

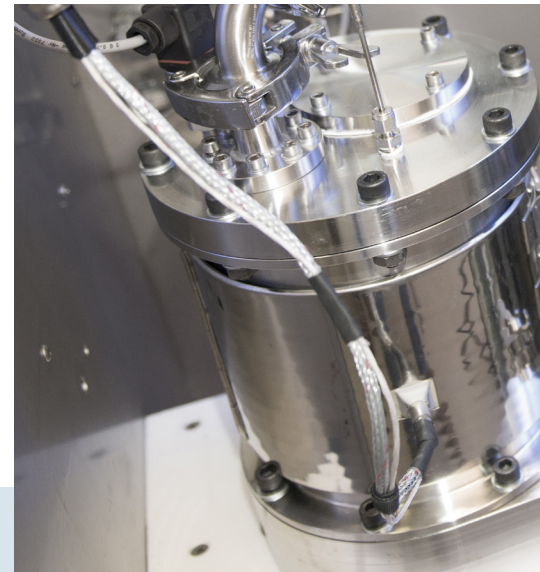
Freecor® BQC

Full organic engine coolant concentrate

Freecor® BQC is a highly cost-efficient OAT (Organic Additive Technology) engine coolant concentrate providing frost and corrosion protection.

Freecor® BQC combines MEG (Mono Ethylene Glycol) as base fluid with a well-balanced fully organic inhibitor package, offering protection to all cooling system components including standard used metals and elastomers.

Freecor® BQC is a cost-effective universal coolant concentrate passing the French and British national standards.



PRODUCT BENEFITS



Protection

- Corrosion protection, also for non-ferrous metals
- Protection against frost damage
- Boiling protection



Robustness

- Cost-effective solution for multiple engine coolant system applications
- Excellent heat transfer properties
- No deposit formation



Miscibility & Compatibility

- Good miscibility
- Seal compatibility
- Hard water stability



Environment, Health and Safety

- Carefully selected additives to reduce environmental impact
- 2-EHA, nitrite, amines and borate free technology
- A waterbased non-classified superconcentrate available: **Freecor® AQI**

Application

Arteco's **Freecor® BQC** can be used in multiple engine cooling system applications.

Freecor® BQC provides year-round frost and corrosion protection. It is recommended to use 50vol% of **Freecor® BQC** in the cooling solution and a minimum of 33vol% to secure corrosion protection properties. This 33% concentration will provide a freezing point down to -17°C. Concentrations higher than 70vol% are not recommended.

When mixing 51.8vol% of **Freecor® BQC** in water, the obtained ready-mix solution meets the ASTM D3306 norm.

Key approvals, standards and specifications

Arteco is renowned to be active in multiple working groups across the globe. This results in:

Freecor® BQC complies with following standards:

- BS 6580:1992
- BS 6580:2010*
- NF-R 15-601

** For product containing 25% or more 1,2 ethane diol (MEG) which is supplied as packaged goods intended for retail to the general public, BS 6580:2010 requires the addition of minimum 25ppm of denatonium benzoate (bitterant), or the package has to be fitted with a childproof closure.*

Freecor® BQC meets the requirements of:

- ASTM D3306-20 Type III for dilutions of 51.8v% and higher
- CUNA NC 956-16
- SAE J1034 for dilutions of 51.8v% and higher
- UNE 26-361-88/1

Toxicity & safety

For toxicity information, safe handling and disposal of the product, we refer to the Safety Data Sheet. This product should not be used to protect the inside of drinking water systems.

Packaging

Arteco's **Freecor® BQC** is available in the following packs & colours:



Bulk



IBC 1000L



Colourless



Blue



Green



Red

Contact details

Should you have questions with regards to Arteco's **Freecor® BQC**, related to available packages or colours or on one of the other Arteco solutions, please do not hesitate to contact your local Area Sales Manager or send your inquiry to info@artecco-coolants.com.

Shelflife & storage requirements

Freecor® BQC can be stored for minimum 3 years in unopened containers without any effect on the product quality or performance. It is strongly recommended to use new, non-translucent containers and where possible packages with a UV-filter. Direct sunlight and high temperatures can degrade the quality of the product. The product should be stored above -20°C and below 35°C. Periods of exposure to temperatures above 35°C should be minimised.

Freecor® BQC is not compatible with galvanized steel.

Compatibility and miscibility

For optimal performance:

- Exclusive use is recommended. Although **Freecor® BQC** is compatible with most other coolants based on ethylene glycol, for getting the full benefits of the product it should not be mixed with other products.
- Use of demineralised water to prepare the ready-to-use dilutions for controlled quality is advised. We refer to our product information leaflet on water quality recommendations.

Addendum - Technical information

Chemical and Physical Properties

Property	Freecor® BQC	Unit	Specification limits		Method
			NF-R 15-601	BS 6580:2010	
Appearance	clear liquid			clear liquid	visual
Colour	optional			optional	visual
Density 20°C	1.109 typ.	kg/l	-	-	ASTM D5931
Refractive Index 20°C	1.427 typ.		report	-	ASTM D1218
Ash content	0.4 typ.	% w/w	-	-	ASTM D1119
Equilibrium boiling point	161 typ.	°C	≥ 155	> 150	ASTM D1120
pH (33vol%)	8.5 typ.		7.0 ≤ pH ≤ 9.5	-	ASTM D1287
pH (50vol%)	8.6 typ.		7.0 ≤ pH ≤ 9.5	-	ASTM D1287
Freezing point (50vol%)	-34.5 typ.	°C	-	-33 max.	ASTM D1177
Reserve Alkalinity (pH 5.5)	3.1 typ.		report	-	ASTM D1121
Foaming properties at 88°C					ASTM D1881
- Foam	43 typ.	ml		50	
- Break time	2 typ.	sec.		5	
Hard water stability	< 0.05 typ.	ml	< 0.05 typ.	< 0.5	NF-R 15-602-6 ASTM D7437

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