



Efficient Cooling. Safe Operation. Sustainable Performance.

PRODUCT OVERVIEW

AURON HT-200 is a high-boiling fluorinated heat transfer fluid designed for advanced thermal management applications requiring maximum temperature stability and minimal evaporation losses. It is a clear, colourless liquid with higher viscosity and density, optimized for stable operation in demanding industrial environments.

KEY FEATURES

- ▶ Non-flammable — no flash point
- ▶ Higher viscosity — stable flow behaviour
- ▶ Extremely low vapour pressure — reduced emissions
- ▶ High chemical and thermal stability
- ▶ Wide operating temperature range

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 | 185°C |
| Pour Point | -85°C |
| Density (25°C) | 1.77 g/mol |
| Kinematic Viscosity (25°C) | 2.6 cSt |
| Kinematic Viscosity (40°C) | 1.8 cSt |
| Kinematic Viscosity (100°C) | 0,7 cSt |
| Dynamic Viscosity | 4.6 mPa·s |
| Surface Tension | 17 mN/m |
| Specific Heat Capacity | 1.12 kJ/(kg·K) |
| Thermal Conductivity | 0.065 W/(m·K) |
| Heat of Vaporization | 100 kJ/kg |
| Expansion Coefficient | 0.0011 K ⁻¹ |
| Vapour Pressure (25°C) | 0.03 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: ~4.2
- ▶ High resistivity (~ $10^{12}\Omega\cdot\text{cm}$)

THERMAL PERFORMANCE

- ▶ Higher viscosity → stable heat transfer behaviour
- ▶ Extremely low vapor pressure → minimal losses
- ▶ High boiling point → extended temperature range

Recommended operating range (typical)

- ▶ Approx. -60°C to +175°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

- ▶ Very low consumption due to minimal evaporation
- ▶ Long service life
- ▶ Reduced maintenance requirements
- ▶ Optimized for high-temperature efficiency

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