

# Safety data sheet

Page: 1/12

BASF Safety data sheet according to UN GHS 4th rev.

Date / Revised: 04.06.2019 Version: 1.2

Product: Kollisolv® PEG 300

(ID no. 30554046/SDS\_GEN\_00/EN)

Date of print 05.06.2019

## 1. Identification

## **Product identifier**

# **Kollisolv® PEG 300**

Chemical name: polyethylene glycol

CAS Number: 25322-68-3

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

Relevant identified uses: pharmaceutical excipient

# Details of the supplier of the safety data sheet

Company:
BASF SE
67056 Ludwigshafen
GERMANY
Operating Division Nutrition and Health

Telephone: +49 621 60-48434

E-mail address: EN-global-safety-data@basf.com

# **Emergency telephone number**

International emergency number: Telephone: +49 180 2273-112

## 2. Hazards Identification

# Classification of the substance or mixture

According to UN GHS criteria

No need for classification according to GHS criteria for this product.

Date / Revised: 04.06.2019 Version: 1.2

Product: Kollisolv® PEG 300

(ID no. 30554046/SDS\_GEN\_00/EN)

Date of print 05.06.2019

#### Label elements

Globally Harmonized System (GHS)

The product does not require a hazard warning label in accordance with GHS criteria.

#### Other hazards

According to UN GHS criteria

No specific dangers known, if the regulations/notes for storage and handling are considered.

# 3. Composition/Information on Ingredients

#### **Substances**

Chemical nature

polyethylene glycol

CAS Number: 25322-68-3

## **Mixtures**

Not applicable

# 4. First-Aid Measures

# **Description of first aid measures**

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air.

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 and then drink 200-300 ml of water.

# Most important symptoms and effects, both acute and delayed

Date / Revised: 04.06.2019 Version: 1.2

Product: Kollisolv® PEG 300

(ID no. 30554046/SDS\_GEN\_00/EN)

Date of print 05.06.2019

Symptoms: (Further) symptoms and / or effects are not known so far

# Indication of any immediate medical attention and special treatment needed

Treatment: Symptomatic treatment (decontamination, vital functions).

# 5. Fire-Fighting Measures

# **Extinguishing media**

Suitable extinguishing media: water spray, dry powder, foam

## Special hazards arising from the substance or mixture

harmful vapours, carbon oxides

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

## 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.

## 6. Accidental Release Measures

High risk of slipping due to leakage/spillage of product. Forms slippery surfaces with water.

## Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Information regarding personal protective measures, see section 8.

#### **Environmental precautions**

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

# Methods and material for containment and cleaning up

For large amounts: Dike spillage. Pump off product. For residues: Pick up with suitable absorbent material. Dispose of absorbed material in accordance with regulations.

# 7. Handling and Storage

#### Precautions for safe handling

No special measures necessary provided product is used correctly.

Protection against fire and explosion:

Date / Revised: 04.06.2019 Version: 1.2

Product: Kollisolv® PEG 300

(ID no. 30554046/SDS\_GEN\_00/EN)

Date of print 05.06.2019

Take precautionary measures against static discharges.

# Conditions for safe storage, including any incompatibilities

Suitable materials for containers: Low density polyethylene (LDPE), High density polyethylene (HDPE), Stove-lacquer RDL 50, Stainless steel 1.4301 (V2), Stainless steel 1.4306 (V2A), Stainless steel 1.4361, Stainless steel 1.4541, Stainless steel 1.4571, Stainless steel 1.4439

Further information on storage conditions: Containers should be stored tightly sealed in a dry place. Keep container dry because product takes up the humidity of air.

Storage stability:

Storage temperature: <= 25 °C

The packed product is not damaged by low temperatures or by frost.

Protect from temperatures above: 70 °C

The packed product must be protected against exceeding the indicated temperature.

# 8. Exposure Controls/Personal Protection

# **Control parameters**

Components with occupational exposure limits

25322-68-3: Polyethylene glycol

# **Exposure controls**

Personal protective equipment

Respiratory protection:

Respiratory protection in case of vapour/aerosol release. Combination filter for gases/vapours of organic compounds and solid and liquid particles (f.e. EN 14387 Type A-P2)

Hand protection:

Chemical resistant protective gloves (EN 374)

Suitable materials for short-term contact (recommended: At least protective index 2, corresponding > 30 minutes of permeation time according to EN 374)

butyl rubber (butyl) - 0.7 mm coating thickness

nitrile rubber (NBR) - 0.4 mm coating thickness

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)

Body protection:

Date / Revised: 04.06.2019 Version: 1.2

Product: Kollisolv® PEG 300

(ID no. 30554046/SDS\_GEN\_00/EN)

(DIN ISO 2592)

Date of print 05.06.2019

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

Wearing of closed work clothing is recommended. No eating, drinking, smoking or tobacco use at the place of work. Handle in accordance with good industrial hygiene and safety practice.

# 9. Physical and Chemical Properties

# Information on basic physical and chemical properties

Form: liquid
Colour: colourless
Odour: product specific

Odour threshold:

not determined

pH value: 6 - 7

(10 g/l, 23 °C)

solidification temperature: approx. -18 °C

Boiling point: > 250 °C

(1.013 hPa)

Flash point: > 200 °C

Evaporation rate:

Value can be approximated from Henry's Law Constant or vapor

pressure.

Flammability: hardly combustible

Lower explosion limit:

For liquids not relevant for classification and labelling., The lower explosion point may be 5 - 15

°C below the flash point.

Upper explosion limit:

For liquids not relevant for classification and labelling.

Ignition temperature: > 300 °C Vapour pressure: < 0,1 hPa

(20 °C)

Density: approx. 1,13 g/cm3

(20 °C)

approx. 1,08 g/cm3

(75 °C)

Relative density:

No data available.

Relative vapour density (air):

not determined

Solubility in water: soluble

Date / Revised: 04.06.2019 Version: 1.2

Product: Kollisolv® PEG 300

(ID no. 30554046/SDS\_GEN\_00/EN)

Date of print 05.06.2019

Solubility (qualitative) solvent(s): alcohols, aromatic hydrocarbons

soluble

Partitioning coefficient n-octanol/water (log Kow):

not determined

Self ignition: not self-igniting

Thermal decomposition: not determined

Viscosity, dynamic:

not determined

Viscosity, kinematic: approx. 85 mm2/s

(DIN 51562)

(20 °C)

Explosion hazard: not explosive

Fire promoting properties: not fire-propagating

# Other information

Miscibility with water:

miscible in all proportions

Hygroscopy: hygroscopic
Surface tension: approx. 64 mN/m

(20 °C; 0,5%)

Grain size distribution: The substance / product is marketed or used in a non solid or

granular form.

Other Information:

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

# 10. Stability and Reactivity

# Reactivity

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

Corrosion to metals: No corrosive effect on metal.

#### Chemical stability

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

Peroxides: The product does not contain peroxides. The product/the substance has

not a tendency towards the formation of peroxide.

## Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.

## Conditions to avoid

See MSDS section 7 - Handling and storage.

# Incompatible materials

Substances to avoid:

Date / Revised: 04.06.2019 Version: 1.2

Product: Kollisolv® PEG 300

(ID no. 30554046/SDS\_GEN\_00/EN)

Date of print 05.06.2019

atmospheric moisture, acids, bases, oxidizing agents, reactive chemicals

## Hazardous decomposition products

Hazardous decomposition products:

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

# 11. Toxicological Information

# Information on toxicological effects

#### Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic by inhalation. Virtually nontoxic after a single ingestion.

Experimental/calculated data: LD50 rat (oral): > 5.000 mg/kg

rat (by inhalation): 8 h (IRT)

No mortality within the stated exposition time as shown in animal studies.

LD50 rat (dermal): not determined

# **Irritation**

Assessment of irritating effects: Not irritating to eyes and skin.

Experimental/calculated data:

Skin corrosion/irritation rabbit: non-irritant (BASF-Test)

Serious eye damage/irritation rabbit: non-irritant (BASF-Test)

#### Respiratory/Skin sensitization

Assessment of sensitization:

No sensitizing effect.

Experimental/calculated data:

guinea pig: Non-sensitizing.

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

## Germ cell mutagenicity

Assessment of mutagenicity:

Mutagenicity tests revealed no genotoxic potential.

Date / Revised: 04.06.2019 Version: 1.2

Product: Kollisolv® PEG 300

(ID no. 30554046/SDS\_GEN\_00/EN)

Date of print 05.06.2019

### Experimental/calculated data:

Ames-test negative

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

## Carcinogenicity

#### Assessment of carcinogenicity:

The whole of the information assessable provides no indication of a carcinogenic effect. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

## Reproductive toxicity

## Assessment of reproduction toxicity:

The results of animal studies gave no indication of a fertility impairing effect. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

### Developmental toxicity

#### Assessment of teratogenicity:

No indications of a developmental toxic / teratogenic effect were seen in animal studies. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

## Specific target organ toxicity (single exposure)

# Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Remarks: The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

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

Assessment of repeated dose toxicity:

None known

## Aspiration hazard

No aspiration hazard expected.

Date / Revised: 04.06.2019 Version: 1.2

Product: Kollisolv® PEG 300

(ID no. 30554046/SDS\_GEN\_00/EN)

Date of print 05.06.2019

# 12. Ecological Information

## **Toxicity**

Toxicity to fish:

LC50 > 100 mg/l, Leuciscus idus (DIN 38412 Part 15, static)

Aquatic invertebrates:

EC50 (24 h) > 100 mg/l, Daphnia magna (DIN 38412 Part 11)

Aquatic plants: EC50 (72 h), algae not determined

Microorganisms/Effect on activated sludge:

EC10 (16 h) > 10.000 mg/l, Pseudomonas putida (DEV-L2)

Chronic toxicity to fish:

No data available.

Chronic toxicity to aquatic invertebrates:

No data available.

Assessment of terrestrial toxicity:

No data available concerning terrestrial toxicity.

# Persistence and degradability

Assessment biodegradation and elimination (H2O):

Readily biodegradable (according to OECD criteria).

Elimination information:

> 70 % DOC reduction (13 d) (OECD 301 A (new version))

Analogous: Assessment derived from products with similar chemical character.

# **Bioaccumulative potential**

Assessment bioaccumulation potential:

Accumulation in organisms is not to be expected.

# Mobility in soil

Assessment transport between environmental compartments:

Volatility: The substance will not evaporate into the atmosphere from the water surface.

Adsorption in soil: Adsorption to solid soil phase is not expected.

#### Results of PBT and vPvB assessment

Date / Revised: 04.06.2019 Version: 1.2

Product: Kollisolv® PEG 300

(ID no. 30554046/SDS\_GEN\_00/EN)

Date of print 05.06.2019

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

#### Other adverse effects

The product does not contain substances that are listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

## **Additional information**

Sum parameter

Chemical oxygen demand (COD): 1.660 mg/g

Biochemical oxygen demand (BOD) Incubation period 5 d: < 10 mg/g

Biochemical oxygen demand (BOD) Incubation period 30 d: 1.120 mg/g

Add. remarks environm. fate & pathway:

Treatment in biological waste water treatment plants has to be performed according to local and administrative regulations.

Other ecotoxicological advice:

The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations. Do not discharge product into the environment without control.

# 13. Disposal Considerations

## Waste treatment methods

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

Contaminated packaging:

Uncontaminated packaging can be re-used.

Packs that cannot be cleaned should be disposed of in the same manner as the contents.

# 14. Transport Information

## **Land transport**

ADR

Not classified as a dangerous good under transport regulations

UN number: Not applicable

Date / Revised: 04.06.2019 Version: 1.2

Product: Kollisolv® PEG 300

(ID no. 30554046/SDS\_GEN\_00/EN)

Date of print 05.06.2019

UN proper shipping name:
Transport hazard class(es):
Packing group:
Environmental hazards:
Special precautions for

Not applicable
Not applicable
Not applicable
Not applicable
Not applicable

user

**RID** 

Not classified as a dangerous good under transport regulations

UN number:
UN proper shipping name:
Transport hazard class(es):
Packing group:
Environmental hazards:
Special precautions for

Not applicable

user

## **Inland waterway transport**

ADN

Not classified as a dangerous good under transport regulations

UN number:
UN proper shipping name:
Transport hazard class(es):
Packing group:
Environmental hazards:
Special precautions for

Not applicable

user:

# Transport in inland waterway vessel

Not evaluated

## Sea transport

**IMDG** 

Not classified as a dangerous good under transport regulations

UN number:
UN proper shipping name:
Transport hazard class(es):
Packing group:
Environmental hazards:
Special precautions for

Not applicable
Not applicable
Not applicable
Not applicable
Not applicable
Not applicable

user

## Air transport

Date / Revised: 04.06.2019 Version: 1.2

Product: Kollisolv® PEG 300

(ID no. 30554046/SDS\_GEN\_00/EN)

Date of print 05.06.2019

#### IATA/ICAO

Not classified as a dangerous good under transport regulations

UN number:
UN proper shipping name:
Transport hazard class(es):
Packing group:
Environmental hazards:
Special precautions for

Not applicable

user

# 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

# 15. Regulatory Information

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

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

## 16. Other Information

Information on intended use: This product is of industrial quality and unless otherwise specified or agreed intended exclusively for industrial use. This includes the mentioned and recommended usage. Any other intended applications should be discussed with the manufacturer. In particular this concerns the application for products that are the object of special standards and regulations.

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.