

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

Printing date 28.02.2022

Version number 9 (replaces version 8)

Issue: 28.02.2022

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

1.1 Product identifier

Trade name: **AMYLOMER CAT 531**

UFI: M4M0-60M1-500C-KJYN

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 antistatic agent

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Gräfe Chemie GmbH
Deichstraße 48-50
D-20459 Hamburg

Tel. +49 (0)40 7602638

Further information obtainable from:

Melanie Günther
Mail: info@graefe-chemie.de

1.4 Emergency telephone number:

Poison Information Center North
Tel. +49 551 19240
medical advice in German and English

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

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

Hazard pictograms



GHS07

Signal word Warning

Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statements

P280 Wear protective gloves / 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

Results of PBT and vPvB assessment

PBT: Not applicable.

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· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**

· **Description:**

Starch, 2-Hydroxy-3-(trimethylammonio) propyl ether, chloride (CAS 56780-58-6), aqueous solution

· **Dangerous components:**

CAS: 79-33-4	L-Lactic acid (2-hydroxy propionic acid)	2.5-5%
EINECS: 201-196-2	Skin Corr. 1C, H314; Eye Dam. 1, H318, EUH071	
Index number: 607-743-00-5		
Reg.nr.: 01-2119474164-39		

· **SVHC**

None of the ingredients is listed.

· **Additional information** For the wording of the listed hazard phrases refer to section 16.

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** Immediately rinse with water.

· **After eye contact**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing** Drink plenty of water and provide fresh air. Call for a doctor 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 or alcohol resistant foam.

· **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:** No special measures required.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.

· **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

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

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

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· **6.4 Reference to other sections**

- No dangerous substances are released.
- 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** No special precautions are necessary if used correctly.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **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.

· **PNECs**


79-33-4 L-Lactic acid (2-hydroxy propionic acid)

PNEC	10 mg/l (sewage treatment plant)
PNEC aqua	1.3 mg/l (freshwater)

- **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

- **Appropriate engineering controls** No further data; see item 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures**
The usual precautionary measures are to be adhered to when handling chemicals.
- **Respiratory protection:** Not required.
- **Hand protection**

 Protective gloves (EN 374)

· **Material of gloves**

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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

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The determined penetration times according to EN 16523-1:2015 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

· **Eye/face protection**

R Safety glasses

· **Body protection:** Protective work clothing.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· Colour:	Light yellow
· Odour:	Characteristic
· Odour threshold:	Not determined.
· Melting point/freezing point:	undetermined
· Boiling point or initial boiling point and boiling range	100 °C (7732-18-5 water, distilled, conductivity or of similar purity)
· Flash point:	Not applicable
· pH at 20 °C	3.8
· Viscosity:	
· dynamic at 20 °C:	150 - 500 mPa*s (Brookfield)
· Solubility	
· Water:	Fully miscible
· Vapour pressure at 20 °C:	23 hPa (7732-18-5 water, distilled, conductivity or of similar purity)
· Density and/or relative density	
· Density at 20 °C:	1.135 g/cm ³

· **9.2 Other information**

· Appearance:	
· Form:	Fluid
· Important information on protection of health and environment, and on safety.	
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.

· **Information with regard to physical hazard classes**

· Explosives	not applicable
· Flammable gases	not applicable
· Aerosols	not applicable
· Oxidising gases	not applicable
· Gases under pressure	not applicable
· Flammable liquids	not applicable
· Flammable solids	not applicable
· Self-reactive substances and mixtures	not applicable
· Pyrophoric liquids	not applicable
· Pyrophoric solids	not applicable
· Self-heating substances and mixtures	not applicable

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| · Substances and mixtures, which emit flammable gases in contact with water | not applicable |
| · Oxidising liquids | not applicable |
| · Oxidising solids | not applicable |
| · Organic peroxides | not applicable |
| · Corrosive to metals | not applicable |
| · Desensitised explosives | not applicable |

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known

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:**

79-33-4 L-Lactic acid (2-hydroxy propionic acid)

Oral	LD ₅₀	3,543 mg/kg (Rat (Female)) (EPA OPP 81-1)
Dermal	LD ₅₀	>2,000 mg/kg (rabbit) (EPA OPP 81-2)

56780-58-6 Starch, 2-hydroxy-3-trimethylammoniopropyl ether, chloride

Cytotoxicity	(EN-ISO 10993-5)	not cytotoxic
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- **Skin corrosion/irritation**

56780-58-6 Starch, 2-hydroxy-3-trimethylammoniopropyl ether, chloride

Irritation of skin	OECD 439	(human skin model)	not irritant
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- **Serious eye damage/irritation**

56780-58-6 Starch, 2-hydroxy-3-trimethylammoniopropyl ether, chloride

Irritation of eyes	OECD 437	(Bovine Corneal Opacity and Permeability)	not irritant
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- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

- **Germ cell mutagenicity**

56780-58-6 Starch, 2-hydroxy-3-trimethylammoniopropyl ether, chloride

Ames-Test	(OECD 471)	not mutagenic
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- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.

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- **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.
- **Additional toxicological information:**
The product was not tested. The statements is derived from the characteristics of the single components.
- **11.2 Information on other hazards**

·	Endocrine disrupting properties
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	None of the ingredients is listed.
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SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

EC ₅₀ /48 h	53.29 mg/l (Daphnia magna) (OECD 202)
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79-33-4 L-Lactic acid (2-hydroxy propionic acid)	
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LC ₅₀ /96 h	130 mg/l (Oncorhynchus mykiss)
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EC ₅₀ /48 h	130 mg/l (Daphnia magna) (OECD 202)
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EC ₅₀ /72 h	>2.8 mg/l (Pseudokirchneriella subcapitata) (OECD 201)
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- **12.2 Persistence and degradability**

biodegradability	82 % (28d) (OECD 302 B (Zahn-Wellens/EMPA Test)) readily biodegradable
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- **Other Information:** No data available

- **12.3 Bioaccumulative potential** No further relevant information available.

- **12.4 Mobility in soil** No further relevant information available.

- **12.5 Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

- **12.7 Other adverse effects**

- **Additional ecological information:**

- **General notes:** Do not allow product to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**

- **Recommendation** Must be specially treated adhering to official regulations.

- **Uncleaned packaging:**

- **Recommendation:** Disposal must be made according to official regulations.

- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

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SECTION 14: Transport information

- **14.1 UN number or ID number**
- **ADR, ADN, IMDG, IATA** not applicable
- **14.2 UN proper shipping name**
- **ADR, ADN, IMDG, IATA** not applicable
- **14.3 Transport hazard class(es)**
- **ADR, ADN, IMDG, IATA**
- **Class** not applicable
- **14.4 Packing group**
- **ADR, IMDG, IATA** not applicable
- **14.5 Environmental hazards:** Not applicable.
- **14.6 Special precautions for user** Not applicable.
- **14.7 Maritime transport in bulk according to IMO instruments** Not applicable.
- **UN "Model Regulation":** not applicable

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.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not 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.

· **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)

ICAO: International Civil Aviation Organisation

ALD: Approximate Lethal Dose

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)

PNEC: Predicted No-Effect Concentration (GB REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

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SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Skin Corr. 1C: Skin corrosion/irritation – Category 1C
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
· * **Data compared to the previous version altered.**

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