



G05[®] Data Sheet

D/EVO 016 e March 2017

Supersedes edition of November 2016

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Glysantin[®] G05[®] is an engine coolant concentrate based on ethylene glycol that needs to be diluted with water before use.

Glysantin G05 contains a corrosion inhibitor package with nitrites, borates and silicates. Glysantin G05 is free of amines and phosphates.

Properties

Glysantin G05 protects engines against corrosion, overheating and frost. It gives a high degree of corrosion protection to engine components such as radiators, cylinder blocks/heads and water pumps. Due to its nitrite content this product is especially recommended for use in heavy-duty engines.

Glysantin G05 fulfills the requirements of the following coolant standards: AS 2108-2004, ASTM D 3306, ASTM D 6210, BS 6580:2010, CUNA NC 956-16, AFNOR NFR 15-601, ÖNORM V 5123, SAE J1034, SANS 1251:2005 and China GB 29743-2013.

Additionally, a 50 vol% aqueous solution of Glysantin G05-23 (green) complies with the NATO S-750 specification (A-A-52624A).

Furthermore Glysantin G05 is officially approved according to the following OEM standards:

- | | |
|--------------|---------------|
| • Chrysler | MS-9769 |
| • MTU | MTL 5048 |
| • John Deere | JDM H 24 |
| • Ford | WSS-M97B51-A1 |
| • Cummins | CES 14603 |

Miscibility

Since the special advantages of Glysantin G05 will only be achieved when Glysantin G05 is used exclusively, mixing Glysantin G05 with other Glysantin Coolants or products from other producers is not recommended.

Glysantin G05 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



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Chemical nature

Ethylene glycol with corrosion inhibitors

Appearance

Clear liquid without solid contaminants

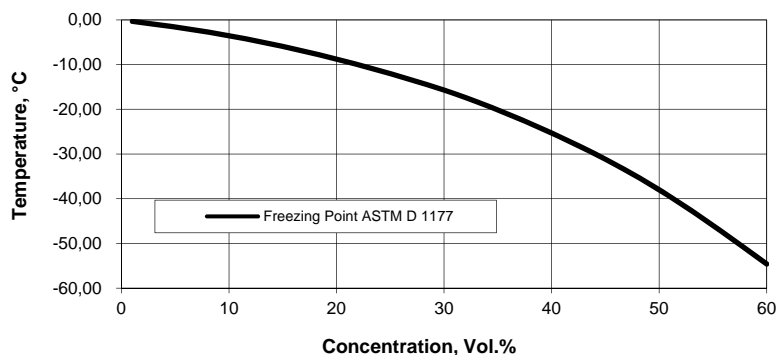
Physical data

Density, 20 °C	1.131 – 1.133 g/cm ³	DIN 51 757-4
Refractive index, 20 °C	1.435 – 1.438	DIN 51 423-2
Boiling point	> 160 °C	ASTM D 1120
Flash point	> 120 °C	DIN EN ISO 2592
pH value	6.0 – 7.0	ASTM D 1287
Reserve alkalinity	15 – 19 ml	ASTM D 1121
Ash content	max. 2.0 %	ASTM D 1119
Water content	max. 3.0 %	DIN 51 777-1

Frost protection

Freezing point		ASTM D 1177
50 vol % solution	below -38 °C	
33 vol % solution	below -18 °C	

Frost Protection of Glystantin[®] G05[®]





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Foaming characteristics	33 vol % solution	max. 50 ml / 3 s	ASTM D 1881
Glassware Corrosion Test	ASTM D 1384		
	Metal coupons	typical weight loss mg/coupon	ASTM D 3306 limit mg/coupon
	Copper	0.0	10 max
	Solder	-0.3 *)	30 max
	Brass	0.6	10 max
	Steel	-0.3 *)	10 max
	Cast iron	0.6	10 max
	Cast aluminum	-2.4 *)	30 max
Heat Transfer Corrosion Test	ASTM D 4340		
		typical corrosion rate mg/cm ² /week	ASTM D 3306 limit mg/cm ² /week
	Cast aluminum	-0.09 *)	1.0 max
Simulated Service Corrosion Test	ASTM D 2570		
	Metal coupons	typical weight loss mg/coupon	ASTM D 3306 limit mg/coupon
	Copper	2.1	20 max
	Solder	1.9	60 max
	Brass	1.2	20 max
	Steel	-1.0 *)	20 max
	Cast iron	-1.1 *)	20 max
	Cast aluminum	1.8	60 max
Cavitation Erosion Corrosion Test	ASTM D 2809		
		Rating	ASTM D 3306 limit Rating
	Aluminum water pump	9	8 min

*) remark: negative values mean a weight gain



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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 G 05 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 use galvanized containers for storage.

Color

Glysantin G05 is usually available in yellow. Different colors may be seen in special cases.

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.

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