

GLYSANTIN® G70™

GLYSANTIN® G70™ is an engine coolant concentrate based on ethylene glycol that needs to be diluted with water before use.
 GLYSANTIN® G70™ contains a corrosion inhibitor package based on salts of organic acids and phosphates (P-OAT coolant).
 GLYSANTIN® G70™ is free of nitrites, amines, borates and silicates.

Properties

GLYSANTIN® G70™ protects engines against corrosion, overheating and frost.

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

GLYSANTIN® G70™ was developed to meet the requirements of Toyota's coolant standard TSK2601G. GLYSANTIN® G70™ is officially approved by Toyota Motor Corporation (TMC) as long life coolant under material code TSK2601G-8A (Class 8A).

Furthermore, GLYSANTIN® G70™ fulfills the performance requirements of the following coolant standards:

- AS 2108-2004, ASTM D 3306, ASTM D 4985, BS 6580:2010, CUNA NC 956-16, AFNOR NFR 15-601, JIS K 2234-2006, ÖNORM V 5123, SAE J1034, SANS 1251:2005 and SH 0521-1999.

Miscibility

Since the special advantages of GLYSANTIN® G70™ will only be achieved when GLYSANTIN® G70™ is used exclusively, mixing GLYSANTIN® G70™ with other GLYSANTIN® coolants or products of other producers is not recommended.

GLYSANTIN® G70™ 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 |
|-------------------|--------------|

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|------------------|--------------|
| 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 at 20 °C | 1.128 – 1.132 g/cm ³ | DIN 51 757-3 |
| Boiling point | 159 – 169 °C | ASTM D1120 |
| Flash point | 110 – 135 °C | DIN ISO 2592 |
| pH at 25 °C, 30 vol % | 7.2 – 7.9 | ASTM D1287 |
| Reserve alkalinity | 10.0 – 16.0 mL | ASTM D1121 |
| Ash content | 2.8 – 3.6 % | ASTM D1119 |
| Water content | 4.0 – 5.0 % | DIN 51 777-1 |

| | | | |
|---|--|---|----------------------------|
| Frost protection | Freezing point | | ASTM D1177 |
| | 50 vol % solution | -35.0 to -37.0 °C | |
| | 30 vol % solution | -14.5 to -16.5 °C | |
| Foaming characteristics | | | TSK2601G |
| | 30 vol % solution | 0 – 2 ml | 4 ml |
| Rubber compatibility | at 80 °C / 168 h 50 vol% solution | 0 to +3 % volume change | |
| | | for typical SBR and EPDM qualities in the same order of magnitude as that of pure water | |
| Metal corrosion prevention | TSK2601G, section 5.12, 30 vol% solution | | |
| | Metal coupon | typical mass change mg/cmÇ | requirements mg/cmÇ |
| | Cast aluminum | +0.01 | within ±0.15 |
| | Cast iron | -0.04 | within ±0.15 |
| | Steel | -0.03 | within ±0.10 |
| | Brass | -0.03 | within ±0.10 |
| | Solder | -0.04 | within ±0.30 |
| | Copper | +0.03 | within ±0.10 |
| | Liquid properties after test | | |
| | liquid phase | no remarkable change | no remarkable change |
| pH change | +0.1 | within ±0.5 | |
| Res. alkalinity change, % | -2.4 | to be reported | |
| Precipitation, vol% | <0.05 | 0.5 max. | |
| Pressurized heating surface corrosion prevention | TSK2601G, section 5.19, 25 vol% solution | | |
| | | typical results | requirements |
| | 170 °C Method | | |
| | Al mass change, mg/cmÇ | +0.07 | within ±1.0 |
| | | | |
| | pH change | -0.04 | within ±1.0 |

| | | | |
|-------------------------------------|---|--|--------------------|
| Service life evaluation test | TSK2601G, section 5.44, 30 vol% solution | | |
| | Metal coupon | typical corrosion rate | requirement |
| | Aluminum radiator | 0.01 * | |
| | Cast aluminum | 0.03 * | |
| | Cast iron | 0.05 * | shall not exceed |
| | Steel | 0.02 * | 0.1 within 672 h |
| | Brass | 0.01 * | |
| | Copper | 0.03 * | |
| | | * corrosion rate between 504 h and 672 h | |
| Quality control | The above data represent average values at the time of going to press of this technical information. They cannot be regarded as specified data. Specified product data are issued as a separate product specification. | | |
| Storage stability | GLYSANTIN® G70™ 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® G70™ is usually available in pink. | | |
| 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 | <p>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.</p> <p>It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed.</p> <p>April 2022</p> | | |

BASF SE

Fuel and Lubricant Solutions
67056 Ludwigshafen, Germany
www.glysantin.de

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