Powering Business Worldwide

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

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

1.1. Product identifiers L(+) Tataric Acid REACH registration No.: 01-2119537204-47-xxxx The substance does not require registration according to Regulation (EC) No 1207/2006 [REACH]: X

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Produktmanagement

Only available during office hours.

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

Use of the substance/ preparation: Product for Winetreatment.

1.3. Details of the supplier of the safety data sheet Supplier (manufacturer/importer/ E. Begerow GmbH & Co.

| Supplier (manufacturer/importer/ | E. Begerow GmbH |
|----------------------------------|------------------|
| downstream user/distributor): | |
| | Hydraulics Group |

Telephone: Telefax: E-mail (competent person): Dept. responsible for information:

Information telephone:

Emergency telephone:

1.4. Emergency telephone number Dept. responsible for information:

Emergency medical information: Giftinformationszentrum Mainz (German and English). + 49 (6131) 19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP):

Causes serious eye damage.

Classification according to Directive 67/548/EEC or 1999/45/EC:

Risk of serious damage to eyes.

Further remarks:

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

2.2. Label elements

Labelling (67/548/EEC or 1999/45/EC):

Hazard symbol(s) and hazard identifier(s) for dangerous materials and preparations:

Xi



R phrases:

| R phrases | |
|-----------|---------------------------------|
| R41 R | Risk of serious damage to eyes. |

S-phrases:

| S-phrases | |
|-----------|-----------------------------------|
| S24/25 | Avoid contact with skin and eyes. |

Labelling (CLP)

Hazard pictograms: GHS05



Signal word: Danger

Hazard statements:

| Hazard statements: | |
|--------------------|----------------------------|
| H318 | Causes serious eye damage. |

Safety precautions:

| Safety precautions: | |
|---------------------|--|
| P264.1 | Wash hands thoroughly after handling. |
| P280.6 | Wear eye protection/face protection. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P337+P313 | If eye irritation persists: Get medical advice/attention. |

2.3. Other hazards

SECTION 3: Composition / Information on ingredients

3.1. Substances

3.2. Mixtures

Hazardous ingredients:

| CAS No. | EC No | Chemical name:/ REACH registration No. | of (%) | up to (%) | Unit/ Content | Hazard symbol(s) | R phrases | INDEX no. |
|---------|-------|---|--------|--------------|------------------|------------------|-----------|--------------|
| 87-69-4 | | (+)-tartaric acid | 100 | | % | Xi | 41 | 201-766-00-0 |

Full text of R-phrases: see section 16.

Labelling (CLP):

| CAS No. | EC No | Chemical name:/ REACH registration No. | Hazard pictograms | Signal word | Hazard statements |
|---------|-------|---|-------------------|-------------|-------------------|
| 87-69-4 | | (+)-tartaric acid | GHS05 | Danger | 318 |

Full text of H-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

| Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) | | | | | |
|--|--------------------------------------|--|--|--|--|
| L(+) Tataric Acid | | | | | |
| Revision date: 25.08.2010 / 05.09.2012 | Version: 2 Date of print: 08.10.2013 | | | | |

After inhalation:

Provide fresh air. In case of respiratory tract irritation, consult a physician.

In case of skin contact:

Subsequently wash off with: Water.

In case of skin irritation, consult a physician.

Take off immediately all contaminated clothing.

In case of eye contact:

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

After ingestion:

Induce vomiting when the affected person is not unconscious. Rinse mouth immediately and drink plenty of water. Immediately get medical attention.

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

Irritant.

Gastrointestinal complaints.

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

Information to physician:

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water. Atomized water. Foam. Extinguishing powder. Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons:

High power water jet.

5.2. Special hazards arising from the substance or mixture

Special exposure hazards arising from the substance or preparation itself, its combustion products or from resulting gases:

In case of fire may be liberated: Carbon monoxide. Carbon dioxide (CO2).

5.3. Advice for firefighters

Special protective equipment for firefighters:

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

Additional information:

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Dispose of waste according to applicable legislation.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:

Avoid generation of dust. Provide adequate ventilation.

6.1.2. For emergency responders

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up:

Take up mechanically. Avoid generation of dust. Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advices on safe handling:

Conditions to avoid Dust deposits. Generation/formation of dust

Dust must be exhausted directly at the point of origin.

Precautions against fire and explosion:

Take precautionary measures against static discharges. Explosive dust-air mixtures may form. Dust explosion category: St 1; minimum ignition energy in mJ: 10; Ignition temperature in °C: 510 °C;

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Suitable floor material: Acid-resistant.

Keep/Store only in original container.

Hints on joint storage:

Do not store together with: Base. Oxidizing agents

Further information on storage conditions:

Keep container tightly closed in a cool, well-ventilated place. Keep container dry. **Storage class:** 11

7.3. Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Components with occupational exposure limits rsp. biological occupational exposure limits requiring monitoring:

Remarks:

not relevant

8.2. Exposure controls

8.2.1. Appropriate engineering controls Technical measures:

To follow: Avoid generation of dust. Dust must be exhausted directly at the point of origin.

8.2.2. Personal protective equipment

Respiratory protection: Respiratory protection necessary at/for: dust formation

Suitable respiratory protection apparatus: Filtering device (DIN EN 147). P 1

Hand protection: Suitable gloves type:

Suitable material: Butyl caoutchouc (butyl rubber).

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time (maximum wearing period): > 120 min (EN 374)

Eye protection: Eye glasses.

Body protection:

Protect skin by using skin protective cream.

General protection and hygiene measures:

Avoid contact with skin and eyes. Do not breathe dust.

When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work.

8.2.3. Environmental exposure controls:

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Physical state: | Powder, crystalline |
|-----------------|---------------------|
| Colour: | colourless |
| Odour: | odourless |

Important health, safety and environmental information:

| | | | | Unit | | | | Method |
|--------------------------------------|-------|---|------|-------|------|----|----------|---------------------|
| pH: | 2,2 | | | | at℃ | 25 | 1470 g/L | |
| Boiling temperature / boiling range: | 179,1 | | | °C | | | - | |
| Melting point / melting range: | 168 | - | 170 | °C | | | | |
| Flash point (°C): | > 100 | | | °C | | | | |
| Ignition temperature in °C: | 375 | | | °C | | | | 1013 hPa NFT 20-036 |
| Explosion limits (LEL, | 35 | | | g/cm³ | | | | |
| UEL): | | | | | | | | |
| Density: | 1,76 | | | g/ml | | | | |
| Bulk density: | 800 | - | 1100 | kg/m³ | | | | |
| Water solubility (g/l): | 1390 | | | g/l | at ℃ | 20 | | |

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

Substance is, under normal conditions, chemically stable.

10.3. Possibility of hazardous reactions

Explosive dust-air mixtures may form.

10.4. Conditions to avoid

Keep away from heat.

10.5. Incompatible materials

Reacts with : Alkalis (alkalis). Acid. Oxidizing agents

10.6. Hazardous decomposition products

This article doesn't contain dangerous substances or preparations intended to be released under normal or reasonably foreseeable conditions of use.

SECTION 11: Toxicological information

11.1. Information on toxicological effects Acute toxicity: Rat. Acute toxicity, oral, LC 0: 7500 mg/kg Acute toxicity, oral, NOAEL: 2460 mg/kg bw/d (chronic) Acute toxicity, dermal LC50: >2000 mg/kg bw (OECD 402) Acute toxicity, oral LC50: >2000 mg/kg bw (OECD 423) Acute toxicity, oral, NOAEL: 2460 mg/kg bw/d (tertogenicity) Irritant and corrosive effects: Serious eye damage/eye irritation: OECD 437: Risk of serious damage to eyes. Skin corrosion/irritation: OECD 404 Not an irritant. (Rabbit.) Sensitisation: OECD 429: not sensitising. Repeated dose toxicity: not determined CMB effects (carcinogenicity mutagenicity and toxicity for reproduction):

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction): not determined

Additional information:

not determined

SECTION 12: Ecological information

12.1. Toxicity

Aquatic toxicity:

Acute fish toxicity LC50: (96h): > 100 mg/l (OECD 203) Algae toxicity EC50: (72h): 51,4 mg/l (OECD 201) Acute Daphnia toxicity Daphnia magna, EC50: (48h): 93,13 mg/l (OECD 202) **Terrestrial toxicity:** not determined **Effects in sewage plants:**

Product is acid. Before discharge into sewage plants the product normally needs to be neutralised.

12.2. Persistence and degradability

12.3. Bioaccumulative potential

log Kow: -1,91

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects

General information:

According to the present state of knowledge negative ecological effects are not expected.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recommendation:

The disposal of the product has to be carried out in accordance with the legal requirements. EWC waste codes are strictly industry-oriented, therefore waste classification has to be done by the waste producer.

Recommendation:

Dispose of waste according to applicable legislation. This material and its container must be disposed of as hazardous waste.

Contaminated packaging:

Recommendation:

Non-contaminated packages may be recycled.

SECTION 14: Transport information

14.1. Land transport (ADR/RID)

14.2. Inland waterway craft (ADN/ADNR)

14.3. Sea transport (IMDG)

14.4. Air transport (ICAO-TI / IATA-DGR)

14.5. Additional information:

No dangerous good in sense of these transport regulations.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Water Hazard Class: 1 **Source:** S Selbsteinstufung

Technische Anleitung Luft (TA-Luft):

Ziffer:

5.2.1

Other regulations (EU):

1967/548 (1999/45); 1991/689 (2001/118); 1999/13; 2004/42; 648/2004; 1907/2006; 1272/2008; 75/324/EWG; (2008/47); 435/2010.

Transport information : ADR/RID (2011); IMDG-CODE-Class: (2011, 35. Amdt.); Air transport (ICAO-TI / IATA -DGR) (2012)

National regulations GefStoffV 2010; WRMG; WHG; TRG 300; TRGS: 200, 615, 900, 905, 220, 400

For this substance a chemical safety assessment has been carried out.

15.2. Chemical Safety Assessment

SECTION 16: Other information

Further remarks:

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.

Further remarks:

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Relevant R-and H-phrases (Number and full text):

| R phrases | |
|-------------------|---------------------------------|
| R41 | Risk of serious damage to eyes. |
| | |
| Hazard statements | |
| H318 | Causes serious eve damage |