

QUANTUM[®] Antifreeze Long Life Ready -40 °C G12 Plus

Description and Application

QUANTUM[®] Antifreeze Long Life G12 Plus is ready for use coolant/antifreeze based on ethylene glycol and a silicate-free additive system developed with organic (mono- and di-carboxylic) acids. The product is free from potentially harmful substances such as nitrites, amines and phosphates which makes it environmentally friendly.

Ensures dependable and long term engine protection against freezing and overheating but also against all forms of corrosion for all engine construction material. Except for the conventional engines this antifreeze is especially suitable for high-tech ones because it provides the so vitally crucial high temperature corrosion protection for the aluminium heat transfer surfaces there.

This product guarantees freeze/frost protection at ambient temperatures down to minus 40°C*.

*Note - This temperature is the average value of the Initial Crystallization Temperature value and the Pour Point value. The exact value of the Freezing Temperature is determined in a laboratory. Approximate values can be obtained by refraction meters and hydrometers, calibrated for ethylene glycol based coolants.

QUANTUM[®] Antifreeze Long Life Ready -40°C G12 Plus allow extended drain intervals thanks to the special organic additives used in the formulation and their minimum depletion during service. The recommended drain intervals are as follows:

- Passenger cars - **250,000 km or 2,000 hours**
- Heavy duty trucks, buses and other commercial vehicles - **650,000 km or 8,000 hours**
- Stationary engines - **32,000 hours or 6 years**

Specifications

ASTM	D 3306/D 4340/D4985/D5345
MB	325.3
MAN	324 Type SNF
SAE J	1034
VW	TL774-F (G12+)
VOLVO	1286083
MTU MTL	5048
OPEL	GM 6277M

Typical Characteristics

Parameter	Test Method	Typical Value
Appearance	Visual	Clear fluid
Colour	visual	Pink-red, fluorescent
Relative Density at 15.5°C	ASTM D 1122	1.07
Initial crystallization point, °C	ASTM D 1177	minus 37
pH	ASTM D 1287	8.5
Foaming properties*	ASTM D 1881	
- Foam Volume, ml		10
- Break Time, s		0
Corrosion in Glassware*	ASTM D 1384	
- Weight Loss, mg/specimen		
- Copper		2.0
- Solder		1.0
- Brass		2.0
- Steel		-0.5
- Cast Iron		-1.4
- Aluminium		2.0

** measured on 50 %v/v of Antifreeze concentrate in distilled water *** measured on 33% v/v of Antifreeze concentrate in distilled water



Product Information T6402

Important note: typical data values do not constitute a specification but are an indication based on current production and can be affected by allowable production tolerances. The right to make modifications is reserved.

Health, Safety and Handling

This product is classified as dangerous and requires special labeling. The use of this product should be in accordance with the guidelines for safe handling in the safety data sheet

For more information about product MSDS, terms and conditions for storage and shelf life please visit: www.quantum-oils.com