

SAFETY DATA SHEET

Version 4.5
Revision Date 06/30/2014
Print Date 07/15/2014

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name : **α-Amylase, from porcine pancreas**

Product Number : A6255
Brand : Sigma
Index-No. : 647-015-00-4

CAS-No. : 9000-90-2

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

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Respiratory sensitisation (Category 1), H334

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word : Danger

Hazard statement(s)
H334 : May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statement(s)
P261 : Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P285 : In case of inadequate ventilation wear respiratory protection.
P304 + P341 : IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P342 + P311 : If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician.
P501 : Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

CAS-No. : 9000-90-2
EC-No. : 232-565-6
Index-No. : 647-015-00-4

Hazardous components

Component	Classification	Concentration
α-Amylase	Resp. Sens. 1; H334	-

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

no data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Nature of decomposition products not known.

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

no data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4	Reference to other sections	For disposal see section 13.
7.1	Precautions for safe handling	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.
7.2	Conditions for safe storage, including any incompatibilities	Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: 2 - 8 °C
7.3	Specific end use(s)	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated
8.1	Control parameters	
8.2	Exposure controls	Components with workplace control parameters Contains no substances with occupational exposure limit values. Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
9.1	Information on basic physical and chemical properties	a) Appearance Form: suspension Colour: brown b) Odour no data available c) Odour Threshold no data available d) pH no data available e) Melting point/freezing point no data available f) Initial boiling point and boiling range no data available g) Flash point no data available h) Evaporation rate no data available i) Flammability (solid, gas) no data available j) Upper/lower flammability or explosive limits no data available k) Vapour pressure no data available l) Vapour density no data available m) Relative density no data available n) Water solubility no data available o) Partition coefficient: n-octanol/water no data available p) Auto-ignition temperature no data available q) Decomposition temperature no data available r) Viscosity no data available s) Explosive properties no data available t) Oxidizing properties no data available 9.2 Other safety information no data available
10.1	Reactivity	no data available
10.2	Chemical stability	Stable under recommended storage conditions.
10.3	Possibility of hazardous reactions	no data available

10. STABILITY AND REACTIVITY

6.4	Reference to other sections	For disposal see section 13.
7.1	Precautions for safe handling	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.
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10.3	Possibility of hazardous reactions	no data available

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

should not be construed as offering an approval for any specific use scenario. Industrial hygienist and safety officer familiar with the specific situation or anticipated use by our customers. If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation or anticipated use by our customers. If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6559 87300, e-mail sales@kcl.de, test method: EN374

Material tested: Dermatri@ (KCL 740 / Aldrich Z677272, Size M)
 Break through time: 480 min
 Minimum layer thickness: 0,1 mm
 Material: Nitrile rubber
 Splash contact
 Material tested: Dermatri@ (KCL 740 / Aldrich Z677272, Size M)
 Break through time: 480 min
 Minimum layer thickness: 0,1 mm
 Material: Nitrile rubber
 Full contact

use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Handling gloves: Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves' outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Full contact
 Material: Nitrile rubber
 Minimum layer thickness: 0,1 mm
 Break through time: 480 min
 Material tested: Dermatri@ (KCL 740 / Aldrich Z677272, Size M)

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- 10.4 Conditions to avoid**
no data available
- 10.5 Incompatible materials**
Oxidizing agents
- 10.6 Hazardous decomposition products**
Other decomposition products - no data available
In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - rat - > 7,500 mg/kg

Inhalation: no data available

Dermal: no data available

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

Germ cell mutagenicity

no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

no data available

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional information

RTECS: BU7432500

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

no data available

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12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

	CAS-No.	Revision Date
α -Amylase	9000-90-2	

New Jersey Right To Know Components

	CAS-No.	Revision Date
α -Amylase	9000-90-2	

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Resp. Sens.

Respiratory sensitisation

HMS Rating

Health hazard: 2

Chronic Health Hazard: *

Flammability: 0

Physical Hazard: 0

NFPA Rating

Health hazard: 2

Fire Hazard: 0

Reactivity Hazard: 0

Further information

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

Preparation Information

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

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