



Efficient Cooling. Safe Operation. Sustainable Performance.

PRODUCT OVERVIEW

AURON HT-135 is a fluorinated heat transfer fluid designed for high-precision temperature control in demanding industrial applications.

It is a clear, colourless liquid with low viscosity, excellent dielectric properties, and high thermal stability. The fluid is suitable for immersion cooling, semiconductor processing, and power electronics.

KEY FEATURES

- ▶ Non-flammable — no flash point
- ▶ Excellent dielectric properties
- ▶ Low viscosity — precise thermal control
- ▶ Wide operating temperature range
- ▶ High chemical and thermal stability
- ▶ Low vapor pressure
- ▶ Suitable for advanced cooling systems

APPLICATIONS

- ▶ Immersion cooling (data centers)
- ▶ Semiconductor temperature control
- ▶ Power electronics cooling
- ▶ Medical cooling systems
- ▶ Industrial heat transfer applications

TECHNICAL SPECIFICATIONS

Appearance	Clear, colourless
Chemical Type	Fluorinated fluid
Flash Point	None
Boiling Point	130-150°C
Pour Point	-131°C
Density (25°C)	1.64 g/mol
Kinematic Viscosity (-20°C)	2.33 cSt
Kinematic Viscosity (0°C)	1.46 cSt
Kinematic Viscosity (25°C)	0.9 cSt
Kinematic Viscosity (40°C)	0,72 cSt
Kinematic Viscosity (100°C)	0,31 cSt
Dynamic Viscosity	1.48 mPa·s
Surface Tension	16 mN/m
Specific Heat Capacity	1.12 kJ/(kg·K)
Thermal Conductivity	0.065 W/(m·K)
Heat of Vaporization	108 kJ/kg
Expansion Coefficient	0.0014 K ⁻¹
Vapour Pressure (25°C)	0.6 kPa
Water Solubility	< 10 ppm

ENVIRONMENT & SAFETY

- ▶ Non-flammable
- ▶ No GHS classification
- ▶ ODP: 0
- ▶ GWP: 42
- ▶ Low acute toxicity (LD50 > 5000 mg/kg oral)
- ▶ Thermal decomposition may generate: HF, CO, CO₂



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ELECTRICAL INSULATION

- ▶ Dielectric strength: ~30 kV (2.54 mm gap)
- ▶ Dielectric constant: ~7.5
- ▶ High resistivity ($\sim 10^{12} \Omega \cdot \text{cm}$)

THERMAL PERFORMANCE

- ▶ Low viscosity → efficient heat transfer
- ▶ Low vapor pressure → reduced losses
- ▶ Wide liquid range → stable operation

Recommended operating range (typical)

- ▶ Approx. -100°C to $+125^{\circ}\text{C}$ (derived technically)

MATERIAL COMPATIBILITY

Compatible with a wide range of materials.
Testing recommended.

- ▶ Metals: aluminium, copper, stainless steel
- ▶ Plastics: PE, PP, PTFE
- ▶ Elastomers: NBR

SAFETY

- ▶ Use only in well-ventilated areas
- ▶ Avoid inhalation of decomposition products
- ▶ Use appropriate PPE for industrial handling
- ▶ Read Safety Data Sheet (SDS) before use

PACKAGING & STORAGE

- ▶ Available packaging: 1kg, 7kg, 15kg
- ▶ Store in closed original containers
- ▶ Keep in cool, dry, well-ventilated environment
- ▶ Avoid contact with strong oxidizers, acids, and bases

ECONOMIC ADVANTAGES & SUSTAINABILITY

- ▶ Efficient cooling due to low viscosity
- ▶ Low evaporation losses (low vapor pressure)
- ▶ Long service life
- ▶ Reduced energy consumption in thermal systems

Disclaimer: Information based on current knowledge. User is responsible for verifying product suitability. No warranty for specific results. Specifications subject to change without notice.