

Safety data sheet

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BASF Safety data sheet according to Regulation (EC) No. 1907/2006

Date / Revised: 23.01.2012

Version: 1.1

Product: **Kollisolv® PG**

(ID no. 30554051/SDS_GEN_EU/EN)

Date of print 24.01.2012

1. Identification of the substance/mixture and of the company/undertaking

Product identifier

Kollisolv® PG

Chemical name: Propane-1,2-diol

CAS Number: 57-55-6

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

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International emergency number:

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2. Hazards Identification

Label elements

Globally Harmonized System, EU (GHS)

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

According to Directive 67/548/EEC or 1999/45/EC

as in Annex VI of Directive 67/548/EEC

The product does not require a hazard warning label in accordance with EC Directives.

Classification of the substance or mixture

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

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

According to Directive 67/548/EEC or 1999/45/EC

Possible Hazards:
No particular hazards known.

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.

3. Composition/Information on Ingredients

Substances

Chemical nature

Propane-1,2-diol

CAS Number: 57-55-6
EC-Number: 200-338-0

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 plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms: No significant symptoms are expected due to the non-classification of the product.

Indication of any immediate medical attention and special treatment needed

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

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
carbon dioxide, dry powder, foam, water spray

Special hazards arising from the substance or mixture

Burning produces harmful and toxic fumes.

Advice for fire-fighters

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

Further information:

Contaminated extinguishing water must be disposed of in accordance with official regulations.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Handle in accordance with good industrial hygiene and safety practice.

Environmental precautions

Do not empty into drains.

Methods and material for containment and cleaning up

For large amounts: Pump off product. Dispose of absorbed material in accordance with regulations.
For residues: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr). Dispose of absorbed material in accordance with regulations.

Reference to other sections

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

7. Handling and Storage

Precautions for safe handling

Ensure thorough ventilation of stores and work areas.

Protection against fire and explosion:

Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Unsuitable materials for containers: zinc

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place. Protect from air. Protect from atmospheric humidity. Protect contents from the effects of light.

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.

8. Exposure Controls/Personal Protection

Control parameters

Components with workplace control parameters

none

PNEC

| freshwater: 260 mg/l

| marine water: 26 mg/l

| intermittent release: 183 mg/l

| STP: 20000 mg/l

| sediment (freshwater): 572 mg/kg

| sediment (marine water): 57.2 mg/kg

| soil: 50 mg/kg

DNEL

| worker:

| Long-term exposure- systemic effects, Inhalation: 168 mg/m³

| worker:

| Long-term exposure - local effects, Inhalation: 10 mg/m³

| consumer:

| Long-term exposure- systemic effects, dermal: 213 mg/kg bw/day

| consumer:

| Long-term exposure- systemic effects, Inhalation: 50 mg/m³

| consumer:

| Long-term exposure- systemic effects, oral: 85 mg/kg bw/day

| consumer:

| Long-term exposure - local effects, Inhalation: 10 mg/m³

Exposure controlsPersonal protective equipment

Respiratory protection:

Respiratory protection in case of release of decomposition products.

Hand protection:

Chemical resistant protective gloves (EN 374)

Eye protection:

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

Body protection:

light protective clothing

General safety and hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties**Information on basic physical and chemical properties**

Form:	viscous	
Colour:	colourless, clear	
Odour:	odourless	
Odour threshold:		
	not determined	
pH value:	6.4	
	(500 g/kg, 20 °C)	
Melting point:	-59 °C	
Boiling point:	188.2 °C	
	(1,013 hPa)	
Flash point:	99 °C	(closed cup)
Flammability:	does not ignite	
Lower explosion limit:	2.6 %(V)	
Upper explosion limit:	12.6 %(V)	
Ignition temperature:	371 °C	
	Literature data.	
Vapour pressure:	0.11 hPa	
	(20 °C)	
Density:	1.04 g/cm ³	
	(25 °C)	
Relative density:	1.03	(Directive 92/69/EEC, A.3)
	(20 °C)	
Relative vapour density (air):		
	not determined	
Solubility in water:	Literature data.	(other)
	1,000 g/l	
	(20 °C)	
Solubility (qualitative) solvent(s):	polar solvents	
	soluble	
Partitioning coefficient n-octanol/water (log Kow):	-0.92	

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Self ignition:	Temperature: 20 °C not self-igniting
Thermal decomposition:	not determined
Viscosity, dynamic:	58.1 mPa.s (20 °C)
Explosion hazard:	Based on the chemical structure there is no indicating of explosive properties.
Fire promoting properties:	not fire-propagating

Other information

pKA:	The substance does not dissociate.	
Hygroscopy:	hygroscopic	
Surface tension:	71.6 mN/m (21.5 °C; 1.01 g/l)	(Directive 92/69/EEC, A.5, OECD harmonized ring method)
Grain size distribution:	The substance / product is marketed or used in a non solid or granular form. Study scientifically not justified.	
Molar mass:	76.10 g/mol	

10. Stability and Reactivity**Reactivity**

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

Formation of flammable gases:	Remarks:	Forms no flammable gases in the presence of water., Study scientifically not justified.
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Chemical stability

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

Possibility of hazardous reactions

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

Conditions to avoid

> 40 °C

Avoid humidity. Avoid daylight. Disregard of the conditions mentioned may result in undesirable decomposition reactions.

Incompatible materials

Substances to avoid:

zinc powder - zinc dust (pyrophoric), strong oxidizing agents

Hazardous decomposition products

Possible decomposition products:

carbonyl compounds, Dioxolan derivatives

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.

Experimental/calculated data:

LD50 rat (oral): > 10,400 mg/kg

█ (by inhalation): Study does not need to be conducted.

LD50 rabbit (dermal): 20,800 mg/kg

Irritation

Assessment of irritating effects:

Not irritating to the skin. Not irritating to the eyes.

Experimental/calculated data:

Skin corrosion/irritation rabbit: non-irritant (Draize test)

Serious eye damage/irritation rabbit: non-irritant (OECD Guideline 405)

Respiratory/Skin sensitization

Assessment of sensitization:

Skin sensitizing effects were not observed in animal studies. The substance did not cause skin sensitization in humans.

Experimental/calculated data:

Guinea pig maximization test guinea pig: Non-sensitizing.

Germ cell mutagenicity

Assessment of mutagenicity:

No mutagenic effect was found in various tests with bacteria and mammalian cell culture. The substance was not mutagenic in studies with mammals.

Carcinogenicity

Assessment of carcinogenicity:

The results of various animal studies gave no indication of a carcinogenic effect.

Reproductive toxicity

Assessment of reproduction toxicity:

The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity

Assessment of teratogenicity:

| No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Specific target organ toxicity (single exposure)

Assessment of STOT single:

Based on available Data, the classification criteria are not met.

Aspiration hazard

| not applicable

12. Ecological Information

Toxicity

Assessment of aquatic toxicity:

Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations. There is a high probability that the product is not acutely harmful to aquatic organisms.

Toxicity to fish:

LC50 (96 h) 46,500 mg/l, Pimephales promelas (OECD 203; ISO 7346; 92/69/EEC, C.1, static)

Aquatic invertebrates:

EC50 (48 h) 43,500 mg/l, Daphnia magna (OECD Guideline 202, part 1)

Aquatic plants:

EC50 (72 h) 24,200 mg/l (growth rate), Selenastrum capricornutum (OECD Guideline 201)

Microorganisms/Effect on activated sludge:

EC50 (0.5 h) > 1,000 mg/l, activated sludge (OECD Guideline 209, aquatic)

Chronic toxicity to fish:

| Study scientifically not justified.

Chronic toxicity to aquatic invertebrates:

No observed effect concentration (7 d), 13,020 mg/l, Ceriodaphnia sp.

Assessment of terrestrial toxicity:

| Study does not need to be conducted.

Persistence and degradability

Assessment biodegradation and elimination (H₂O):

Readily biodegradable (according to OECD criteria).

Elimination information:

90 - 100 % DOC reduction (8 d) (OECD 301 A (new version)) (aerobic, activated sludge, domestic)

Bioaccumulative potential

Assessment bioaccumulation potential:

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Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Mobility in soil (and other compartments if available)

Assessment transport between environmental compartments:
Adsorption to solid soil phase is not expected.

Results of PBT and vPvB assessment

According to Annex XIV 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. Self classification

13. Disposal Considerations

Waste treatment methods

Observe national and local legal requirements.

Contaminated packaging:
Untamminated 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

RID

Not classified as a dangerous good under transport regulations

Inland waterway transport

ADN

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Sea transport

IMDG

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Air transport

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IATA/ICAO

Not classified as a dangerous good under transport regulations

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

Any other intended applications should be discussed with the manufacturer. Corresponding occupational protection measurements must be followed.

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. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. 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.