

**Ecologically and Environmentally Friendly
Non-Toxic Secondary Refrigerant Antifreeze.
Based on Refined Vegetable Extracts
blended with BS6580 proven Corrosion,
Scale and Biological Inhibitors.**



Anti-Freeze



Renewable



Non-Toxic



Biodegradable



Corrosion Control



Quality Assured

Properties:

COOLFLOW ECO₂ has been especially formulated to provide Refrigeration and AC plant operators with a Secondary Refrigerant Antifreeze that is 100% RENEWABLE. I.E. not derived from non-renewable crude oil. **COOLFLOW ECO₂** is based on sustainable Refined Vegetable Extracts that are Non-Toxic, Bio-Degradable and more thermally efficient than Propylene Glycol based coolants. Subsequently **COOLFLOW ECO₂** could be considered the most ecologically friendly antifreeze available.

COOLFLOW ECO₂ 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 ECO₂ also contains scale and biological inhibitors to help prevent fouling – thus promoting long operational life and high thermal efficiency.

COOLFLOW ECO₂ is a clear, slightly viscous liquid. It is slightly sweet to the taste and has a non-pungent but characteristic aroma.

COOLFLOW ECO₂ is miscible with water in all proportions and can protect RAC systems down to -50°C depending on concentration.

COOLFLOW ECO₂ 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.

Density: 1.02 – 1.26 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 minimised. A pressurised system is best.

* Air contains oxygen that feeds the corrosion process which consumes the inhibitors.

Determine the total system volume and add **COOLFLOW ECO₂** to the system according to the minimum operating temperature required (see table, below). The minimum dose of **COOLFLOW ECO₂** 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 ECO₂ can also be supplied pre-mixed, as a Ready-To-Use solution.

Mixing Guide for COOLFLOW ECO₂

Frost Protection °C	% v/v of COOLFLOW ECO ₂ in the system	Refractive Index
-10	25%	1.355
-15	32%	1.362
-20	38%	1.367
-25	43%	1.372
-30	48%	1.377
-35	52%	1.380

When measuring the percentage of **COOLFLOW ECO₂** 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.