



Efficient cooling. Safe operation. Sustainable performance.

PRODUCT OVERVIEW

This advanced, fluorinated dielectric fluid was developed for high-performance thermal management in demanding industrial and electronic applications. It combines outstanding heat transfer with excellent electrical insulation, environmental compatibility, and operational safety.

The fluid enables direct cooling of live components while ensuring long-term stability and reliability.

KEY FEATURES

- ▶ Non-flammable — no flash point
- ▶ Excellent dielectric properties — safe for live electronics
- ▶ Low viscosity — reduced energy consumption for pumps
- ▶ Low GWP & no ODP
- ▶ High chemical and thermal stability
- ▶ Wide range of material compatibility
- ▶ Wide fluid temperature range

APPLICATIONS

- ▶ Immersion cooling (two-phase systems)
- ▶ Cooling of data centers and power electronics
- ▶ Foam insulation additive

TECHNICAL SPECIFICATIONS

Appearance	Clear, colorless
Chemical Type	Heat transfer fluid
Flash point	None
Boiling point	48°C
Pour point	-80°C
Density (25°C)	1.6 kg/l
Molecular weight	300 g/mol
Specific heat capacity	1.13 kJ/(kg·K)
Heat of vaporization	98 kJ/kg
Vapor pressure	3.47 kPa
Water solubility	0.649 mg/l [at 22.3 °C]
Dielectric strength	24 kV/mm (50 Hz)

ENVIRONMENTAL PROPERTIES

- ▶ ODP: 0
- ▶ GWP: < 100–120
- ▶ Low toxicity
- ▶ Non-flammable / non-combustible
- ▶ Recyclable / reusable
- ▶ No ozone depletion



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ELECTRICAL INSULATION

The liquid allows for the safe immersion of live electronic components

- Dielectric strength (kV/gap):
24 kV / 1 mm

THERMAL PERFORMANCE

The fluid enables efficient heat transfer through:

- Low viscosity for high flow rates
- Good surface wetting properties
- Stable thermal properties over a wide temperature range

Recommended operating range (typical)

- Approx. -70°C to +40°C

MATERIAL COMPATIBILITY

Compatible with a wide variety of materials.

Testing recommended for specific applications!

- Metals: aluminum, copper, stainless steel, brass, nickel
- Plastics: ABS, PC, PE, PP, PTFE, PMMA, PEEK
- Elastomers: EPDM, NBR, silicone, FKM

SAFETY

- Read the Safety Data Sheet (SDS) before use
- Suitable only for industrial/commercial applications
- AURON HFP-48 is a chemically inert PFAS material

CONTAINERS & STORAGE

- Container sizes: 25 kg plastic canisters
- Store in closed, original containers
- Store in a cool, dry place
- Avoid contamination

ECONOMIC BENEFITS & SUSTAINABILITY

- Lower environmental impact compared to conventional PFC fluids
- Reduced energy consumption due to low viscosity
- Long service life and consistent performance
- Reduced maintenance requirements and downtime
- Recycling options available

Disclaimer: The information provided is based on current knowledge. The user is responsible for verifying the product's suitability. No guarantee is made regarding specific results. Specifications are subject to change.