



CoolFlow LV



Thermally Efficient Low Viscosity Non Toxic Antifreeze

based on

Potassium Formate Brine

with

**non-toxic corrosion,
& scale inhibitors**

Properties & Benefits

- **Low Viscosity offers significant reduction in energy consumption, pump/motor size & pressure drop**
- **High Thermal Conductivity, providing a better heat transfer rate, when compared to glycols**
- **Food-Safe, non-toxic and biodegradable**
- **Prices comparable to Propylene Glycol**
- **Extended chiller life with minimal downtime**
- **Frost Protection to minus 60 Deg. C**
- **Coolant Maintenance Program available**
- **Food Grade Dyes in several colours**
- **Bitter taste additives to prevent consumption**

Product Information

CoolFlow LV could be considered as the next step forward in the world of non-toxic secondary refrigerants. CoolFlow LV is often selected ahead of propylene glycol due to its lower viscosity and higher thermal conductivity. CoolFlow LV has a much lower viscosity than PG throughout its operating range and offers the benefits of reduced running costs and smaller system components, such as pipes, pumps and motors. CoolFlow LV has a higher thermal conductivity than PG and EG at all operating temperatures. Thus the primary cooling system can be reduced in size and output. It is an ideal replacement for the more corrosive chloride based coolants, such as sodium and calcium chloride.

CoolFlow LV can be dyed and/or a bitter taste additive added, to deter human consumption and for identifying leaks.

Application

CoolFlow LV is supplied in various concentrations to suit specific applications and temperature requirements. It is not recommended for use in systems with zinc, galvanised or tin (soft) soldered components. Please refer to the Technical Info sheet for more data.

Coolant Maintenance Program (CMP)

The CMP verifies coolant concentration & condition, including inhibitor reserves. It also helps to identify corrosion by-products and any biological activity. Please ask for details.

Availability

CoolFlow LV is packed in 25L, 205L and 1000L containers. It is always kept in stock and can be despatched within hours.

Storage

CoolFlow LV should be stored in cool, dry conditions and drums should be kept sealed. It is not classed as hazardous for transport purposes.

Health & Safety

Please consult the associated Material Safety Data Sheet for detailed safety information.

IS YOUR COOLING SYSTEM PROTECTED OR DOES IT LOOK LIKE THIS?



PROTECT YOUR INVESTMENT & PREVENT DOWNTIME - USE COOLFLOW INHIBITED COOLANTS

CoolFlow Specialist Antifreeze & Secondary Refrigerants - from Hydratech

Hydra Technologies Limited Units 3 & 4 Queensway Centre, Queensway, Swansea West Industrial Park, Swansea SA5 4DT
Tel : 0870 744 6395 Fax : 0870 744 6396 E-mail : sales@coolflow.co.uk URL: www.coolflow.co.uk

Core Technical Information for CoolFlow LV

Product Type : Thermally Efficient Low Viscosity Non-Toxic Antifreeze with non-toxic corrosion and scale inhibitors

Appearance : Various colours, depending on inhibitors and dyes used.

Density : 1.266 –1.398 at 20° Centigrade.

PH : 10.6 – 11.6 depending on inhibitors.

Boiling point : 100 - 115° C

CoolFlow LV Properties

- Low viscosity, high thermal conductivity secondary coolant/refrigerant/antifreeze.
- A blend of food-grade potassium formate, deionised water and non-toxic corrosion and scale inhibitors.
- In comparison with propylene and ethylene glycol it has lower viscosity at all temperatures.
- Has improved thermal conductivity characteristics when compared with glycol based products, resulting in smaller heat exchangers and/or primary refrigeration equipment.
- Environmentally friendly being, non-toxic, readily biodegradable and non-flammable.
- Can be used in existing systems provided they do not contain, zinc, galv or tin soldered components.
- To minimise corrosion, closed loop systems must minimise air contact and a pressurised system is ideal.
- Blended in several grades (strengths) to suit system requirements - please see examples below.

CoolFlow LV Grade	Cooling Limit Degrees Centigrade	Viscosity m Pas (cP) at 20 °C	Thermal Conductivity (W/mK)	Density At 20 °C (g/cm ³)
LV20	- 20	2.1	0.53	1.24
LV30	- 30	2.2	0.54	1.26
LV40	-40	2.6	0.52	1.31
LV50	-50	3.0	0.50	1.35
LV60	-60	3.9	0.47	1.39

For more detailed information, relating to specific operating parameters please call 0870 744 6395

Safety : CoolFlow LV is not a potential water pollutant and is biodegradable. Please refer to the material safety data sheet for more information about the product and its handling.

Shelf Life : CoolFlow LV has a shelf life of at least 3 years in airtight containers.

Availability : CoolFlow LV is available in 25, 205 & 1000 litre containers.

PROTECT YOUR INVESTMENT!...USE COOLFLOW LV... WITH CORROSION & SCALE INHIBITORS

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