

Non-Toxic Secondary Refrigerant Antifreeze, based on Propylene Glycol blended with BS6580 proven Corrosion, Scale and Biological Inhibitors.



Anti-Freeze



Non-Toxic



Biodegradable



Corrosion Control



Quality Assured

Properties:

COOLFLOW NTP has been especially formulated for use as a Non-Toxic Secondary Refrigerant Antifreeze in Process Cooling, Refrigeration and Air Conditioning systems. It contains synergistic corrosion inhibitors to protect metals commonly found in such systems. It has been tested in accordance with BS5117 and found to meet BS6580 corrosion standards for mild & stainless steel, aluminium, copper, brass and cast iron. Zinc or galvanised components are not recommended for use with closed loop cooling or heating systems.

COOLFLOW NTP also contains scale and biological inhibitors to help prevent fouling – thus promoting long operational life and high thermal efficiency.

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

COOLFLOW NTP is miscible with water in all proportions and can protect RAC systems down to -50°C depending on concentration.

COOLFLOW NTP exhibits super-cooling characteristics and mixtures containing in excess of 50% by volume do not freeze solid, alleviating any concern over possible expansion and burst damage.

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

Density: 1.02 – 1.15 g/cm³ depending on inhibitors

pH: 7.5 – 10.5 depending on inhibitors

Boiling Point: > 100°C

Application

As per BSRIA guide AG 1/2001.1 all pipe-work systems should be clean and free from biological contamination prior to commissioning.

To minimise corrosion air* ingress and exposure should be minimized. A pressurised system is best.

* *Oxygen feeds the corrosion process which consumes inhibitors.*

Determine the total system volume and add **COOLFLOW NTP** to the system according to the minimum operating temperature required (see table). The minimum dose of **COOLFLOW NTP** 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-].

Health & Safety: Please refer to the associated Safety Data Sheet.

Shelf Life: 3 years when stored in sealed containers out of direct sunlight.

Available in: 5, 10, 15, 20, 25, 205 & 1,000 litre containers and in bulk tankers.

COOLFLOW NTP can also be supplied pre-mixed, as a ready-to-use solution.

Mixing Guide for COOLFLOW NTP

Frost Protection °C	% v/v of COOLFLOW NTP in the system	Refractive Index
-10	25%	1.356
-15	33%	1.364
-20	39%	1.370
-25	44%	1.373
-30	48%	1.380
-35	52.5%	1.383

When measuring the percentage of COOLFLOW NTP in the system use a refractometer



SUREFLOW Support Services ensure that end users and distributors receive the full benefit of working with a specialist manufacturer. Specifically;

- Expert technical advice on all aspects of fluid selection, including Environmental Impact Assessments, Thermal Performance etc.
- Fluid Maintenance Program; for the proactive verification of fluid and system condition.
- Huge stock inventory facilitating same day dispatch and delivery.
- Bespoke formulations for specialist applications.