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

· 1.1 Product identifier

· Trade name: Lactic acid 80 %

· Article number: 5552

· **Registration number** 01-2119474164-39

· **UFI:** EUCW-206F-R00S-SPD7

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

No further relevant information available.

· Application of the substance / the mixture Preservative

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Möller Chemie GmbH & Co. KG

Bürgerkamp 1 D-48565 Steinfurt Tel.: 02551/9340-0 Fax: 02551/9340-60

· Further information obtainable from: Product safety department

· 1.4 Emergency telephone number:

Poison Control Center Mainz - 24 hour emergency service - Tel.: +49 (0) 6131/19240

### SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Skin Corr. 1C H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

- · 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms



GHS05

- · Signal word Danger
- · Hazard statements

H314 Causes severe skin burns and eye damage.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

Read carefully and follow all instructions.

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

Specific treatment (see on this label). P321

P405 Store locked up.

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

· 2.3 Other hazards

The product does not contain any substance above the legal limits included on the list for endocrine disrupting properties established under Article 59(1) of Regulation (EC) No 1907/2006 or under Commission (Contd. on page 2)

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Delegated Regulation (EU) 2017/2100 or of Commission Regulation (EU) 2018/605 has endocrine disrupting properties.

- · Results of PBT and vPvB assessment
- · PBT:

The product does not contain any substances above legal limits that meet the criteria for PBT (persistent, bioaccumulative and toxic).

vPvB:

The product does not contain any substances above legal limits that meet the criteria for vPvB (very persistent and very bioaccumulative).

## SECTION 3: Composition/information on ingredients

- · 3.2 Mixtures
- · **Description:** Mixture: consisting of the following components.
- Dangerous components:

CAS: 79-33-4 L-Lactic acid (2-hydroxy propionic acid) 📀 Skin Corr. 1C, H314; Eye Dam. 1, H318, EUH071 80.0%

EINECS: 201-196-2

Index number: 607-743-00-5

## SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · After inhalation: Supply fresh air, consult doctor in case of complaints.
- · After skin contact:

In case of contact with the skin, take off soiled, soaked clothing immediately and wash the skin immediately with plenty of water and soap.

If skin irritation continues, consult a doctor.

· After eye contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.

Seek medical treatment.

- · After swallowing: Do not induce vomiting; call for medical help immediately.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- · 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

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

- · 5.1 Extinguishing media
- · Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray.
- · 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- · 5.3 Advice for firefighters
- · **Protective equipment:** Wear self-contained respiratory protective device.

### SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Particular danger of slipping on leaked/spilled product.

Wear protective equipment. Keep unprotected persons away.

Avoid contact with eyes and skin

· 6.2 Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform the responsible authorities if larger quantities are released.

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

Absorb with liquid-binding material (sand, diatomaceous earth, acid binder, universal binder, sawdust). Dispose contaminated material as waste according to section 13.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## SECTION 7: Handling and storage

#### · 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Avoid contact with eyes and skin.

When diluting always pour product into water and not vice versa.

- · Information about fire and explosion protection: Keep away from sources of ignition No smoking.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Keep container tightly closed Keep us in a cool, well-ventilated place.

Information about storage in one common storage facility:

Store away from oxidising agents.

Do not store together with alkalis (caustic solutions).

- · Further information about storage conditions: Protect from heat and direct sunlight.
- · Storage class: 8A
- · 7.3 Specific end use(s) No further relevant information available.

## SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· DNELs

79-33-4 L-(+)-lactic acid

Population:

Oral: 35.4 mg/kg bw/day (acute, systemic effects)

Inhalation: 296 mg/m³ (acute, local effects)

Worker:

Inhalation: 592 mg/m³ (acute, local effects)

· PNECs

Water (fresh water): 1.3 mg/l

STP (sewage treatment plant): 10 mg/l

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Appropriate engineering controls No further data; see section 7.
- · Individual protection measures, such as personal protective equipment
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Do not breathe vapors or spray mist.

• Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.

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# Safety data sheet according to 1907/2006/EC, Article 31

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#### · Hand protection



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

# · Material of gloves

Butyl rubber, BR

Fluorocarbon rubber (Viton)

Nitrile rubber, NBR Natural rubber, NR

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

### Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye/face protection



Tightly sealed goggles

· Body protection: Acid resistant protective clothing

### SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information

· Colour: colorless to yellow

· Odour: Mild

• Melting point/freezing point: Undetermined.

· Boiling point or initial boiling point and boiling

range 110-130 °C
• Flash point: not applicable
• Decomposition temperature: >200 °C

 $\cdot pH(100 \, g/l) \, at \, 20 \, {}^{\circ}C$ 

· Solubility

· water: Fully miscible.

· Density and/or relative density

• **Density at 20 °C:** 1.22 g/cm<sup>3</sup>

9.2 Other information

· Appearance:

· Form: Fluid

· Important information on protection of health and

environment, and on safety.

• Ignition temperature: Product is not selfigniting.

• Explosive properties: Product does not present an explosion hazard.

· Information with regard to physical hazard classes

Explosives
Flammable gases
Aerosols
Oxidising gases
Void
Void

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| · Gases under pressure                       | Void |
|--|------|
| · Flammable liquids                          | Void |
| · Flammable solids                           | Void |
| · Self-reactive substances and mixtures      | Void |
| · Pyrophoric liquids                         | Void |
| · Pyrophoric solids                          | Void |
| Self-heating substances and mixtures         | Void |
| · Substances and mixtures, which emit flamma | ble  |
| gases in contact with water                  | Void |
| Oxidising liquids                            | Void |
| · Oxidising solids                           | Void |
| · Organic peroxides                          | Void |
| · Corrosive to metals                        | Void |
| · Desensitised explosives                    | Void |
|  |      |

## SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: Avoid temperatures above 220 °C.
- · 10.3 Possibility of hazardous reactions

Reacts with alkali (lyes).

Reacts with oxidising agents.

- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials:

Strong oxidizing agents

Strong bases

· 10.6 Hazardous decomposition products: Irritant gases/vapours

## SECTION 11: Toxicological information

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Based on available data, the classification criteria are not met.
- LD/LC50 values relevant for classification:

LD50/oral/rat: 3790 mg/kg

LD50/dermal/rabbit > 2000 mg/kg

· Skin corrosion/irritation

Causes severe skin burns and eye damage.

· Serious eye damage/irritation

Causes serious eye damage.

- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.
- · 11.2 Information on other hazards
- · Endocrine disrupting properties

None of the ingredients is listed.

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# SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity:

LC50/96 h: 320 mg/l (Brachydanio rerio) EC50/48 h: 240 mg/l (Daphnia magna)

IC50/72 h: 3500 mg/l (Selenastrum capricomutum)

- · 12.2 Persistence and degradability Easily biodegradable
- · 12.3 Bioaccumulative potential Keine wesentliche Bioakkumulation
- · 12.4 Mobility in soil No further relevant information available.
- · 12.5 Results of PBT and vPvB assessment
- · PBT: This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).
- · vPvB: The product is not considered to be persistent or very bioaccumulative (vPvB).
- · 12.6 Endocrine disrupting properties For information on endocrine disrupting properties see section 11.
- · 12.7 Other adverse effects
- · Additional ecological information:
- · General notes: Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

## **SECTION 13: Disposal considerations**

- · 13.1 Waste treatment methods
- · Recommendation Disposal according to local regulations.
- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

| 14.1 UN number or ID number<br>ADR, IMDG, IATA | UN3265  |
|--|---|
| 14.2 UN proper shipping name<br>ADR            | 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (L-Lactic acid (2-hydroxy propionic acid)) |
| · IMDG, IATA                                   | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (1<br>Lactic acid (2-hydroxy propionic acid))   |
| 14.3 Transport hazard class(es)                |   |
| ADR  |   |
| Class  | 8 (C3) Corrosive substances.  |
| · Label  | 8   |
| IMDG, IATA                                     |   |
| Class  | 8 Corrosive substances.   |
| Label  | 8   |
| 14.4 Packing group                             |   |
| ADR, IMDG, IATA                                | III   |

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|   | (Contd. of page                                   |
|---|---|
| 14.5 Environmental hazards:                     | Not applicable.                                   |
| 14.6 Special precautions for user               | Warning: Corrosive substances.                    |
| Hazard identification number (Kemler code):     | 80  |
| EMS Number:                                     | F- $A$ , $S$ - $B$                                |
| Segregation groups                              | (SGG1) Acids                                      |
| Stowage Category                                | $\overline{A}$                                    |
| Stowage Code                                    | SW2 Clear of living quarters.                     |
| Segregation Code                                | SG36 Stow "separated from" SGG18-alkalis.         |
|   | SG49 Stow "separated from" SGG6-cyanides          |
| 14.7 Maritime transport in bulk according to IM | 10  |
| instruments                                     | Not applicable.                                   |
| Transport/Additional information:               |   |
| ADR   |   |
| Limited quantities (LQ)                         | 5L  |
| Excepted quantities $(EQ)$                      | Code: E1  |
|   | Maximum net quantity per inner packaging: 30 ml   |
|   | Maximum net quantity per outer packaging: 1000 ml |
| Transport category                              | 3   |
| Tunnel restriction code                         | E   |
| IMDG  |   |
| Limited quantities (LQ)                         | 5L  |
| Excepted quantities (EQ)                        | Code: E1  |
|   | Maximum net quantity per inner packaging: 30 ml   |
|   | Maximum net quantity per outer packaging: 1000 ml |
| UN "Model Regulation":                          | UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC         |
|   | N.O.S. (L-LACTIC ACID (2-HYDROXY PROPIONIC        |
|   | ACID)), 8, III                                    |

## **SECTION 15: Regulatory information**

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has been carried out.

## SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

EUH071 Corrosive to the respiratory tract.

- · Department issuing SDS: Product safety department
- · Contact: Mrs. Steyer
- · Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

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ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the

International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH) LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Skin Corr. 1C: Skin corrosion/irritation – Category 1C Eye Dam. 1: Serious eye damage/eye irritation – Category 1