



## Kilfrost ALV

The higher efficiency, non-toxic alternative to MEG and MPG for low temperature cooling and refrigeration

### Product Description

Kilfrost ALV is a secondary coolant system fluid specifically engineered to increase both the efficiency and safety of low temperature chilling/cooling equipment and circuits, including those in the food and beverage industry.

Kilfrost ALV is a low viscosity, non-toxic heat transfer fluid formulated with bio-derived base fluids listed as GRAS (Generally Recognised as Safe) by the FDA, rheology modifiers and ASTM D1384-05 proven corrosion inhibitors. It has been formulated to offer greater efficiency levels than Mono Ethylene Glycol (MEG) based fluids. This means that customers now have a genuinely safe, non-toxic, more efficient alternative to Mono Ethylene Glycol.

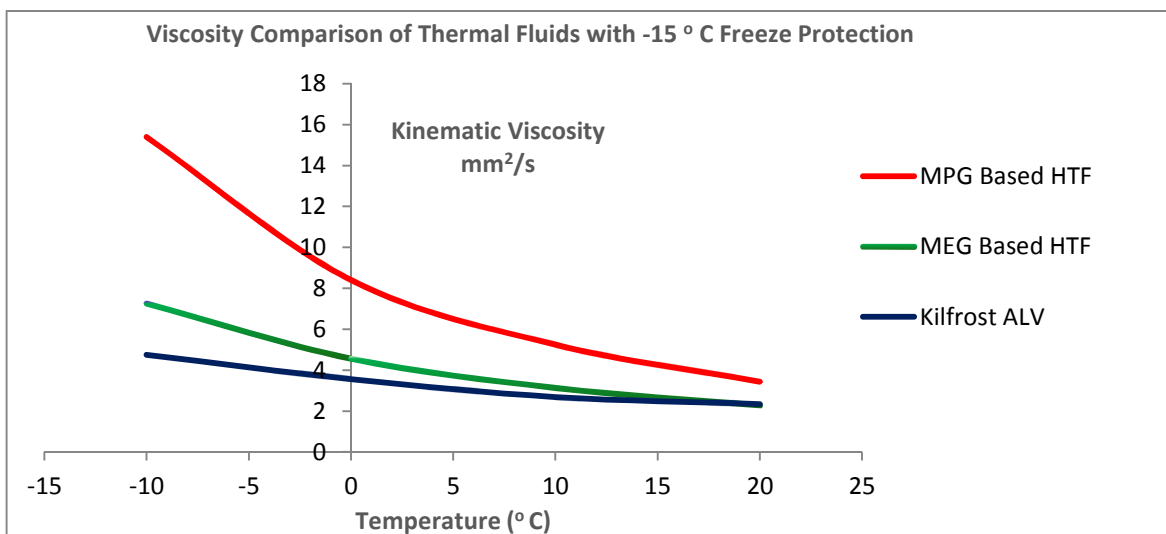
Replacement of more viscous fluids such as Mono Propylene Glycol (MPG) or Glycerine based products in existing systems with Kilfrost ALV will give customers an immediate increase in both pumping and heat transfer efficiency, leading to immediate and sustained energy savings.



### Key Features of Kilfrost ALV

- High performance non-toxic heat transfer fluid
- Outperforms MEG, MPG, Bio-PDO and ethanol based heat transfer fluids
- Delivers lower system pressure drop and lower pumping costs
- Protects against corrosion and scaling
- Classified as non-hazardous according to CLP/REACH
- Superior environmental profile
- Free from nitrates, nitrites, borates, heavy metals and phosphates
- Optimum operating temperature -40°C to +40°C

### Viscosity Comparison





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### Product Data

Freeze Protection on Dilution			Physical Data (100%)	
Dilution %v/v	Freeze Point (°C)	Refractive Index	Property	Value
25	-10	1.3632	pH	8.5-9.5
30	-15	1.3679	Refractive index	Ca. 1.4437
40	-20	1.3794	Specific Gravity (20°C)	1.30 – 1.38
50	-30	1.3905	Boiling Point (°C)	Ca. 105
60	-40	1.4031	German Water Hazard	WGK1

### User Guidelines

As per BSRIA guide BG29/2012, all pipework should be cleaned and sanitised to remove all physical debris and biological growth prior to the installation of a thermal fluid. For added protection, Kilfrost ALV is available pre-diluted with de-ionised water to the required level of freeze protection. For the suitability of this product with your system at higher temperatures please consult your Kilfrost representative.

### Monitoring

A Thermal Fluid Test Kit is available from Kilfrost to monitor the health of Kilfrost ALV as part of a routine maintenance schedule. In addition, Kilfrost offers a service of comprehensive fluid health checks to its customers

### Dosage

The dilution rate depends on the freeze point required by the system:

- Product concentration should not be diluted below 25% v/v
- Supplied in ready to use solution for enhanced system protection
- Product dilutions more than 30% v/v will give optimal corrosion and scale protection
- Kilfrost ALV should not be added to systems that already contain other heat transfer fluids, which may result in lost performance and energy savings

**Available Pack Sizes: 25, 215 and 1000 litre and bulk container sizes**

