



# Mercedes-Benz

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

**A 000 989 28 25 12 Anticorrosion/antifreeze agent**

Print date 09.03.2018

Revision date 19.12.2017

Version 18

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

### 1.1 Product identifier

Trade name/designation Anticorrosion/antifreeze agent

Partno A 000 989 28 25 12

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

Use of the substance/mixture

Corrosion prevention agent

Anti-freezing agent

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

Supplier

Daimler AG

70546 Stuttgart

DEUTSCHLAND

Telephone +49 (0)711 17-97390

Telefax +49 (0)711 17-94831

E-mail (competent person):  
Mercedes-Benz-SDB@daimler.com

### 1.4 Emergency telephone number

+49 (0)711 17-0

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]	Classification procedure
---	--------------------------

Acute Tox. 4, H302

STOT RE 2, H373

#### hazard statements for health hazards

H302 Harmful if swallowed.

H373 May cause damage to kidneys through prolonged or repeated exposure if swallowed.

### 2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

product identifiers

Trade name/designation Anticorrosion/antifreeze agent

Hazard components for labelling

ethane-1,2-diol

Hazard pictograms



GHS07



GHS08



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## Signal word

Warning

## hazard statements for health hazards

H302 Harmful if swallowed.

H373 May cause damage to kidneys through prolonged or repeated exposure if swallowed.

## Precautionary statements

P102 Keep out of reach of children.

P260 Do not breathe dust/gas/mist/vapours.

P264 Wash hands thoroughly after handling.

P270 Do no eat, drink or smoke when using this product.

P301+P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P311 Call a POISON CENTER/doctor.

P501 Dispose of contents/container in accordance with regional regulations.

## 2.3 Other hazards

### Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

## SECTION 3: Composition / information on ingredients

### 3.1 Substances

not applicable

### 3.2 Mixtures

#### Description

Ethylene glycol with inhibitors

#### Hazardous ingredients

CAS No.	EC No.	Substance name	Concentration	Classification according to Regulation (EC) No 1272/2008 [CLP]
107-21-1	203-473-3	ethane-1,2-diol	> 90 %	Acute Tox. 4 H302
REACH No.		Substance name		
01-2119456816-28		ethane-1,2-diol		

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General information

Remove contaminated, saturated clothing immediately.

#### Following inhalation

Remove casualty to fresh air and keep warm and at rest.

Provide fresh air.

In the event of symptoms refer for medical treatment.

#### Following skin contact

After contact with skin, wash immediately with plenty of water and soap.

#### After eye contact

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

#### After ingestion

Do NOT induce vomiting.

Medical treatment necessary.

Rinse mouth immediately and drink plenty of water.



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## 4.2 Most important symptoms and effects, both acute and delayed

No data available

## 4.3 Indication of any immediate medical attention and special treatment needed

### Notes for the doctor

Treat symptomatically.

First Aid, decontamination, treatment of symptoms.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Foam

Dry extinguishing powder

Water spray jet

#### Unsuitable extinguishing media

High power water jet

### 5.2 Special hazards arising from the substance or mixture

#### Hazardous combustion products

In case of fire formation of dangerous gases possible.

### 5.3 Advice for firefighters

#### Special protective equipment for firefighters:

In case of fire: Wear self-contained breathing apparatus.

#### Additional information

Do not inhale explosion and combustion gases.

Use water spray jet to protect personnel and to cool endangered containers.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

## SECTION 6: Accidental release measures

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

#### For non-emergency personnel

Use personal protection equipment.

Respiratory protection required

#### For emergency responders

Personal protection equipment

Keep away unprotected persons

### 6.2 Environmental precautions

If stretches of water or sewerage systems become polluted, inform the relevant authorities.

Collect contaminated water / firefighting water separately.

Do not allow to enter into surface water or drains.

Do not allow to enter into soil/subsoil.

### 6.3 Methods and material for containment and cleaning up

#### For containment

Collect with spongy material (all-purpose gelation agent) and dispose of in compliance with the regulations.

### 6.4 Reference to other sections

Safe handling: see section 7

Disposal: see section 13

Personal protection equipment: see section 8



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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Protective measures

No special measures are necessary.

Take precautionary measures against static discharges.

Keep the packing dry and well sealed to prevent contamination and absorption of humidity.

Do not inhale gases/vapours/aerosols.

Do not put any product-impregnated cleaning rags into your trouser pockets.

#### Advices on general occupational hygiene

Thorough skin-cleansing after handling the product.

Apply skin care products after work.

When using do not eat, drink, smoke, sniff.

Remove contaminated, saturated clothing immediately.

Keep away from food and drink.

Wash hands before breaks and after work.

Use protective skin cream before handling the product.

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

#### Requirements for storage rooms and vessels

Keep container tightly closed and store at cool and aired place.

#### Storage class

LGK10 Combustible liquids that cannot be assigned to any of the above storage classes

#### Further information on storage conditions

Storage: cool and dry

Protect against:

Humidity

### 7.3 Specific end use(s)

#### Recommendation

See section 1.2

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limit values

CAS No.	EC No.	Substance name	occupational exposure limit value
107-21-1	203-473-3	Ethanol	10 [ml/m <sup>3</sup> (ppm)] 26 [mg/m <sup>3</sup> ] peak limitation 2(l) DFG, EU, H, Y, 11 TRGS 900
107-21-1	203-473-3	Ethylene glycol	20 [ml/m <sup>3</sup> (ppm)] 52 [mg/m <sup>3</sup> ] H: skin resorptive 2000/39/EC
107-21-1		Glikol etylenowy	15 [mg/m <sup>3</sup> ] PiMOSP 1997, z. 17

#### DNEL worker

CAS No.	Substance name	DNEL value	DNEL type	Remark
107-21-1	ethane-1,2-diol	106 mg/kg bw/day	long-term dermal (systemic)	
107-21-1	ethane-1,2-diol	35 mg/m <sup>3</sup>	long-term inhalative (local)	



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## DNEL Consumer

CAS No.	Substance name	DNEL value	DNEL type	Remark
107-21-1	ethane-1,2-diol	7 mg/m <sup>3</sup>	long-term inhalative (local)	
107-21-1	ethane-1,2-diol	53 mg/kg bw/day	long-term dermal (systemic)	

## PNEC

CAS No.	Substance name	PNEC Value	PNEC type	Remark
107-21-1	ethane-1,2-diol	199.5 mg/L	sewage treatment plant (STP)	
107-21-1	ethane-1,2-diol	1 mg/L	aquatic, marine water	
107-21-1	ethane-1,2-diol	10 mg/L	aquatic, freshwater	
107-21-1	ethane-1,2-diol	37 mg/kg	sediment, freshwater	
107-21-1	ethane-1,2-diol	3.7 mg/kg	sediment, marine water	
107-21-1	ethane-1,2-diol	1.53 mg/kg	soil, freshwater	

## 8.2 Exposure controls

### Appropriate engineering controls

#### Technical measures to prevent exposure

Sufficient ventilation and exhaustion.

### Personal protection equipment

#### Eye/face protection

safety goggles with side protection  
DIN EN 166

#### Hand protection

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN374.

Glove materials data [type, thickness, breakthrough time/duration of use, permeation rate]: Butyl rubber, >= 0,7 mm thickness, >30 minutes permeation rate, protection index 2

Glove material specification [make/type, thickness, permeation time/life, wetting resistance]: Nitrile rubber, 0.4 mm coating thickness, for short-term contact/splash

#### Body protection:

Protective clothing

#### Respiratory protection

Respiratory protection necessary at:

aerosol or mist formation

Suitable respiratory protection apparatus:

Filtering device (full mask or mouthpiece) with filter:

A

P

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Physical state

liquid

#### Colour

pink

#### Odour

product-specific



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## Safety relevant basis data

	Value	Method	Source, Remark
Odour threshold:	not determined		
pH	in delivery state 8	ASTM D1287	determinated undiluted
Melting point/freezing point	< -18 °C	DIN ISO 3016	
Initial boiling point and boiling range	> 160 °C pressure 1013 hPa	ASTM D 1120	
Flash point	> 124 °C	EN ISO 2719	
Evaporation rate	not determined		
flammability	solid		not applicable
flammability	gaseous		not applicable
Upper/lower flammability or explosive limits	Upper explosion limit 15.1 Vol-%	DIN 51649-1 (01/2004: replaced by DIN EN 1839)	
Upper/lower flammability or explosive limits	Lower explosion limit 3.4 Vol-%	DIN 51649-1 (01/2004: replaced by DIN EN 1839)	
Vapour pressure	0.2 hPa at °C: 20		
Vapour density	not determined		
Density	1.122- 1.125 g/cm <sup>3</sup> at °C: 20	DIN 51757	
Solubility(ies)	Water solubility (g/L)		very soluble
Solubility(ies)	polar solvents		soluble
Partition coefficient: n-octanol/water			not determined
Auto-ignition temperature			The product is not self-igniting.
Decomposition temperature			not determined
Viscosity	kinematic 20- 30 mm <sup>2</sup> /s at °C: 20	DIN 51562	
Viscosity	dynamic		not determined
Explosive properties:			
Oxidising properties	not determined		The product is not explosive

## 9.2 Other information

### Further safety characteristics

	Value	Method	Source, Remark
Water content (%)			
acid number			

### Other safety information

Product effects hygroscopic.



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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No hazardous reactions with proper storage and handling.

### 10.2 Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

### 10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

### 10.4 Conditions to avoid

Flames, sparks, heat

### 10.5 Incompatible materials

Oxidising agent, strong

### 10.6 Hazardous decomposition products

No hazardous decomposition products known.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

##### Animal data

	Effective dose	Method	Source, Remark
Acute oral toxicity	1600 mg/kg	calculated	
Acute dermal toxicity			No data available
Acute inhalation toxicity			No data available

#### Skin corrosion/irritation

##### Animal data

Result / evaluation	Method	Source, Remark
Not an irritant. Rabbit		

#### Eye damage/irritation

##### Animal data

Result / evaluation	Method	Source, Remark
Not an irritant. Rabbit		

#### Skin sensitisation

##### Animal data

Result / evaluation	Dose / Concentration	Method	Source, Remark
not sensitising.			

#### Germ cell mutagenicity

Value	Method	Result / evaluation	Remark
In vitro mutagenicity/genotoxicity		not mutagenic	

#### Carcinogenicity

##### Animal data

Value	Method	Result / evaluation	Remark
Carcinogenicity		not cancerogenic	



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## STOT-single exposure

### STOT SE 1 and 2

#### Other information

The substance or mixture is not classified as specific target organ toxicant, single exposure.

## STOT-repeated exposure

#### Other information

The material or mixture is classified as toxic to specific target organs, repeated exposure.

Skin contact or swallowing can lead to kidney damage if exposure is prolonged or repeated.

## Aspiration hazard

### Experimental data

	Value	Method	Source, Remark
Viscosity	kinematic 20- 30 mm <sup>2</sup> /s at °C: 20	DIN 51562	
Viscosity	dynamic		not determined

#### Remark

No classification in relation to aspiration toxicity

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Aquatic toxicity

	Effective dose	Method	Source, Remark
Acute (short-term) fish toxicity	LC50: > 100 mg/L Leuciscus idus (golden orfe) Test duration 96 h		
Chronic (long-term) fish toxicity	not determined		
Acute (short-term) toxicity to crustacea	EC50 > 100 mg/L Daphnia magna (Big water flea) Test duration 48 h		
Chronic (long-term) toxicity to crustacea	not determined		
Acute (short-term) toxicity to aquatic algae and cyanobacteria	EC50 > 100 mg/L Test duration 72 h		
Toxicity to other aquatic plants/organisms	not determined		
Toxicity to microorganisms	not determined		

### 12.2 Persistence and degradability

	Value	Method	Source, Remark
Biodegradation	Degradation rate (%): > 70	OECD 301A/ ISO 7827/ EEC 92/69/V, C.4-A	Biodegradable.

### 12.3 Bioaccumulative potential

	Value	Method	Source, Remark
Partition coefficient: n-octanol/water			not determined

#### Assessment/classification

No indication of bioaccumulation potential.



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## 12.4 Mobility in soil

	Value	Distribution	Transport type	Method	Remark
Log KOC					not determined

## 12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

## 12.6 Other adverse effects

### Additional ecotoxicological information

#### Additional information

Do not allow uncontrolled discharge of product into the environment.

Technically correct releases of minimal concentrations to adapted biological sewage plants, will not disturb the biodegradability of activated sludge.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Waste codes/waste designations according to EWC/AVV

Waste code product Waste name

160114 \* antifreeze fluids containing hazardous substances

#### Appropriate disposal / Product

Dispose of waste according to applicable legislation.

#### Appropriate disposal / Package

Non-contaminated packages must be recycled or disposed of.

Handle contaminated packages in the same way as the substance itself.

#### Remark

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

## SECTION 14: Transport information

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1 UN number	-	-	-
14.2 UN proper shipping name	-	-	-
14.3 Transport hazard class(es)	-	-	-
14.4 Packing group	-	-	-
14.5 Environmental hazards	No	No	No

### 14.6 Special precautions for user

No data available

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

### All transport carriers

No dangerous goods as defined by the transport regulations - ADR/RID, IMDG, ICAO/IATA-DGR.

## SECTION 15: Regulatory information

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

#### National regulations

##### Water hazard class (WGK)

slightly hazardous to water (WGK 1)

according to the Ordinance on Facilities for Handling Substances that are Hazardous to Water (AwSV)



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#### Restrictions of occupation

Observe employment restrictions for young people.

#### 15.2 Chemical Safety Assessment

Substance safety analysis was not performed for this mixture.

### SECTION 16: Other information

#### Abbreviations and acronyms

See overview table at [www.euphrac.eu](http://www.euphrac.eu)

#### Key literature references and sources for data

Safety data sheets of suppliers

#### Additional information

Adhere to existing national and local rules referring to chemicals.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.  
Abkürzungen und Akronyme siehe Übersichtstabelle unter [www.euphrac.eu](http://www.euphrac.eu)

#### Relevant R-, H- and EUH-phrases (Number and full text)

H302 Harmful if swallowed.