



# G34<sup>®</sup> Data sheet

D/EVO 096 e January 2013  
Supersedes edition of November 2008

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Glysantin<sup>®</sup> G34<sup>®</sup> is an engine coolant concentrate based on ethylene glycol that needs to be diluted with water before use.

Glysantin G34 contains a corrosion inhibitor package based on salts of organic acids (OAT-Coolant)  
Glysantin G34 is free from nitrites, amines, phosphates, borates and silicates.

## Properties

Glysantin G34 gives engines an optimum degree of protection against corrosion, overheating and frost.

It contains a blend of inhibitors designed to give a high degree of corrosion protection to cooling system and engine components such as radiators, cylinder blocks/heads and water pumps.

Glysantin G34 is officially approved by GM Europe/Opel according to the following specifications:

- GM 6277 M
- B 040 1065

Furthermore Glysantin G34 fulfills the requirements of the following standards:

ASTM D 3306, ASTM D 4985, SAE J1034, ÖNORM V 5123, SH 0521-1999 and BS 6580:2010.

## Miscibility

Since the special advantages of Glysantin G34 will only be achieved when Glysantin G34 is used exclusively, mixing Glysantin G34 with other Glysantin Coolants or products of other producers is not recommended.

Glysantin G34 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 distilled or deionized water is recommended. 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



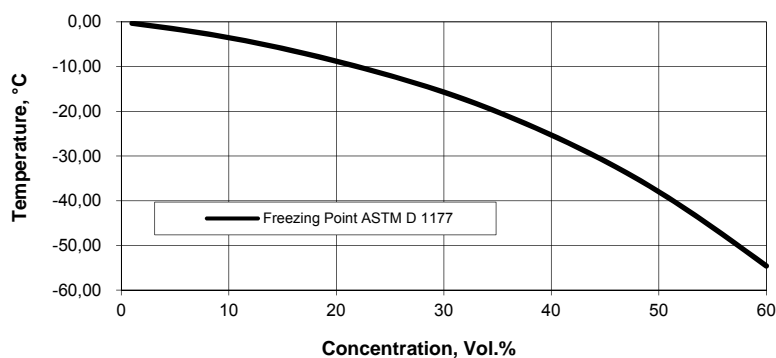
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<b>Chemical nature</b>	Ethylene glycol with corrosion inhibitors		
<b>Appearance</b>	Clear liquid, without solid contaminants		
<b>Physical Data</b>	Density, 20 °C	1.110 – 1.120 g/cm <sup>3</sup>	DIN 51 757-4
	Refractive index, 20 °C	1.431 – 1.435	DIN 51 423-2
	Boiling point	≥ 165 °C	ASTM D 1120
	Flash point	≥ 110 °C	DIN EN ISO 2592
	pH value	8.4 – 9.0	ASTM D 1287
	Reserve alkalinity	3.5 – 5.5 ml	ASTM D 1121
	Water content	3 % max	DIN 51 777-1
<b>Frost protection</b>	Freezing point		ASTM D 1177
	50 vol % solution	below -38 °C	
	33 vol % solution	below -18 °C	

Frost Protection of Glysantin® G34®



<b>pH value</b>	33 vol % solution	7.5 - 8.5	ASTM D 1287
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<b>Foaming characteristics</b>	33 vol % solution	50 ml max / 5 s max	ASTM D 1881
<b>Glassware Corrosion Test</b>	ASTM D 1384	Typical weight loss mg/coupon	ASTM D 3306 limit mg/coupon
	Metal coupons		
	Copper	2	10 max
	Solder	6	30 max
	Brass	3	10 max
	Steel	0	10 max
	Cast iron	0	10 max
	Cast aluminum	0	30 max
<b>Heat Transfer Corrosion Test</b>	ASTM D 4340	Typical corrosion rate mg/cm <sup>2</sup> /week	ASTM D 3306 limit mg/cm <sup>2</sup> /week
	Cast aluminum	0.1	1.0 max
<b>Simulated Service Corrosion Test</b>	ASTM D 2570	Typical weight loss mg/coupon	ASTM D 3306 limit mg/coupon
	Metal coupons		
	Copper	2	20 max
	Solder	5	60 max
	Brass	1	20 max
	Steel	1	20 max
	Cast iron	0	20 max
	Cast aluminum	0	60 max
<b>Cavitation Erosion Corrosion Test</b>	ASTM D 2809	Rating	ASTM D 3306 Rating
	Al-water pump	9	8 min



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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 G34 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 G34 is usually available in orange.

### 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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