



HT1 Propylene Glycol Antifreeze

For food & beverage cooling systems

Performance Properties

Coolflow NTP-HT1 has been specifically formulated for food & beverage cooling systems where only HT1 certified heat transfer fluids are acceptable in locations where there is a possibility of incidental food contact.

For the majority of F&B cooling systems Coolflow NTP and/or Coolflow DTX are totally acceptable.

Non Toxic:

Coolflow NTP-HT1 is classified as non toxic, with an LD50 (Oral Rat) >15,000 mg/kg bw.

Protection:

Coolflow NTP-HT1 contains a unique corrosion inhibitor, plus biocide, both of which have been classified as GRAS by the US FDA. The corrosion inhibitor provides protection for all metals (with the exception of zinc and magnesium, which are not recommended for fluid-filled cooling systems) and also provides natural pH buffering to prevent acidification.

Application

As per BSRIA guide BG 29/2012 all pipe-work systems should be clean and free from biological contamination and debris prior to commissioning.

To minimise corrosion air ingress should be minimised. A pressurised system is best.

Determine the total system volume and add **Coolflow NTP-HT1** to the system according to the minimum operating temperature required (see table). The minimum dose of **Coolflow NTP-HT1** should not be less than 25% of the system volume and the maximum does not normally exceed 60%. We recommend the use of deionised, distilled or UltraPure™ water for this dilution. Avoid water containing high levels of calcium salts or Chlorides [Cl-].

Coolflow NTP-HT1 can also be supplied as a Ready-To-Use solution.

Physical Properties

Frost Protection

-50°C depending on concentration.

Density

1.02 - 1.04 g/cm³ depending on inhibitors

pH

7.5 - 8.5

Boiling Point

>100°C

For operating temperatures above 100°C, refer to Hydratech for technical advice.

Characteristics

a clear, slightly viscous liquid. It is mildly sweet to the taste and has a non-pungent but characteristic aroma.

Biodegradability

Coolflow NTP-HT1 mixtures are readily biodegradable (90% over ten days) and will not remain in the environment or bio-accumulate.

Container Sizes

Available in: 5, 10, 25, 205L drums & 1000L IBCs

Diluting Concentrate

When measuring the percentage concentration of Coolflow NTP-HT1 in solution we recommend the use of a recently calibrated refractometer.

Frost Protection °C	v/v of Coolflow NTP-HT1 %	Refractive Index
-10	25.0	1.35900
-15	33.0	1.37000
-20	39.0	1.37600
-25	44.0	1.38200
-30	48.0	1.38600
-35	52.5	1.39100

Fluid Management Services

To ensure inhibitor levels are being maintained and the system fluid is in good condition, we recommend periodic sampling and testing. Hydratech operate the Fluid Monitoring Program (FMP) service for all users of our products. For more information on the FMP please call or visit www.hydratech.co.uk.

Quality Assured

Coolflow NTP-HT1 meets or exceeds the corrosion standards laid down in ASTM D-1384. Hydratech products are manufactured in accordance with ISO 9001: 2015 procedures.

Storage & Shelf Life

At least 3 years when stored in sealed containers, below 40°C and out of direct sunlight.

Health & Safety

Please refer to the associated Safety Data Sheet, which is available online via Login and/or by mail.

24/7 Technical Support

Technical support services and products to ensure ongoing system efficiency and protection.

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