenated terphenyl
Maximum bulk temperature	320°C (608°F)
Maximum film temperature	345°C (650°F)
Kinematic viscosity at 100°C (ASTM D-445)	3.8 to 4 mm ² /s (cSt)
Kinematic viscosity at 40°C (ASTM D-445)	29.6 to 31 mm ² /s (cSt)
Flash point, COC (ASTM D-92)	199°C (390°F)
Pour point (ISO 3016)	-25°C (-13°F)
Normal boiling point	359°C (678°F)
Auto ignition temperature (ASTM E-659)	385°C (725°F)
Pumpability, at 300 mm ² /s (cSt)	11°C (52°F)
Moisture content (PPM)	Maximum 122
Coefficient of thermal expansion at 200°C	0.000819/°C (0.000455/°F)
Pseudocritical pressure in bar	15.2

"The property mentioned here is based on the tested sample and may vary slightly across different samples."

KEY ADVANTAGES OF **EUROTHERM FL ULTRA**

01

Remarkable Heat Transfer Properties: EUROTHERM® FL excels in efficiently transferring heat, ensuring optimal thermal performance.

02

Accurate Temperature Control: The fluid's ability to function effectively in the vapor phase allows for precise temperature management, crucial for demanding processes.

03

Highest Thermal Stability and Anti Oxidation Technology

04

BCR Technology Create Turbulent Flow to Remove Carbon from the Fluid: While operation & give a sustainable lifelong quality and longest life of the fluid.

05

Low Viscosity with Desire Thermal Conductivity Ensure Lowest Pumping Energy use and Highest Heat Transfer Ratio.

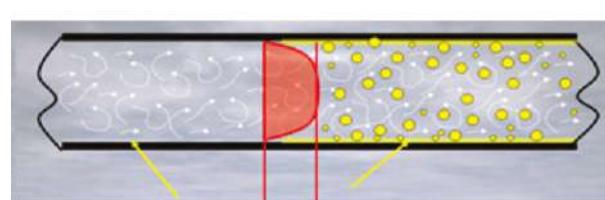
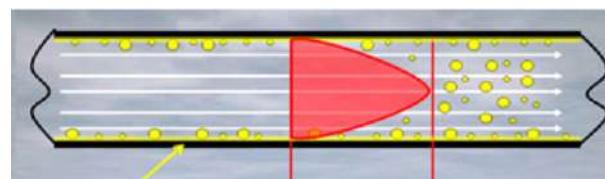
06

Selective Synthetic Additives Formulation Ensure a Long Life and High Thermal Conductivity.

Highest Thermal Stability and Anti Oxidation Technology



BCR Technology Create Turbulent Flow to Remove Carbon from the Fluid



ADVANTAGES OF **LOW VISCOSITY FLUIDS**

Low Viscosity Fluids enhance thermal conductivity by promoting turbulent flow in heat transfer systems. This turbulence increases the heat transfer ratio while minimizing pumping energy use, resulting in efficient thermal management.

APPLICATION **METHOD & INDUSTRIES**

EUROTHERM FG Ultra is highly used as heat transfer medium in majorly food & pharma industries like

Sweets, Spices, Oil Refineries, Distillery	Adhesives
Bakery	Desalination
Deodorizing	Dryer Heating
Deodorizing Oil and Fat	Fatty Acid
Edible Oil	Industrial
Food Production	Peek (polyether ether ketone)
Food/Feed/Beverage Processing	Phthalic Anhydride
Production of Bio Alcohol	Polyester (pet)
Production of Biodiesel	Specialty Chemicals
Specialty & Batch Chemical Production	And many more.

PROPERTIES AT CERTAIN TEMPERATURE

Temperature	Liquid Density	Specific Heat	Thermal Conductivity	Kinematic Viscosity	Vapour Pressure
°C	kg/m³	kJ/Kg °K	W/m·K	cSt	kPa
0	850	1.790	0.135	228	-
10	849	1.840	0.134	118	-
20	844	1.895	0.134	72	-
30	840	1.928	0.133	46	-
40	838	1.970	0.132	32	-
50	834	2.008	0.131	18	-
60	828	2.050	0.131	15	-
70	825	2.094	0.130	12	-
80	821	2.135	0.129	8.500	-
90	817	2.177	0.128	6.500	0.010
100	813	2.219	0.127	5.200	0.020
110	809	2.262	0.127	4.500	0.030
120	805	2.304	0.126	3.350	0.050
130	801	2.345	0.125	2.700	0.060
140	797	2.386	0.125	2.200	0.080
150	793	2.428	0.124	1.980	0.100
160	789	2.470	0.123	1.842	0.160
170	785	2.513	0.123	1.628	0.240
180	781	2.554	0.122	1.480	0.380
190	777	2.596	0.122	1.350	0.570
200	772	2.638	0.121	1.240	0.848
210	769	2.680	0.120	1.130	0.124
220	765	2.722	0.119	1.070	1.836
230	760	2.762	0.118	0.980	2.552
240	756	2.805	0.117	0.880	3.565
250	754	2.846	0.116	0.800	4.905
260	751	2.890	0.116	0.760	6.670
270	746	2.931	0.115	0.710	9.160
280	741	2.974	0.114	0.668	12.380
290	738	3.015	0.113	0.622	16.300
300	735	3.055	0.112	0.580	21.610
310	731	3.099	0.111	0.562	27.860
320	722	3.140	0.111	0.548	35.400

"The property mentioned here is based on the tested sample and may vary slightly across different samples."

LIFETIME CARING PARTNER

Our highly experienced team is committed to providing comprehensive support tailored to your needs. We offer:



Start-up Guidance

Expert assistance to ensure a smooth initial setup.



Operational Training

Customized training programs to equip your team with essential skills.



Sample Testing and Analysis

In-depth testing services to evaluate fluid performance and ensure quality.



Safety Awareness Training

Programs designed to promote safety and compliance in all operations.



System Selection and Pipeline Design Support

Expert advice to help you choose the right system & optimize pipeline design.



Fluid Flushing & Refill Support

Efficient services to maintain system performance and fluid integrity.

With our support, you can optimize operations and enhance safety and efficiency in your processes.



American
Petroleum
Institute



ABOUT **WINZZOL**

WINZZOL's EUROTHERM "HEAT TRANSFER FLUIDS" are expertly engineered for the efficient indirect transfer of process heat across various applications. These fluids excel in both single- and multiple-station heat-using systems, providing exceptional thermal stability throughout a wide temperature range.

