

Lactic Acid (80%)

Revision date: 14.10.2008 / 10.10.2012 Version: 2 Date of print: 08.10.2013



## 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

##### Lactic Acid (80%)

REACH registration No.: 02-2119474164-39-xxxx

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

Use of the substance/ preparation: Food and fodder additive

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

Supplier (manufacturer/importer/  
downstream user/distributor): Eaton Technologies GmbH

Begerow Product Line  
An den Nahewiesen 24  
55450 Langenlonsheim

Telephone: +49 6704 204-0

Telefax: +49 6704 204-121

E-mail (competent person): SDB@Eaton.com

Dept. responsible for information: Produktmanagement  
Only available during office hours.

Information telephone: +49 6704 204-0

#### 1.4. Emergency telephone number

Dept. responsible for information: Emergency medical information: Giftinformationszentrum Mainz  
(German and English).

Emergency telephone: + 49 (6131) 19240

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

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

Causes skin irritation.

Causes serious eye damage.

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

Irritating to skin.

Risk of serious damage to eyes.

#### 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	
R38	Irritating to skin.
R41	Risk of serious damage to eyes.

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**S-phrases:**

S-phrases	
S23	Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
S24/25	Avoid contact with skin and eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S39	Wear eye/face protection.

**Special provisions concerning the labelling of certain mixtures:****Labelling (CLP)**

Hazard pictograms: GHS05



Signal word: Danger

**Hazard statements:**

Hazard statements:	
H315	Causes skin irritation.
H318	Causes serious eye damage.

**Safety precautions:**

Safety precautions:	
P264.1	Wash hands thoroughly after handling.
P280.6	Wear eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
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 or doctor/ physician.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.

**2.3. Other hazards****SECTION 3: Composition / Information on ingredients****Chemical characterization (preparation):**

2-Hydroxypropionsäure

**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.
79-33-4		l-(+)-lactic acid	80		%	Xi	38-41	201-196-02-0

Full text of R-phrases: see section 16.

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**Labelling (CLP):**

CAS No.	EC No	Chemical name:/ REACH registration No.	Hazard pictograms	Signal word	Hazard statements
79-33-4		l-(+)-lactic acid	GHS05	Danger	315-318

Full text of H-phrases: see section 16.

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information:**

First aider: Pay attention to self-protection!

**After inhalation:**

Provide fresh air. In case of respiratory tract irritation, consult a physician. If victim is at risk of losing consciousness, position and transport on their side.

**In case of skin contact:**

After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.

Remove contaminated clothing immediately and dispose of safely.

**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. Protect uninjured eye.

**After ingestion:**

Do not induce vomiting. Rinse mouth immediately and drink plenty of water. Immediately get medical attention.

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

Irritant.

**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:**

The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

Carbon dioxide (CO<sub>2</sub>). Atomized water. Alcohol resistant foam. Extinguishing powder.**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 (CO<sub>2</sub>). Pyrolysis products, toxic.**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**

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**Personal precautions:**

Remove persons to safety. Wear personal protection equipment. Wear breathing apparatus if exposed to vapours/dusts/aerosols. Provide adequate ventilation. Special danger of slipping by leaking/spilling product.

**6.1.2. For emergency responders****6.2. Environmental precautions**

Prevent spread over a wide area (e.g. by containment or oil barriers). Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

**6.3. Methods and material for containment and cleaning up****Methods for cleaning up:**

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). 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**

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**7.1. Precautions for safe handling****Advices on safe handling:**

Keep container tightly closed. Provide for sufficient ventilation and punctiform suction at critical points.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storerooms and containers:**

The floor should be leak tight, jointless and not absorbent.

Suitable floor material: Material, acid-resistant

Keep only in the original container in a cool, well-ventilated place.

**Hints on joint storage:**

Do not store together with: Acid. Base. Oxidising agent.

**Further information on storage conditions:**

Keep container tightly closed.

Protect against: Heating UV-radiation/sunlight.

Storage temperature: of °C: +15 up to °C: 25..

**Storage class:** 12

**7.3. Specific end use(s)**

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**SECTION 8: Exposure controls/personal protection**

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**8.1. Control parameters**

**Components with occupational exposure limits resp. biological occupational exposure limits requiring monitoring:**

**Remarks:**

DNEL/DMEL

Consumer. Human, inhalative, short term: 296 mg/m<sup>3</sup>

Professional Human, inhalative, short term: 592 mg/m<sup>3</sup>

**8.2. Exposure controls****8.2.1. Appropriate engineering controls****Technical measures:**

Provide for sufficient ventilation and punctiform suction at critical points.

**8.2.2. Personal protective equipment**

**Respiratory protection:** Respiratory protection necessary at/for: aerosol or mist formation

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

**Hand protection:** 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.

**Suitable material:** Butyl caoutchouc (butyl rubber).

**Penetration time (maximum wearing period):** > 480 min

**Eye protection:** Tightly sealed safety glasses.

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**Body protection:**

Take off immediately all contaminated clothing.

**General protection and hygiene measures:**

Avoid contact with skin, eyes and clothes.

Protect skin by using skin protective cream.

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:** liquid**Colour:** colourless - light yellow**Odour:** odourless - fruity**Important health, safety and environmental information:**

		Unit		Method
pH:	- 2		at °C 20	10 %
Boiling temperature / boiling range:	110 - 130	°C		100%
Melting point / melting range:	18	°C		
Explosion limits (LEL, UEL):	n.a.			
Flammability:	<i>not applicable</i>			
Spontaneously flammable:	<i>not applicable</i>			
Oxidizing characteristics:	No.			
Explosivity:	<i>not applicable</i>			
Density:	1,4 - 1,22	g/cm <sup>3</sup>		
Partition coefficient n-octanol /water (log P O/W):	0,62			

**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**

Reacts with : Alkalis (alkalis). Oxidising agent, strong. Acid.

**10.4. Conditions to avoid**

Heating

**10.5. Incompatible materials**

Reacts with : Alkalis (alkalis). Oxidising agent, strong.

**10.6. Hazardous decomposition products**

not known.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects**

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**Acute toxicity:**

CAS No.	Chemical name	LD50: oral	Unit	Species	LD50: dermal	Unit	Species	LC50: inhalat iv	Unit	Species
79-33-4	l-(+)-lactic acid	3730	mg/kg	Rat.	> 2000	mg/kg	Rabbit.	n.b		

CAS No.	Chemical name	Method: oral	Method: dermal	Method: inhalativ	h	Remark
79-33-4	l-(+)-lactic acid	IUCLID	IUCLID			

**Irritant and corrosive effects:**

Irritant effect on the skin: irritant. Rabbit.

Irritant effect on the eye: strongly irritant. Risk of serious damage to eyes.

**Sensitisation:**

not determined

**Repeated dose toxicity:**

not determined

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):**

not determined

**Additional information:**

The usual precautionary measures are to be adhered to when handling chemicals.

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

Acute Daphnia toxicity

Daphnia magna EC50: 130 mg/l 48 h

Algae toxicity

Pseudokirchneriella subcapitata ErC50: 2800 mg/l 72h

Acute fish toxicity

Brachydanio rerio (zebrafish) LC50: 320 mg/l 96h

**Terrestrial toxicity:**

not determined

**Effects in sewage plants:**

not determined

**12.2. Persistence and degradability****Further details:**

Readily biodegradable (according to OECD criteria)

**12.3. Bioaccumulative potential**

Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.

**12.4. Mobility in soil****12.5. Results of PBT and vPvB assessment**

This substance does not meet the criteria for classification as PBT or vPvB.

**12.6. Other adverse effects****Remark:** not determined**Remark:** not determined**General information:**

Data apply to the main component.

Do not allow to enter into surface water or drains.

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**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Recommendation:**

The waste code numbers according to the German Waste Catalogue are substance-related, while the Waste code numbers according to the European Waste Catalogue (EWC code) are source-related. The exact assignment to a waste code according to the EWC code can only be undertaken by the user who generates waste products from them requiring disposal.

**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****Informations on working limitations:**

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe restrictions for homeworking.

**Water Hazard Class:** 1      **Source:** Anh. 3

**Other regulations (EU):**

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.

**E-mail (competent person):**

SDB@Eaton.com

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

R phrases	
R38	Irritating to skin.
R41	Risk of serious damage to eyes.

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Hazard statements	
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