

# Safety data sheet

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BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 19.01.2017

Version: 1.3

Product: **GLYSANTIN® G64® Ready Mix/50 green**

(ID no. 30638731/SDS\_GEN\_EU/EN)

Date of print 28.02.2018

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## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

## **GLYSANTIN® G64® Ready Mix/50 green**

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: engine coolant

### 1.3. Details of the supplier of the safety data sheet

Company:

BASF SE

67056 Ludwigshafen

GERMANY

Fuel and Lubricant Solutions

Telephone: +49 621 60-22068

E-mail address: product-safety-auto-refinery@basf.com

### 1.4. Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

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## SECTION 2: Hazards Identification

### 2.1. Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 [CLP]

Acute Tox. 4 (oral)

STOT RE (Kidney) 2

H302, H373

For the classifications not written out in full in this section the full text can be found in section 16.

## 2.2. Label elements

### Globally Harmonized System, EU (GHS)

Pictogram:



Signal Word:

Warning

Hazard Statement:

H302

Harmful if swallowed.

H373

May cause damage to organs (Kidney) through prolonged or repeated exposure.

Precautionary Statements (Prevention):

P260

Do not breathe dust/gas/mist/vapours.

P270

Do not eat, drink or smoke when using this product.

P264

Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (Response):

P314

Get medical advice/attention if you feel unwell.

P301 + P312

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P330

Rinse mouth.

Precautionary Statements (Disposal):

P501

Dispose of contents/container to hazardous or special waste collection point.

According to Regulation (EC) No 1272/2008 [CLP]

Hazard determining component(s) for labelling: ETHANE-1,2-DIOL/ETHYLENEGLYCOL

## 2.3. Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

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## SECTION 3: Composition/Information on Ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

#### Chemical nature

ethanediol; ethylene glycol, inhibitors, in water

#### Hazardous ingredients (GHS)

according to Regulation (EC) No. 1272/2008

ethanediol; ethylene glycol

Content (W/W): > 40 % - < 50 %

CAS Number: 107-21-1

EC-Number: 203-473-3

REACH registration number: 01-2119456816-28

INDEX-Number: 603-027-00-1

Acute Tox. 4 (oral)

STOT RE (Kidney) 2

H302, H373

For the classifications not written out in full in this section, including the hazard classes and the hazard statements, the full text is listed in section 16.

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## SECTION 4: First-Aid Measures

### 4.1. Description of first aid measures

Immediately remove contaminated clothing. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). First aid personnel should pay attention to their own safety.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:

Immediately wash thoroughly with soap and water, seek medical attention.

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:

Rinse mouth immediately and then drink plenty of water, seek medical attention.

**4.2. Most important symptoms and effects, both acute and delayed**

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Further important symptoms and effects are so far not known.

**4.3. Indication of any immediate medical attention and special treatment needed**

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

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**SECTION 5: Fire-Fighting Measures****5.1. Extinguishing media**

Suitable extinguishing media:  
water spray, dry powder, foam

**5.2. Special hazards arising from the substance or mixture**

harmful vapours

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

**5.3. Advice for fire-fighters**

Special protective equipment:  
Wear a self-contained breathing apparatus.

Further information:

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

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**SECTION 6: Accidental Release Measures****6.1. Personal precautions, protective equipment and emergency procedures**

Use personal protective clothing. Breathing protection required.

**6.2. Environmental precautions**

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

**6.3. Methods and material for containment and cleaning up**

For large amounts: Pump off product.

For residues: Pick up with suitable absorbent material. Dispose of absorbed material in accordance with regulations.

**6.4. Reference to other sections**

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

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## SECTION 7: Handling and Storage

### 7.1. Precautions for safe handling

No special measures necessary provided product is used correctly.

Protection against fire and explosion:

Take precautionary measures against static discharges.

### 7.2. Conditions for safe storage, including any incompatibilities

The product in undamaged packing need not be stored separately.

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

### 7.3. Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

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## SECTION 8: Exposure Controls/Personal Protection

### 8.1. Control parameters

#### Components with occupational exposure limits

107-21-1: ethanediol; ethylene glycol

TWA value 52 mg/m<sup>3</sup> ; 20 ppm (OEL (EU))

indicative

STEL value 104 mg/m<sup>3</sup> ; 40 ppm (OEL (EU))

indicative

Skin Designation (OEL (EU))

The substance can be absorbed through the skin.

### 8.2. Exposure controls

#### Personal protective equipment

Respiratory protection:

Respiratory protection in case of vapour/aerosol release. Particle filter with high efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P3 or FFP3).

Hand protection:

Chemical resistant protective gloves (EN 374)

Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374):

e.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), polyvinylchloride (0.7 mm) and other

Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

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Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is required additionally to the stated personal protection equipment.

Environmental exposure controls

For information regarding environmental exposure controls, see Section 6.

## SECTION 9: Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

Form:	liquid	
Colour:	green	
Odour:	product specific	
Odour threshold:	No applicable information available.	
pH value:	8 (measured with the undiluted substance)	(ASTM D1287)
solidification temperature:	< -35 °C	(capillary tube method)
boiling temperature:	108 °C (1,013 hPa)	(ASTM D1120)
Flash point:	A flash point determination is unnecessary due to the high water content.	
Evaporation rate:	Value can be approximated from Henry's Law Constant or vapor pressure.	
Flammability:	not flammable	
Ignition temperature:	Based on the water content the product does not ignite.	(DIN 51794)
Vapour pressure:	17 mbar (20 °C)	
Density:	1.074 g/cm <sup>3</sup> (20 °C)	(ISO 2811-3)
Solubility in water:	soluble	

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Solubility (qualitative) solvent(s): polar solvents  
soluble  
Self ignition: not self-igniting  
Viscosity, kinematic: approx. 4 mm<sup>2</sup>/s (DIN 51562)  
(23 °C)  
Explosion hazard: not explosive  
Fire promoting properties: not fire-propagating

## 9.2. Other information

Self heating ability: It is not a substance capable of spontaneous heating.

Hygroscopy: Non-hygroscopic

Other Information:

If necessary, information on other physical and chemical parameters is indicated in this section.

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## SECTION 10: Stability and Reactivity

### 10.1. Reactivity

Corrosion to metals: No corrosive effect on metal.

### 10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated.

### 10.3. Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.

### 10.4. Conditions to avoid

Avoid open flames.

### 10.5. Incompatible materials

Substances to avoid:  
strong oxidizing agents

### 10.6. Hazardous decomposition products

Hazardous decomposition products:  
No hazardous decomposition products known.

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## SECTION 11: Toxicological Information

### 11.1. Information on toxicological effects

Acute toxicity

**Assessment of acute toxicity:**

Of moderate toxicity after single ingestion. Of low toxicity after short-term skin contact.

**Experimental/calculated data:**

LD (human) (oral): approx. 1,600 mg/kg

**Irritation****Experimental/calculated data:**

Skin corrosion/irritation rabbit: non-irritant

Serious eye damage/irritation rabbit: non-irritant

**Respiratory/Skin sensitization****Assessment of sensitization:**

Skin sensitizing effects were not observed in animal studies. Human data do not fully exclude a skin sensitizing potential.

**Germ cell mutagenicity**

No data available.

**Carcinogenicity****Assessment of carcinogenicity:**

The whole of the information assessable provides no indication of a carcinogenic effect.

**Reproductive toxicity**

No data available.

**Developmental toxicity**

*Information on: ethanediol; ethylene glycol*

*Assessment of teratogenicity:*

*In animal studies the substance caused malformations when given at high doses.*

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**Specific target organ toxicity (single exposure)**

No data available.

**Repeated dose toxicity and Specific target organ toxicity (repeated exposure)**

*Information on: ethanediol; ethylene glycol*

*Assessment of repeated dose toxicity:*

*The substance may cause damage to the kidney after repeated ingestion. The substance may cause damage to the kidney after repeated skin contact with high doses.*



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Aspiration hazard

No data available.

Other relevant toxicity information

The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

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## SECTION 12: Ecological Information

### 12.1. Toxicity

Toxicity to fish:

LC50 (96 h) > 100 mg/l, *Leuciscus idus*

Aquatic invertebrates:

EC50 (48 h) > 100 mg/l, *Daphnia magna*

Aquatic plants:

EC50 (72 h) > 100 mg/l, algae

Microorganisms/Effect on activated sludge:

Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

### 12.2. Persistence and degradability

Assessment biodegradation and elimination (H<sub>2</sub>O):

The substance can be virtually eliminated from water in suitable effluent treatment plants by biodegradation, stripping and mechanical separation.

*Information on: 1,2-Ethanediol*

*Elimination information:*

*83 - 96 % (14 d) Readily biodegradable.*

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### 12.3. Bioaccumulative potential

Assessment bioaccumulation potential:

No data available.

### 12.4. Mobility in soil

Assessment transport between environmental compartments:

Adsorption in soil: No data available.

### 12.5. Results of PBT and vPvB assessment

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According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

### 12.6. Other adverse effects

The product does not contain substances that are listed in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer.

### 12.7. Additional information

Other ecotoxicological advice:  
Do not release untreated into natural waters.

The product has not been tested. The statement has been derived from the properties of the individual components.

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## SECTION 13: Disposal Considerations

### 13.1. Waste treatment methods

Must be disposed of or incinerated in accordance with local regulations.

Waste key:  
16 01 14<sup>01</sup> antifreeze fluids containing dangerous substances

Contaminated packaging:  
Uncontaminated packaging can be re-used.  
Packs that cannot be cleaned should be disposed of in the same manner as the contents.

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## SECTION 14: Transport Information

### Land transport

ADR

	Not classified as a dangerous good under transport regulations
UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

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**RID**

Not classified as a dangerous good under transport regulations

UN number: Not applicable  
UN proper shipping name: Not applicable  
Transport hazard class(es): Not applicable  
Packing group: Not applicable  
Environmental hazards: Not applicable  
Special precautions for user: None known

**Inland waterway transport****ADN**

Not classified as a dangerous good under transport regulations

UN number: Not applicable  
UN proper shipping name: Not applicable  
Transport hazard class(es): Not applicable  
Packing group: Not applicable  
Environmental hazards: Not applicable  
Special precautions for user: None known

**Transport in inland waterway vessel**

Not evaluated

**Sea transport****IMDG**

Not classified as a dangerous good under transport regulations

UN number: Not applicable  
UN proper shipping name: Not applicable  
Transport hazard class(es): Not applicable  
Packing group: Not applicable  
Environmental hazards: Not applicable  
Special precautions for user: None known

**Air transport****IATA/ICAO**

Not classified as a dangerous good under transport regulations

UN number: Not applicable  
UN proper shipping name: Not applicable  
Transport hazard class(es): Not applicable

Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

#### **14.1. UN number**

See corresponding entries for "UN number" for the respective regulations in the tables above.

#### **14.2. UN proper shipping name**

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

#### **14.3. Transport hazard class(es)**

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

#### **14.4. Packing group**

See corresponding entries for "Packing group" for the respective regulations in the tables above.

#### **14.5. Environmental hazards**

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

#### **14.6. Special precautions for user**

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

#### **14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code**

Regulation:	Not evaluated
Shipment approved:	Not evaluated
Pollution name:	Not evaluated
Pollution category:	Not evaluated
Ship Type:	Not evaluated

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## **SECTION 15: Regulatory Information**

### **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

#### Prohibitions, Restrictions and Authorizations

Annex XVII of Regulation (EC) No 1907/2006: Number on List: 3

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

### **15.2. Chemical Safety Assessment**

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Chemical Safety Assessment not yet performed due to registration timelines

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## SECTION 16: Other Information

### Assessment of the hazard classes according to UN GHS criteria (most recent version)

Acute Tox. 4 (oral)  
STOT RE (Kidney) 2

Full text of the classifications, including the hazard classes and the hazard statements, if mentioned in section 2 or 3:

Acute Tox.	Acute toxicity
STOT RE	Specific target organ toxicity — repeated exposure
H302	Harmful if swallowed.
H373	May cause damage to organs (Kidney) through prolonged or repeated exposure.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

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