



IGE: Ethylene Glycol Antifreeze



Industrial grade secondary refrigerant Antifreeze for Process Cooling & AC systems. Based on Ethylene Glycol and ASTM D1384 proven corrosion, scale and biological inhibitors.

Performance Properties

IGE: Ethylene Glycol Antifreeze has been especially formulated from Ethylene Glycol for use as a industrial grade secondary refrigerant Antifreeze for use in Process Cooling, Refrigeration and Air Conditioning systems, where toxicity is not an issue.



Antifreeze

IGE: Ethylene Glycol Antifreeze is miscible with water in all proportions and can protect RAC systems down to -50 °C depending on concentration. IGE: Ethylene Glycol Antifreeze exhibits super-cooling characteristics and mixtures containing in excess of 55% by volume do not freeze solid, alleviating any concern over possible expansion and burst damage.



Optimum Flow

IGE: Ethylene Glycol Antifreeze has improved heat transfer characteristics including lower dynamic viscosity and higher thermal conductivity. For a detailed comparison please refer to the Fluid Performance Chart which is available upon request.



Protection

IGE: Ethylene Glycol Antifreeze 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 and ASTM D1384 corrosion standards. IGE: Ethylene Glycol Antifreeze also contains scale and biological inhibitors to help prevent fouling - thus promoting long operational life and high thermal efficiency.



Biodegradable

IGE: Ethylene Glycol Antifreeze mixtures are readily biodegradable (90% over 10 days) and will not remain in the environment or bio-accumulate.



Quality Assured

All BDIC Glycol products are manufactured in accordance with certified ISO 9001-2008 procedures.

For further information about this product please email: info@bdicooling.com





IGE: Ethylene Glycol Antifreeze



Physical Properties

IGE: Ethylene Glycol Antifreeze is a clear, slightly viscous liquid and mildly sweet to the taste. It is non-pungent however it does have a characteristic aroma.

Density: 1.08 - 1.2 g/cm³ depending on inhibitors
 pH: 7.5 - 10.5 depending on inhibitors
 Boiling Point: >100 °C

Application

As per BSRIA guide BG 29/2012 all pipework 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 IGE: Ethylene Glycol Antifreeze to the system according to the minimum operating temperature required (see table to the right).

The minimum dose of IGE: Ethylene Glycol Antifreeze 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-].

Diluting Concentrate

When measuring the percentage concentration of IGE: Ethylene Glycol Antifreeze in solution we recommend the use of a recently calibrated refractometer.

Health & Safety

Please refer to the associated product Safety Data Sheet which is available upon request.

Shelf Life

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

Available in

25, 205 & 1000 Litre IBC's and bulk tankers.

IGE: Ethylene Glycol Antifreeze can also be supplied as a ready-to-use solution.

Frost Protection °C	V/V of IGE: Ethylene Glycol	Refractive Index
-10	20%	1.349
-15	27%	1.355
-20	32%	1.359
-25	37%	1.363
-30	41%	1.366
-35	45%	1.369

Support Services

BDIC strive to ensure end users and distributors receive the full benefit of working with a specialist supplier that offers:

- Expert Technical advice on all aspects of fluid selection, including Environmental impact Assessments, Thermal Performance etc.
- Fluid Maintenance Programs for the proactive verification of fluid and system condition.
- A vast stock inventory facilitating same day dispatch and delivery.
- Bespoke formulations for specialist applications.

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