GLYSANTIN® G64®

GLYSANTIN® G64® is an engine coolant concentrate based on ethylene glycol that needs to be diluted with water before use.
GLYSANTIN® G64® contains a corrosion inhibitor package based on salts of organic acids, phosphate and silicate (PSi-OAT coolant).
GLYSANTIN® G64® is free from nitrites, amines and borates.

Properties

GLYSANTIN® G64® protects engines from corrosion, overheating and frost. It effectively protects engines against corrosion.

GLYSANTIN® G64® protects engines with an elevated temperature profile from the formation of deposits from flux and corrosion in the cooling system with its vital ducts in engine block and cylinder head, the radiator, the heater core and the water pump.

GLYSANTIN® G64® protects heavy duty diesel engines from pitting of wet cylinder liners. It fulfills the ASTM D6210 standard by providing excellent performance in ASTM D7583 John Deere coolant cavitation test.

Product properties are identical for the respective ECO BMB 100 product.

GLYSANTIN® G64® and GLYSANTIN® NA64® are chemically identical; GLYSANTIN® NA64® is the product name for the North American market.

GLYSANTIN® G64® fulfills the requirements of the following coolant standards:

- ASTM D3306, ASTM D4985, ASTM D6210, ASTM D7583, SAE J1034, ÖNORM V 5123, CUNA NC 956-16, PN-C40007:2000, AS 2108-2004, JIS K 2234:2006, SANS 1251:2005, GB 29743-2013 and BS 6580:2010.

Furthermore, GLYSANTIN® G64® is officially approved according to the following OEM standards:

• DEUTZ	• DQC CC-14
• Geely	•
• Huerlimann	•
• Jenbacher	• TA 1000-0200
• Lamborghini-Tractors	•
• MAN Energy Solutions	• for MAN 175D engines
• MWM	• TR 2091
• SDF (SAME DEUTZ-FAHR)	• for all models
• Volvo Cars	• TR-31854114-002

Miscibility

Since the special advantages of GLYSANTIN® G64® will only be achieved when GLYSANTIN® G64® is used exclusively, mixing of GLYSANTIN® G64® with other engine coolants is not recommended.

GLYSANTIN® G64® should be blended with water in a concentration of 33 to 60% by volume prior to use. The usage of a 50/50 ratio for the mixture of water and GLYSANTIN® G64® is generally recommended.

For preparation of the coolant it is recommended to use distilled or deionized water. In most cases tap water is also appropriate.

Analysis values of the water shall not exceed the following threshold values:

Water hardness	0 – 3.6 mmol/L
Chloride content	max. 100 ppm
Sulfate content	max. 100 ppm

Chemical nature	Ethylene glycol with corrosion inhibitors		
Appearance	Clear liquid without solid contaminants		
Physical data	Density at 20 °C	1.124 – 1.128 g/cm³	DIN 51 757
	Boiling point	min 165 °C	ASTM D1120
	Flash point	min 120 °C	DIN ISO 2592
	pH value	8.4 – 8.9	ASTM D1287
	Reserve alkalinity	8.0 – 10.0 mL	ASTM D1121
	Water content	max 5.0 %	DIN 51 777
	Refractive index	1.431 – 1.434	DIN 51 423
	Ash content	max 2.5 %	ASTM D1119
Kinematic viscosity			DIN 51 562
	At -40 °C	1720 mm2/s	
	At -20 °C	250 mm2/s	
	At 0 °C	63 mm2/s	
	At 20 °C	23 mm2/s	
	At 40 °C	11 mm2/s	
	At 80 °C	4 mm2/s	

Frost protection	Freezing point		ASTM D1177
	60 vol% solution	Below -50 °C	
	50 vol% solution	Below -37 °C	
	40 vol% solution	Below -24 °C	
	33 vol % solution	Below -18 °C	
	20 vol% solution	Below -8 °C	
	10 vol% solution	Below -3 °C	
Foaming characteristics	33 vol % solution	max 50 mL / 3 s	ASTM D1881
Stability	Inhibitor stability (168 hrs)	No precipitation	VW TL 774-G
	Hard water stability (10 days)	No precipitation	VW PV 1426
Glassware corrosion test	ASTM D1384		
	Metal coupons	**Typical weight loss (mg/coupon)**	**ASTM D3306 limit (mg/coupon)**
	Copper	0	10 max
	Solder	0	30 max
	Brass	-1	10 max
	Steel	0	10 max
	Cast Iron	1	10 max
	Aluminum	1	30 max
Simulated service corrosion test	ASTM D2570		
	Metal coupons	**Typical weight loss (mg/coupon)**	**ASTM D3306 limit (mg/coupon)**
	Copper	-1	20 max
	Solder	-11	60 max
	Brass	-2	20 max
	Steel	-1	20 max
	Cast Iron	0	20 max
	Aluminum	1	60 max
Heat transfer corrosion test	ASTM D4340		ASTM D3306
	Cast aluminum	-0.06 mg / cm² / week	1.0 max
Cavitation erosion corrosion test	ASTM D2809		ASTM D3306
	Aluminum water pump rating	10	8 min

Coolant cavitation test	ASTM D7583		
	Pit counts	103	200 max

Quality control	The above-listed data represents average values at the time of going to press this Data Sheet. They are intended as a guide to facilitate handling and cannot be regarded as specific data. Specified product data are issued as a separate product specification.
Storage stability	GLYSANTIN® G64® has a shelf life of at least 3 years when stored in originally closed, air-tight containers at temperatures of maximum 30 °C. Do not use galvanized containers for storage.
Color	GLYSANTIN® G64® is usually available in green.

Safety	When using this product, the information and advice given in our Safety Data Sheet should be observed. Due attention should also be given to the precautions necessary for handling chemicals.
Note	The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed. February 2024