

## Core Technical Information for CoolFlow FG

<b>Product</b>	: Non-Toxic Antifreeze based on Mono Propylene Glycol with non-toxic corrosion & scale inhibitors.
<b>Appearance</b>	: Various colours, depending on inhibitors and dyes used.
<b>Density</b>	: 1.04 – 1.10 depending on inhibitors and dyes used.
<b>PH</b>	: 7.5 – 9.5 depending on inhibitors.
<b>Boiling point</b>	: >155° C

### Properties

CoolFlow FG is a clear, viscous, virtually odourless liquid. It is based on mono propylene glycol and has a low order of oral toxicity. It is readily biodegradable (90% over ten days) and thus will not remain in the environment. CoolFlow FG may be used as a coolant or heat transfer fluid in the food processing and water purification industries. CoolFlow FG contains synergic (glycol compatible) corrosion inhibitors to protect all metals commonly found in modern chiller equipment, thus ensuring a long operating life and high thermal efficiency. CoolFlow FG is miscible with water in all proportions and can protect systems down to –50°C depending on the concentration. Solutions containing in excess of 35% CoolFlow FG exhibit super-cooling characteristics and do not freeze solid, alleviating the concern over possible expansion and burst damage. CoolFlow FG does not normally attack the seals in cooling systems.

### Application of CoolFlow FG

Firstly determine the total system volume. Dose the CoolFlow FG to the system according to the minimum operating temperature (Fig.I guide below) and the system volume. The minimum dose of CoolFlow FG should not usually be less than 25% of the system volume and the maximum does not normally exceed 60%. We recommend the use of deionised, distilled or CoolFlow UltraPure water for this dilution. Avoid water containing high levels of calcium salts or Chlorides [Cl<sup>-</sup>].

### Fig I. Dilution Guide for CoolFlow FG

Freezing point ° C	% v/v of CoolFlow FG in the system
-10	25%
-13	30%
-17	35%
-21	40%
-26	45%
-32	50%
-40	55%

When measuring the percentage of CoolFlow FG in the system, we recommend the use of a refractometer with a % scale. Hydrometers can be difficult to read and are affected by total dissolved solids (inhibitors).

**Safety :** CoolFlow FG 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 FG has a shelf life of at least 3 years in airtight containers.

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

## CoolFlow Specialist Antifreeze & Secondary Refrigerants - from Hydratech

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# CoolFlow FG



## Non Toxic Antifreeze

based on  
**Mono Propylene Glycol**  
with  
**non-toxic corrosion  
& scale inhibitors**

### Properties & Benefits

- **Non-Toxic Multi-Metal Corrosion Inhibitors**
- **Extended chiller life with minimal downtime**
- **Non-toxic Scale Inhibitors & Sludge mobilisers**
- **Excellent Environmental Profile & Biodegradable**
- **Maximise heat transfer rates & eliminate blockages**
- **Frost Protection to - 50°C**
- **Concentrations of 35% + CoolFlow FG do not solidify, eliminating fluid expansion and pipe bursts**
- **Boiling Point : up to +155°C**
- **Coolant Maintenance Program available**
- **Food Grade Tracer Dyes, in various colours**
- **Bitter taste additives to prevent consumption**
- **Density : 1.04 - 1.10 depending on additives**
- **Non-Volatile and Non-Hazardous for storage**

### Product Information

**CoolFlow FG** is the mono propylene glycol based secondary refrigerant from the CoolFlow range. It is formulated for use in the food and beverage industry and for systems where low oral toxicity is preferred. It contains non-toxic multi-metal inhibitors to protect chillers and associated cooling systems against corrosion and scale, thus maintaining maximum heat transfer. CoolFlow FG has excellent frost protection characteristics; please refer to our Technical Info sheet for further details.

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

### Application

**CoolFlow FG** is best diluted with UltraPure, demineralised, or softened water. For exact proportions to achieve the desired frost protection, please refer to the Technical Info sheet.

### 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 FG** is packed in 25L, 205L and 1000L containers. 40 tonnes+ is always kept in stock and can be despatched within hours.

### Storage

**CoolFlow FG** 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**

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