

# Safety data sheet

Page: 1/14

---

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

Date / Revised: 12.01.2017

Version: 6.5

Product: **GLYSANTIN® G05® yellow**

(ID no. 30177333/SDS\_GEN\_EU/EN)

Date of print 28.02.2018

---

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

### 1.1. Product identifier

## **GLYSANTIN® G05® yellow**

### 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

---

## 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.

**SECTION 3: Composition/Information on Ingredients****3.1. Substances**

Not applicable

**3.2. Mixtures**Chemical nature

ethanediol; ethylene glycol, inhibitors

This product contains (a) substance(s) included on the candidate list according to article 59 (1,10) of regulation EC No. 1907/2006 ('REACH') in a concentration equal or above 0.1% w/w: disodium tetraborate pentahydrate; borax pentahydrate

Hazardous ingredients (GHS)

according to Regulation (EC) No. 1272/2008

ethanediol; ethylene glycol

Content (W/W): 85 % - 95 %

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

Sodium benzoate

Content (W/W):  $\geq 2\%$  -  $\leq 4\%$ 

CAS Number: 532-32-1

EC-Number: 208-534-8

Eye Dam./Irrit. 2

H319

disodium tetraborate pentahydrate; borax pentahydrate

Content (W/W):  $\geq 1\%$  -  $\leq 2\%$ 

CAS Number: 12179-04-3

EC-Number: 215-540-4

REACH registration number: 01-2119490790-32

Eye Dam./Irrit. 2

Repr. 1B (fertility)

Repr. 1B (unborn child)

H319, H360FD

Specific concentration limit:Repr. 1B:  $\geq 6.5\%$ 

sodium nitrite

---

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

Date / Revised: 12.01.2017

Version: 6.5

Product: **GLYSANTIN® G05® yellow**

(ID no. 30177333/SDS\_GEN\_EU/EN)

Date of print 28.02.2018

Content (W/W): > 0.1 % - < 0.5 %  
CAS Number: 7632-00-0  
EC-Number: 231-555-9  
REACH registration number: 01-2119471836-27

Ox. Sol. 3  
Acute Tox. 3 (oral)  
Eye Dam./Irrit. 2  
Aquatic Acute 1  
M-factor acute: 1  
H272, H319, H301, H400

Differing classification according to current knowledge and the criteria given in Annex I of Regulation (EC) No. 1272/2008

Ox. Sol. 2  
Acute Tox. 3 (oral)  
Eye Dam./Irrit. 2  
Aquatic Acute 1  
H272, H319, H301, H400

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.

---

## SECTION 4: First-Aid Measures

### 4.1. Description of first aid measures

Remove contaminated clothing.

If inhaled:

If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention.

On skin contact:

Wash thoroughly with soap and water.

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. Administer 50 ml of pure ethanol in a drinkable concentration.

### 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: Symptomatic treatment (decontamination, vital functions).

---

---

## SECTION 5: Fire-Fighting Measures

### 5.1. Extinguishing media

Suitable extinguishing media:

dry powder, alcohol-resistant foam, water spray, carbon dioxide

### 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.

---

## SECTION 6: Accidental Release Measures

High risk of slipping due to leakage/spillage of product.

### 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective clothing.

### 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.

---

## SECTION 7: Handling and Storage

### 7.1. Precautions for safe handling

Ensure thorough ventilation of stores and work areas. Shut containers immediately after taking product because product takes up the humidity of air.

Protection against fire and explosion:

Sources of ignition should be kept well clear.

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

Further information on storage conditions: Containers should be stored tightly sealed in a dry place. Storage in galvanized containers is not recommended.

## 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.

---

## 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.

532-32-1: Sodium benzoate

1330-43-4: disodium tetraborate, anhydrous; boric acid, disodium salt

7632-00-0: sodium nitrite

12179-04-3: disodium tetraborate pentahydrate; borax pentahydrate

### 8.2. Exposure controls

#### Personal protective equipment

Respiratory protection:

Suitable respiratory protection for higher concentrations or long-term effect: Gas filter for gases/vapours of organic compounds (boiling point >65 °C, e. g. EN 14387 Type A)

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.

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)

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

Date / Revised: 12.01.2017

Version: 6.5

Product: **GLYSANTIN® G05® yellow**

(ID no. 30177333/SDS\_GEN\_EU/EN)

Date of print 28.02.2018

#### 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

Do not inhale gases/vapours/aerosols. Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended.

#### 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:	yellow	
Odour:	product specific	
Odour threshold:	No applicable information available.	
pH value:	6.0 - 7.0	
solidification temperature:	approx. -15 °C	(DIN ISO 3016)
boiling temperature:	> 160 °C	(ASTM D1120)
Flash point:	117 °C	(DIN EN 22719; ISO 2719)
Evaporation rate:	Value can be approximated from Henry's Law Constant or vapor pressure.	
Flammability:	not flammable	
Lower explosion limit:	2.9 %(V) (20 °C)	(air)
Upper explosion limit:	18.9 %(V) (20 °C)	(air)
Ignition temperature:	445 °C	(DIN 51794)
Vapour pressure:	0.3 hPa (20 °C)	
Density:	1.131 g/cm <sup>3</sup> (20 °C)	
Solubility (qualitative) solvent(s):	polar solvents soluble	
Partitioning coefficient n-octanol/water (log Kow):	Study scientifically not justified.	
Self ignition:	not self-igniting	
Thermal decomposition:	No decomposition if correctly stored and handled.	
Viscosity, kinematic:	20 - 30 mm <sup>2</sup> /s (20 °C)	(DIN 51562)
Explosion hazard:	not explosive	
Fire promoting properties:	not fire-propagating	

## 9.2. Other information

Miscibility with water:

miscible in all proportions

Other Information:

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

---

## SECTION 10: Stability and Reactivity

### 10.1. Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

### 10.2. Chemical stability

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

### 10.3. Possibility of hazardous reactions

The substance/product may react with secondary and tertiary amines to form nitrosamines.

### 10.4. Conditions to avoid

Avoid humidity. Avoid sources of ignition.

### 10.5. Incompatible materials

Substances to avoid:

strong oxidizing agents

### 10.6. Hazardous decomposition products

Hazardous decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

---

## 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

*Information on: sodium nitrite*

*Assessment of carcinogenicity:*

*Under certain conditions the substance can form nitrosamines. Nitrosamines are carcinogenic in animal studies.*

-----

#### 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.*

-----

#### 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.*

-----

#### Aspiration hazard

No aspiration hazard expected.

#### Other relevant toxicity information

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

---

## **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**

Elimination information:

> 70 % DOC reduction (28 d) (OECD 301 A (new version)) Readily biodegradable.

### **12.3. Bioaccumulative potential**

Assessment bioaccumulation potential:

Significant accumulation in organisms is not to be expected.

### **12.4. Mobility in soil**

Assessment transport between environmental compartments:

Adsorption in soil: No data available.

### **12.5. Results of PBT and vPvB assessment**

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**

Adsorbable organically-bound halogen (AOX):  
This product contains no organically-bound halogen.

Other ecotoxicological advice:  
The product has not been tested. The statement has been derived from the properties of the individual components.

Do not release untreated into natural waters.

---

## SECTION 13: Disposal Considerations

### 13.1. Waste treatment methods

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

The waste codes are manufacturer's recommendations based on the designated use of the product. Other use and special waste disposal treatment on customer's location may require different waste-code assignments.

Waste key:  
16 01 14<sup>⊘</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.

---

## 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

#### 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

---

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

Date / Revised: 12.01.2017

Version: 6.5

Product: **GLYSANTIN® G05® yellow**

(ID no. 30177333/SDS\_GEN\_EU/EN)

Date of print 28.02.2018

---

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

---

**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

**15.2. Chemical Safety Assessment**

Chemical Safety Assessment not yet performed due to registration timelines

---

**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
Eye Dam./Irrit.	Serious eye damage/eye irritation
Repr.	Reproductive toxicity
Ox. Sol.	Oxidising solids
Aquatic Acute	Hazardous to the aquatic environment - acute
H302	Harmful if swallowed.
H373	May cause damage to organs (Kidney) through prolonged or repeated exposure.
H319	Causes serious eye irritation.
H360FD	May damage fertility. May damage the unborn child.
H272	May intensify fire; oxidizer.
H301	Toxic if swallowed.
H400	Very toxic to aquatic life.

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.

---

Vertical lines in the left hand margin indicate an amendment from the previous version.