

### To Our Customers:

The attached Safety Data Sheet (SDS) was prepared by the vendor of the product you purchased through one of our divisions. We used the manufacturer's electronic document directly or scanned a paper copy and generated a file for our automated SDS delivery system.

All statements, technical information, and recommendations contained therein are solely that of the manufacturer of the product. We at Zep Inc. did not verify the accuracy and completeness of the statements and do not warrantee or guarantee the information. We provide vendor SDSs to assist our customers in their compliance efforts. The attached document is in compliance with one of the respective country regulatory requirements noted below:

The OSHA Hazard Communication Standard (in the United States) The Hazardous Products Regulations (in Canada)

We made every effort to deliver all of the information prepared by the manufacturer. We cannot anticipate all conditions under which this information will be used. If you have any questions about the statements on the SDS, please contact the company shown on the document.

Zep Inc. assumes no liability or responsibility for loss or damage resulting from the improper use or handling of this product, from incompatible product combinations, or from the failure to follow instructions, warnings, and advisories in the manufacturer's product label and Safety Data Sheet.

Sincerely,

Product Stewardship Team Zep Inc.



## A 000 989 68 07 09 0109 Anticorrosion / Antifreeze AGENT

Print date 24.04.2021 Revision date 16.04.2021

Version 1

## 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 68 07 09 0109

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

Use

Anti-freezing agent

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

#### Supplier

Mercedes-Benz USA, LLC. One Mercedes-Benz Dr. Sandy Springs, GA 30328-4312 +1 770 705 0600

### Manufacturer

Mercedes-Benz AG

70546 Stuttgart Germany

Telephone +49 (0)711 17-0

### 1.4 Emergency telephone number

+49 (0)711 17-0 gms.daimler.com

## **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 organs (kidneys) through prolonged or repeated exposure.

### 2.2 Label elements

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

product identifiers

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#### Hazard components for labelling

ethanediol

#### Hazard pictograms





GHS07

11307 0113

## Signal word

Warning

### **Hazard statements**

H302 Harmful if swallowed.

H373 May cause damage to organs (kidneys) through prolonged or repeated exposure.

## **Precautionary statements**

P102 Keep out of reach of children.

P260 Do not breathe gas/mist/vapours.

P264 Wash hands thoroughly after handling.

P270 Do not 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

## Hazardous ingredients

CAS No.	EC No.	Substance name	Concentration	Classification according to Regulation (EC) No 1272/2008 [CLP]
107-21-1	203-473-3	ethanediol	≥ 90 ≤ 100 %	Acute Tox. 4 H302 STOT RE 2 H373
DEACH No		Substance name		

REACH No. Substance name 01-2119456816-28 ethanediol

## **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.



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#### Following skin contact

After contact with skin, wash immediately with plenty of water and soap. Consult a doctor if the complaint persists.

#### After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

## After ingestion

Do NOT induce vomiting.
Medical treatment necessary.
Rinse mouth immediately and drink plenty of water.

### 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.

### **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

### Suitable extinguishing media

Foam Carbon dioxide (CO2) 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.



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#### 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

Personal protection equipment: see section 8

Disposal: see section 13

## **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 absorbtion 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

10 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	Ethylene glycol	20 [ml/m3(ppm)] 52 [mg/m3] Short-term(ml/m3) 40 Short-term(mg/m3) 104 H: skin resorptive 2000/39/EC
107-21-1		Ethane-1,2-diol, particulate	10 [mg/m3] (IE)



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CAS No.	EC No.	Substance name	occupational exposure limit value	
107-21-1		Ethane-1,2-diol, vapour	20 [ml/m3(ppm)] 52 [mg/m3] Short-term(ml/m3) 40 (1) Short-term(mg/m3) 104 (1) (IE)	
107-21-1		Ethane-1,2-diol, particulate	10 [mg/m3] (UK)	
107-21-1		Ethane-1,2-diol, vapour	20 [ml/m3(ppm)] 52 [mg/m3] Short-term(ml/m3) 40 Short-term(mg/m3) 104 (UK)	

#### DNEL worker

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

### **DNEL Consumer**

CAS No.	Substance name	DNEL value	DNEL type	Remark
107-21-1	ethanediol	7 mg/m³	long-term inhalative (local	
107-21-1	ethanediol	53 mg/kg	long-term dermal (systemic)	

## **PNEC**

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

## 8.2 Exposure controls

## **Appropriate engineering controls**

## Technical measures to prevent exposure

Sufficient ventilation and exhaustion.

## Personal protection equipment

## Eye/face protection

safety goggles DIN EN 166

### Hand protection

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

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

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.



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## **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

## Safety relevant basis data

Value	Method	Source, Remark
not determined		
approx. 8		
<-18 °C		
> 160 °C pressure 1013 hPa		
> 124 °C		
not determined		
solid		not applicable
gaseous		not applicable
Upper explosion limit 15.1 Vol-%		
Lower explosion limit 3.4 Vol-%		
0.2 hPa (20°C)		
not determined		
1.122- 1.125 g/cm <sup>3</sup> (20	°C)	
Water solubility (g/L)		very soluble
polar solvents		soluble
-1.36		CAS No.107-21-1 ethanediol
		The product is not self-igniting.
		not determined
kinematic 20- 30 mm²/s (20°C)		
	not determined approx. 8  <-18 °C  > 160 °C pressure 1013 hPa  > 124 °C not determined solid  gaseous  Upper explosion limit 15.1 Vol-%  Lower explosion limit 3.4 Vol-%  0.2 hPa (20 °C) not determined 1.122- 1.125 g/cm³ (20 °C) Water solubility (g/L)  polar solvents  -1.36  kinematic	not determined approx. 8 <-18 °C > 160 °C pressure 1013 hPa > 124 °C not determined solid  gaseous  Upper explosion limit 15.1 Vol-%  Lower explosion limit 3.4 Vol-%  0.2 hPa (20 °C) not determined 1.122- 1.125 g/cm³ (20 °C) Water solubility (g/L)  polar solvents -1.36



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Value Method Source, Remark

Explosive properties: The product is not explosive

Oxidising properties not determined

#### 9.2 Other information

## Other safety information

Product effects hygroscopic.

## **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 aldehydes Acid, strong strong alkalis Schwefelverbindungen

## 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	ATEmix calculated: 515.46 mg/kg	calculated	
Acute dermal toxicity	LD50: 9530 mg/kg Rabbit		CAS No.107-21-1 ethanediol
Acute inhalation toxicity	Acute inhalation toxicity (dust/mist) LC50: 10.9 mg/L Rat Exposure time 1 h		CAS No.107-21-1 ethanediol

## Assessment/classification

Harmful if swallowed.

## Skin corrosion/irritation

## Assessment/classification

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

## Eye damage/irritation

## Assessment/classification

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



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#### Sensitisation to the respiratory tract

### Assessment/classification

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

### Skin sensitisation

#### Assessment/classification

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

### **Overall Assessment on CMR properties**

The classification criteria have not been met according to the available data.

### STOT-single exposure

### STOT SE 1 and 2

## Assessment/classification

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

### STOT SE 3

## Irritation to respiratory tract

### Assessment/classification

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

### **Narcotic effects**

## Assessment/classification

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

### STOT-repeated exposure

### **Animal data**

	Effective dose	Method	Specific effects:	Organs affected:	Source, Remark
Oral specific target organ toxicity (repeated exposure)	CAS No.107-21- 1 ethanediol NOEL(C): 150 mg/kg bw/day Rat Exposure time 52 Wochen Exposure frequency 7 d/w	OECD 452		kidney	
Dermal specific target organ toxicity (repeated exposure)	CAS No.107-21- 1 ethanediol NOAEL(C): >2200< 4400 mg/kg bw/day Hund Exposure time 4 Wochen Exposure frequency 7 d/w	OECD 410			

## Assessment/classification

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

### **Aspiration hazard**

## **Experimental data**

	Value	Method	Source, Remark
Viscosity	kinematic 20- 30 mm²/s (20°C)		

## Assessment/classification

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



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## **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 durarion 96 h		
Chronic (long-term) fish toxicity	NOEC 32000 mg/L Pimephales promelas (fathead minnow) Test durarion 7 d		CAS No.107-21-1 ethanediol
Acute (short-term) toxicity to crustacea	EC50 > 100 mg/L Daphnia magna (Big water flea) Test durarion 48 h		
Chronic (long-term) toxicity to crustacea	NOEC 24000 mg/L Daphnia magna (Big water flea) Test durarion 7 d		CAS No.107-21-1 ethanediol
Acute (short-term) toxicity to aquatic algae and cyanobacteria	EC50 > 100 mg/L Test durarion 72 h		
Toxicity to other aquatic plants/organisms	not determined		
Toxicity to microorganisms	not determined		

### Assessment/classification

The substance/mixture does not fullfill the criteria of the acute aquatic toxicity according to Regulation (EC) No 1272/2008 [CLP], Annex I.

## 12.2 Persistence and degradability

	Value	Method	Source, Remark
Biodegradation	Degradation rate (%): 90- 100	OECD 301A/ ISO 7827/ EEC 92/69/V, C.4-A	CAS No.107-21-1 ethanediol
		, , , ,	Easily biodegradable
12.3 Bioaccumulative potential			
	Value	Method	Source, Remark
Partition coefficient: n- octanol/water	-1.36		CAS No.107-21-1 ethanediol

## Assessment/classification

No indication of bioaccumulation potential.

## 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.



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#### **SECTION 13: Disposal considerations**

### 13.1 Waste treatment methods

#### 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

Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).

VOC-value 0 %

## 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)

#### Restrictions of occupation

Observe national legislation regarding professional restrictions.

Observe employment restrictions for young people.

Observe employment restrictions for mothers-to-be and nursing mothers.

#### 15.2 Chemical Safety Assessment

Substance safety analysis was not performed for this mixture.

## **SECTION 16: Other information**

## Indication of changes

Current safety data sheets are available at: http://gms.aftersales.daimler.com



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#### Abbreviations and acronyms

See overview table at www.euphrac.eu

#### Key literature references and sources for data

Safety data sheets of suppliers

## Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

The mixture is classified according to the available hazard data for the constituents as defined in the classification criteria for mixtures for each hazard class in Appendix I of Regulation (EC) No 1272/2008.

### **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

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

H302 Harmful if swallowed.

H373 May cause damage to organs through prolonged or repeated exposure.