

# Freecor® XLC-PG

## OAT technology

**Freecor® XLC-PG** is a propylene glycol based full Organic Additive Technology (OAT) engine coolant that provides year-round frost and boil protection. Carefully chosen additives offer an outstanding performance in oxidation and hard water stability, as well as superior corrosion protection under harsh conditions.

**Freecor® XLC-PG** offers a low toxic coolant suitable for use in both automotive, heavy duty applications and stationary engines.



## PRODUCT BENEFITS



### Superior protection

- Outstanding corrosion performance in both static corrosion as well as in dynamic heat transfer test
- Offers high temperature corrosion resistance of the aluminium heat transfer surfaces contained in modern engines
- Outstanding oxidation and pH stability at high temperatures



### Robustness

- Superior heat transfer proven by testing the coolant under the most stringent conditions leaving more flexibility to engine design
- Suitable for mixed fleets, one coolant for both automotive, heavy duty applications and stationary engines
- Hard water stability avoiding the formation of insoluble deposits



### Environment, health and safety

- Low toxic option thanks to the characteristics of the base fluid
- Carefully selected additives to reduce environmental impact
- 2-EHA, nitrite and borate free technology



### Long life performance

- Extended life secured by the use of virtually non-depleting organic corrosion inhibitors
- Minimal maintenance, saving time & money

## Application

Arteco's **Freecor® XLC-PG** can be used with confidence in engines manufactured from cast iron, aluminium or combinations of the two metals, and in cooling systems comprising aluminium or copper alloys. This coolant is particularly recommended where high temperature aluminium protection is important.

**Freecor® XLC-PG** can be used as a full replacement for Freecor® PGC applications and its respective performance level requirements, for both professional and consumer use.

## Standards

**Freecor® XLC-PG** complies with following standards:

- ASTM D3306
- BS 6580:2010\*  
*\* modified*

**Freecor® XLC-PG** is recommended for:

- DAF
- Deutz
- Iveco
- MAN ES
- Stellantis

For the complete overview and details, please consult [Arteco's Product Finder](#).

## 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® XLC-PG** is available in the following packs & colours:



**Bulk**



**Drum**



**IBC 1000L**



Colourless



Green

## Contact details

Should you have questions with regards to Arteco's **Freecor® XLC-PG**, related to available packages, 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](mailto:info@artecco-coolants.com).

## Shelflife & storage requirements

**Freecor® XLC-PG** can be stored for 12 months in unopened recipients 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. **Freecor® XLC-PG** should be stored above -20°C and below 30°C. Periods of exposure to temperatures above 35°C should be minimised. **Freecor® XLC-PG** is not compatible with galvanized steel.

## Compatibility and mixability

For optimal performance:

- Exclusive use of **Freecor® XLC-PG** is recommended. Although **Freecor® XLC-PG** is compatible with most other coolants based on propylene and ethylene glycol - especially **Freecor® PGC**, for getting the full benefits of the product it should not be mixed with other products.
- The coolant as concentrate needs to be diluted before use in your installations/systems. Use at least 33vol% of **Freecor® XLC-PG** in the coolant solution and follow the dilution recommendation of the manual for your equipment.
- Use of deionised or distilled water to prepare the ready-to-use dilutions for controlled quality is advised. We refer to our product information leaflet on water quality recommendations.

**Freecor® XLC-PG** is compatible with widely and commonly used construction materials such as metals, alloys, rubbers and engineering (thermo)plastics. We refer to our leaflet on Coolant Compatibility with Elastomer and Thermoplastic & Thermosetting Polymers for a more extensive list.

**Addendum - Technical information**

**Chemical and Physical Properties**

Property	Freecor® XLC-PG	Unit	ASTM D3306 requirements	Method
Propylene glycol	91 min.	% w/w	base	
Other glycols	1 max.	% w/w	1% max.	
Inhibitor content	5 typ.	% w/w		
Water content	< 5	% w/w	report	ASTM D1123
Ash content	1.5 max.	% w/w	5% max.	ASTM D1119
Nitrite, nitrate, borate, 2EHA	-			
Relative density (15,6°C)	1.054 typ.		1.030 - 1.065	ASTM D5931
Colour	coloured or uncoloured			
Equilibrium boiling point	160 min.	°C	> 152	ASTM D1120
Reserve Alkalinity (pH 5.5)	5.9 typ.	ml 0.1M HCl	report	ASTM D1121
pH (20°C)	8.6 typ.			ASTM D1287

**Chemical and Physical Properties - Dilutions in water**

	40% dilution	50% dilution	Unit	Method
Freezing point	- 20.8	- 34.5	°C	ASTM D1177
Foaming properties	50 ml/ 3 s (measured on 33v% dilution of concentrate in water)			ASTM D1881
Boiling point	106	109	°C	ASTM D1120
Density (20°C)	1.036	1.043	kg/l	ASTM D1122
Kinematic viscosity (20°C)	4.3	6.1	mm <sup>2</sup> /s	ASTM D445
pH	8.7	8.7		ASTM D1287

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