



A 002 986 04 71 Metal dust remover

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Version 18

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

1.1 Product identifier

Trade name/designation Metal dust remover

Partno A 002 986 04 71

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

Use
cleaner

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
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

Met. Corr. 1, H290

Skin Corr. 1B, H314

Eye Dam. 1, H318

hazard statements for physical hazards

H290 May be corrosive to metals.

hazard statements for health hazards

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

2.2 Label elements

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

product identifiers

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Hazard components for labelling

oxalic acid, ortho-phosphoric acid

Hazard pictograms



GHS05

Signal word

Danger

Hazard statements

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

Precautionary statements

P102 Keep out of reach of children.

P234 Keep only in original container.

P260 Do not breathe mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P390 Absorb spillage to prevent material damage.

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

P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P405 Store locked up.

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

Other labelling

Labelling for contents according to regulation (EC) No. 648/2004:

< 5% non-ionic surfactants

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

Aqueous solution.

Hazardous ingredients

| CAS No. | EC No. | Substance name | Concentration | Classification according to Regulation (EC) No 1272/2008 [CLP] |
|------------|-----------|---|---------------|--|
| 144-62-7 | 205-634-3 | oxalic acid | 5 < 10 % | Acute Tox. 4 H302 Acute Tox. 4 H312 Eye Dam. 1 H318 |
| 7664-38-2 | 231-633-2 | ortho-phosphoric acid | 5 < 10 % | Skin Corr. 1B H314 Met. Corr. 1 H290 Acute Tox. 4 H302 |
| 68920-66-1 | 500-236-9 | alcohols, C16-18 and C18-unsatd., ethoxylated | 1 < 2.5 % | Skin Irrit. 2 H315 |



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| REACH No. | Substance name |
|------------------|-----------------------|
| 01-2119534576-33 | oxalic acid |
| 01-2119485924-24 | ortho-phosphoric acid |

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Remove contaminated, saturated clothing immediately.

Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

Following inhalation

Provide fresh air.

In case of inhaling spray mist, consult a physician.

Following skin contact

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

Medical treatment necessary.

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.

Call a physician immediately.

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

All quenching agents are suitable.

Use extinguishing media appropriate for surrounding fire.

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.

Wear full chemical protective clothing.

Additional information

The product itself does not burn.

Co-ordinate fire-fighting measures to the fire surroundings.

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

Avoid skin and eye contact.

For emergency responders

Provide adequate ventilation.

Personal protection equipment

Keep away unprotected persons

Use breathing apparatus if exposed to vapours/dust/aerosol.

6.2 Environmental precautions

Do not allow to enter into surface water or drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Do not allow to enter into soil/subsoil.

6.3 Methods and material for containment and cleaning up

For containment

Take up with absorbent material (e.g. sand, kieselguhr, acid binder, general-purpose binder, sawdust).

After taking up the material dispose according to regulation.

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

Always close containers tightly after the removal of product.

Do not inhale aerosols

Provide for appropriate ventilation/aspiration at the work station

Avoid:

generation/formation of aerosols

Eye contact

Skin contact

Advices on general occupational hygiene

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

Remove contaminated, saturated clothing immediately.

Keep away from food and drink.

Use protective skin cream before handling the product.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Suitable floor material:

Acid-resistant

Keep/Store only in original container.

Unsuitable container/equipment material:

Light metal

Suitable container/equipment material:

Polyethylene (PE)

Storage class

LGK8B Non-combustible corrosive substances

Materials to avoid

Do not store together with:

Oxidising agent

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Further information on storage conditions

Store only at temperature of 15°C minimum (=59°F).

Store only at temperature of 30°C maximum (=86°F).

Protect against:

Frost

Heat

UV-radiation/sunlight

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 |
|-----------|-----------|----------------------|--|
| 7664-38-2 | 231-633-2 | Orthophosphoric acid | 1 [mg/m ³] Short-term(mg/m ³) 2 2000/39/EC |
| 144-62-7 | 205-634-3 | Oxalic acid | 1 [mg/m ³] 2006/15/EC |
| 7664-38-2 | | Orthophosphoric acid | 1 [mg/m ³] Short-term(mg/m ³) 2 (1) (IE) |
| 144-62-7 | | Oxalic acid | 1 [mg/m ³] (IE) |
| 7664-38-2 | | Orthophosphoric acid | 1 [mg/m ³] Short-term(mg/m ³) 2 (UK) |
| 144-62-7 | | Oxalic acid | 1 [mg/m ³] Short-term(mg/m ³) 2 (UK) |

DNEL worker

| CAS No. | Substance name | DNEL value | DNEL type | Remark |
|-----------|-----------------------|------------------------|--|--------|
| 7664-38-2 | ortho-phosphoric acid | 10.7 mg/m ³ | long-term inhalative (systemic) | |
| 7664-38-2 | ortho-phosphoric acid | 2 mg/m ³ | acute inhalative (local) | |
| 144-62-7 | oxalic acid | 2.29 mg/kg bw/day | acute dermal, short-term (systemic) | |
| 144-62-7 | oxalic acid | 4.03 mg/kg bw/day | acute inhalative (systemic) | |

PNEC

| CAS No. | Substance name | PNEC Value | PNEC type | Remark |
|----------|----------------|--------------|---------------------------------|--------|
| 144-62-7 | oxalic acid | 0.1622 mg/L | aquatic, freshwater | |
| 144-62-7 | oxalic acid | 0.01622 mg/L | aquatic, marine water | |
| 144-62-7 | oxalic acid | 1500 mg/L | sewage treatment plant (STP) | |

8.2 Exposure controls**Appropriate engineering controls****Technical measures to prevent exposure**

Sufficient ventilation and exhaustion.



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Personal protection equipment

Eye/face protection

tightly fitting goggles
DIN EN 166

Hand protection

Glove material specification [make/type, thickness, permeation time/wearing time, wetting resistance]: butyl rubber, material thickness 0.5 mm, permeation time min. 8 h

Glove material specification [make/type, thickness, permeation time/wearing time, wetting resistance]: fluorine rubber, material thickness 0.4 mm, permeation time min. 8 h

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.

Body protection:

Required properties:
acid-resistant

Respiratory protection

Respiratory protection necessary at:

insufficient ventilation
aerosol or mist formation

Suitable respiratory protection apparatus:

Self-contained respirator (breathing apparatus) (DIN EN 133)

Filtering device (full mask or mouthpiece) with filter:

B

P

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state

liquid

Colour

colourless
clear

Odour

odourless

Safety relevant basis data

| | Value | Method | Source, Remark |
|--|---|--------|----------------|
| Odour threshold: | | | not determined |
| pH | in delivery state 1 (20°C) Concentration 1000 g/L | | |
| Melting point/freezing point | | | not determined |
| Initial boiling point and boiling range | | | not determined |
| Flash point | | | not applicable |
| Evaporation rate | | | not determined |
| flammability | solid | | not applicable |
| flammability | gaseous | | not applicable |
| Upper/lower flammability or explosive limits | Upper explosion limit | | not applicable |

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| | Value | Method | Source, Remark |
|--|---------------------------------|--------|------------------------------|
| Upper/lower flammability or explosive limits | Lower explosion limit | | not applicable |
| Vapour pressure | | | not determined |
| Vapour density | | | not determined |
| Density | 1.076 g/cm ³ (15 °C) | | |
| Solubility(ies) | Water solubility (g/L) | | completely miscible |
| Partition coefficient: n-octanol/water | | | not applicable |
| Auto-ignition temperature | | | not determined |
| Decomposition temperature | | | not determined |
| Viscosity | kinematic | | not determined |
| Viscosity | dynamic | | not determined |
| Explosive properties: | | | The product is not explosive |
| Oxidising properties | not determined | | |

9.2 Other information**Further safety characteristics**

| | Value | Method | Source, Remark |
|-------------------|-------|--------|----------------|
| Water content (%) | 83 % | | |

Other safety information

none

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

Reactions with various metals.

Reactions with strong alkalies.

10.4 Conditions to avoid

High temperatures

insolation

frost

10.5 Incompatible materials

Light metals

Oxidising agent, strong

10.6 Hazardous decomposition productsPhosphorus oxides (e.g. P₂O₅)**Additional information**

No risk of production of decomposition products when appropriately handled and stored



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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Animal data

| | Effective dose | Method | Source, Remark |
|---------------------------|---|--------|--|
| Acute oral toxicity | LD50: 375 mg/kg Rat | | CAS No.144-62-7 oxalic acid |
| Acute dermal toxicity | LD50: 2740 mg/kg Rabbit | | CAS No.7664-38-2 ortho-phosphoric acid |
| Acute inhalation toxicity | LC50: 850 mg/L Rat Exposure time 2 h | | CAS No.7664-38-2 ortho-phosphoric acid |

Assessment/classification

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

Skin corrosion/irritation

Assessment/classification

Corrosive.

Eye damage/irritation

Assessment/classification

Corrosive.

Causes serious eye damage.

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.

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

Assessment/classification

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

Aspiration hazard

Experimental data

| | Value | Method | Source, Remark |
|-----------|-----------|--------|----------------|
| Viscosity | kinematic | | not determined |
| Viscosity | dynamic | | not determined |

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Remark

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

Additional information

Risk of strong health injuries in case of long-term exposition.

Swallowing will cause severely chemical burns to the mouth and throat and may perforate the esophagus and stomach.

Corrosive effect on skin and mucous membranes

SECTION 12: Ecological information**12.1 Toxicity****Aquatic toxicity**

| | Effective dose | Method | Source, Remark |
|--|---|----------|--|
| Acute (short-term) fish toxicity | LC50: 3- 3.25 mg/L Lepomis macrochirus (Bluegill) Test duration 96 h | | CAS No.7664-38-2 ortho-phosphoric acid |
| 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 | OECD 202 | CAS No.7664-38-2 ortho-phosphoric acid |
| Chronic (long-term) toxicity to crustacea | not determined | | |
| Acute (short-term) toxicity to aquatic algae and cyanobacteria | EC50 > 100 mg/L Desmodesmus subspicatus Test duration 72 h | OECD 201 | CAS No.7664-38-2 ortho-phosphoric acid |
| Acute (short-term) toxicity to aquatic algae and cyanobacteria | NOEC 100 mg/L Desmodesmus subspicatus Test duration 72 h | OECD 201 | CAS No.7664-38-2 ortho-phosphoric acid |
| Toxicity to other aquatic plants/organisms | not determined | | |
| Toxicity to microorganisms | not determined | | |

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

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

12.4 Mobility in soil

| | Value | Distribution | Transport type | Method | Remark |
|---------|-------|--------------|----------------|--------|----------------|
| Log KOC | | | | | not applicable |

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 product to reach ground water, water course or sewage system.

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SECTION 13: Disposal considerations**13.1 Waste treatment methods****Waste codes/waste designations according to EWC/AVV**

Waste code packaging Waste name

150110 * packaging containing residues of or contaminated by hazardous substances

Appropriate disposal / Product

Dispose of waste according to applicable legislation.

Appropriate disposal / Package

Empty (emptied with remainders) container are contaminated and must be disposed of by experts or consigned to an authorised reconditioning. Waste code: 150110 (EAK)

Remark

Send to a hazardous waste incinerator facility under observation of official regulations.

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 | 1805 | 1805 | 1805 |
| 14.2 UN proper shipping name | PHOSPHORIC ACID SOLUTION | PHOSPHORIC ACID SOLUTION | Phosphoric acid, solution |
| 14.3 Transport hazard class(es) | 8 | 8 | 8 |
| 14.4 Packing group | III | III | III |
| 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

Land transport (ADR/RID)

| | |
|----------------------------|--------------------------|
| UN number | 1805 |
| UN proper shipping name | PHOSPHORIC ACID SOLUTION |
| Transport hazard class(es) | 8 |
| Hazard label(s) | 8 |
| Classification code: | C1 |
| Packing group | III |
| Environmental hazards | No |
| Limited quantity (LQ) | 5 L |
| Special Provisions | - |
| tunnel restriction code | E |

Remark

Transport as "limited quantity" according to chapter 3.4 ADR/RID

Sea transport (IMDG)

| | |
|----------------------------|--------------------------|
| UN number | 1805 |
| UN proper shipping name | PHOSPHORIC ACID SOLUTION |
| Transport hazard class(es) | 8 |
| Packing group | III |



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| | |
|-----------------------|----------|
| Environmental hazards | No |
| Limited quantity (LQ) | 5 L |
| Marine pollutant | - |
| EMS | F-A, S-B |

Remark

EmS-No. F-A,S-B

Air transport (ICAO-TI / IATA-DGR)

| | |
|----------------------------|---------------------------|
| UN number | 1805 |
| UN proper shipping name | Phosphoric acid, solution |
| Transport hazard class(es) | 8 |
| Packing group | III |
| Environmental hazards | No |

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)

Restrictions of occupation

Observe national legislation regarding professional restrictions.

Observe employment restrictions for young people.

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>

Abbreviations and acronyms

See overview table at 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.

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

| | |
|------|--|
| H290 | May be corrosive to metals. |
| H302 | Harmful if swallowed. |
| H312 | Harmful in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |