



G40® Data Sheet

D/EVO 120 e August 2019
Supersedes edition of March 2019

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GLYSANTIN® G40® is an engine coolant concentrate based on ethylene glycol that needs to be diluted with water before use.

GLYSANTIN® G40® contains a corrosion inhibitor package based on salts of organic acids and silicates (Si-OAT coolant). GLYSANTIN® G40® is free from nitrites, amines, phosphates and borates.

Properties

GLYSANTIN® G40® protects engines against corrosion, overheating and frost. It effectively prevents corrosion and deposits in the cooling system with its vital parts, the coolant channels in engine block and cylinder head, the radiator, the water pump and the heater core.

GLYSANTIN® G40® fulfills the requirements of the following coolant standards:

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

GLYSANTIN® G40® is officially approved by the following OEMs:

- VW / Audi / Seat / Skoda / Lamborghini / Bentley / Bugatti TL 774-G
- Porsche from MY 1996
- Daimler / Mercedes-Benz MB-Approval 325.5 and 325.6
- MAN Truck & Bus MAN 324 Typ Si-OAT
- Cummins CES 14603
- MTU MTL 5048 (selected engines)
- Liebherr Minimum LH-01-COL3A
- DEUTZ DQC CC-14
- IRIZAR, S. COOP from September 2016
- MAN Diesel & Turbo for High Speed MAN175D
- Bundeswehr SY7025 acc. to TL 6850-0038/6



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Miscibility

Since the special advantages of GLYSANTIN[®] G40[®] will only be achieved when GLYSANTIN[®] G40[®] is used exclusively, mixing GLYSANTIN[®] G40[®] with other GLYSANTIN[®] coolants or products from other coolant manufacturers is not recommended.

GLYSANTIN[®] G40[®] should be blended with water in a concentration amongst 33 to 60% by volume prior to infilling. The usage of a 50/50 ratio for the mixture of water and GLYSANTIN[®] is generally advisable.

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 may 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	1.123 – 1.126 g/cm ³	DIN 51 757-3
Boiling point	min 163 °C	ASTM D1120
Flash point	min 120 °C	DIN ISO 2592
pH value	8.2 – 8.6	ASTM D1287
Reserve alkalinity	8.0 – 11.0 mL	ASTM D1121
Water content	max 3.0 %	DIN 51 777-1
Refractive index	1.432 – 1.436	DIN 51 423-2
Ash content	max 2.0 %	ASTM D1119



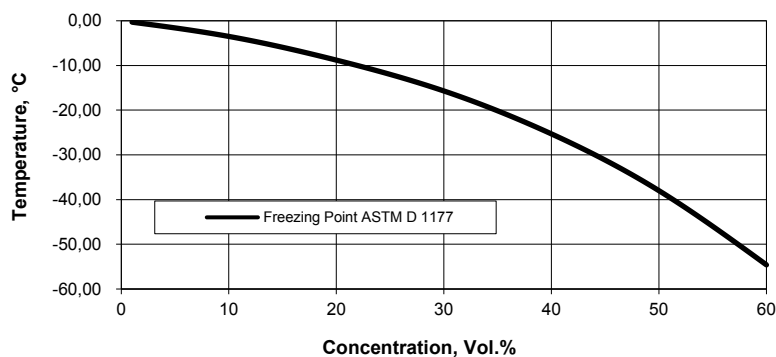
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Stability	Inhibitor stability	no precipitation	VW TL 774-G
	after 168 h		
	Hard water stability	no precipitation-	VW PV 1426
	after 10 days		
Frost protection	Freezing point		ASTM D1177
	50 vol% solution	below -37 °C	
	33 vol% solution	below -18 °C	

Frost Protection of GLYSANTIN[®] G40[®]



Foaming characteristics	33 vol% solution	max 20 mL / 5 mL	VW TL 774-G
	33 vol% solution	max 50 mL / 3 s	ASTM D 1881
Electrical conductivity	At 25°C, undiluted	1.2 mS/cm	ASTM D1125
	At 25°C, 50 vol%	3.8 mS/cm	



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Corrosion Test data

Glassware Corrosion Test

ASTM D1384

Specimen	Typical weight loss mg	ASTM D3306 limit mg
Copper	1	10 max
Solder	0	30 max
Brass	1	10 max
Steel	1	10 max
Cast Iron	4	10 max
Cast aluminum	-2	30 max

Simulated Service Corrosion Test

ASTM D2570

Specimen	Typical weight loss mg	ASTM D3306 limit mg
Copper	2	20 max
Solder	24	60 max
Brass	2	20 max
Steel	1	20 max
Cast Iron	1	20 max
Cast aluminum	0	60 max

Cavitation Erosion Corrosion Test

ASTM D2809

Pump rating	10	min. 8
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Heat Transfer Corrosion Test

ASTM D4340

Corrosion rate	-0.36 mg/cm ² /week	1.0 max
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Glassware Corrosion Test

VW TL 774-G

Metal specimen	typical weight loss g/m ²	VW TL 774-G limit g/m ²
Copper	0.1	3 max
Solder	0.1	3 max
Brass	-0.4	3 max
Steel	-0.1	3 max
Cast iron	-0.1	3 max
GAISi6Cu4	-0.5	2 max
AlSi12	-0.9	2 max
AlMn	-0.4	2 max
GAISi10Mg	-0.7	2 max

Chip/filter paper method

DIN 51 360-2

Concentration	typical rating	VW TL 774-G limit rating
20 vol% solution	4	4 max
40 vol% solution	2	2 max

Quality Control

The above-listed data represent average values at the time of going to press of this Data Sheet. They are intended as a guide to facilitate handling and cannot be regarded as specified data. Specified product data are issued as a separate product specification.

Storage Stability

GLYSANTIN® G40® has a shelf life of at least three years when stored in originally closed, air-tight containers at temperatures of maximum 30 °C. Do not store in direct sunlight. Do not use galvanized containers for storage.

Color

GLYSANTIN® G40® is available in pink only.



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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.

August 2019

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