Amylase AG 300 L

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

1.1. Product identifier

Trade name/designation:

Amylase AG 300 L

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

Use of the substance/mixture:

Enzyme preparations are biocatalysts used in a variety of industrial processes within food manufacturing

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor):

Eaton Technologies GmbH
Langenlonsheim Branch
An den Nahewiesen 24
55450 Langenlonsheim
Germany

Telephone: +49 6704 204-0 (Diese Nummer ist nur zu Bürozeiten besetzt.)

Telefax: +49 6704 204-121

E-mail: SDB@Eaton.com

Website: www.eaton.com/filtration

1.4. Emergency telephone number

Notfallauskunft bei Vergiftungen: Giftinformationszentrum Mainz (Deutsch und Englisch). Emergency medical information: Poison information center Mainz (German and English)., 24h: +49 6131 19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]:

Hazard classes and hazard categories	Hazard statements	Classification pro cedure
Respiratory or skin sensitisation *(Resp. Sens. 1)*	H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.	

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms:

GHS08
Health hazard

Signal word: Danger

hazard statements for health hazards	
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statements Prevention	
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P285	In case of inadequate ventilation wear respiratory protection.

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Precautionary statements	Response
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/doctor/....

2.3. Other hazards

Adverse physicochemical effects:
On basis of test data.: none

Adverse human health effects and symptoms:
Repeated inhalation of enzyme dust or aerosols resulting improper handling may induce sensitization and may cause allergic type 1 reactions in sensitized individuals.
Irritant effect on the skin: mild irritant.
Irritant effect on the eye: mild irritant.

Adverse environmental effects:
On basis of test data.: none

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Description:
Enzymes are defined as enzyme concentrate (dry matter basis).
Active enzymproteine (AEP): 10 - < 20 Gew.%

Hazardous ingredients / Hazardous impurities / Stabilisers:

product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concen-tration
CAS No.: 9032-08-0 **EC No.:** 232-877-2 **REACH No.:** 01-2119480439-28	**Amylase, gluco-** The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP]. **Danger** H334	10 – < 20 weight-%

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:
Accidental release measures high concentrations

Following inhalation:
Effects: May produce an allergic reaction.
Symptoms: May cause allergy or asthma symptoms or breathing difficulties if inhaled. Cough
Remove casualty to fresh air and keep warm and at rest. In case of allergic symptoms, especially in the breathing area, seek medical advice immediately.

In case of skin contact:
Effects: Frequently or prolonged contact with skin may cause dermal irritation.
Symptoms: mild irritant.
After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.
IF ON CLOTHING: Take off immediately all contaminated clothing. Wash contaminated clothing prior to re-use.

After eye contact:
Effects: Irritating to eyes.
Symptoms: mild irritant.
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. Remove contact lenses, if present and easy to do. Continue rinsing.

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Following ingestion:
Effects: The following symptoms may occur: Gastrointestinal complaints, Nausea, Vomiting
Symptoms: irritant.
Rinse mouth immediately and drink plenty of water. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

4.2. Most important symptoms and effects, both acute and delayed
No data available

4.3. Indication of any immediate medical attention and special treatment needed
Treat symptomatically.
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media:
Carbon dioxide (CO_2), Water mist. alcohol resistant foam, Dry extinguishing powder
Unsuitable extinguishing media:
none

5.2. Special hazards arising from the substance or mixture
May produce an allergic reaction.

5.3. Advice for firefighters
In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
6.1.1. For non-emergency personnel
Personal precautions:
See protective measures under point 7 and 8.

6.1.2. For emergency responders
No data available

6.2. Environmental precautions
No special environmental measures are necessary.
Collect spillage.

6.3. Methods and material for containment and cleaning up
For cleaning up:
Conditions to avoid: generation/formation of aerosols. Generation/formation of dust
Take up by mechanical means preferably by a vacuum cleaner equipped with a high efficiency filter.
Flush remainder carefully with plenty of water. Avoid splashing and high pressure washing (avoid formation of aerosols).
Provide adequate ventilation.

6.4. Reference to other sections
No data available

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SECTION 7: Handling and storage

*
7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

Conditions to avoid: generation/formation of aerosols. Generation/formation of dust
Avoid breathing dust/fume/gas/mist/vapours/spray.
Provide adequate ventilation as well as local exhaustion at critical locations.
Liquid enzyme preparations are dustfree preparations. However, inappropriate handling may cause formation of dust or aerosols. for appropriate handling, see section 6 and 7. Inhalation of enzyme dust or aerosols resulting from handling may induce sensititazion and may cause allergic reactions in sensitized individuals. Prolonged skin contact may cause minor irritation.

Fire prevent measures:

No special fire protection measures are necessary.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels:

Keep container tightly closed in a cool, well-ventilated place.
storage temperature 0 - 10 °C

7.3. Specific end use(s)

Recommendation:

The product should be handled with the care usual when dealing with chemicals.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No data available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Provide adequate ventilation as well as local exhaustion at critical locations.

8.2.2. Personal protection equipment

Eye/face protection:

Tightly sealed safety glasses.

Skin protection:

Thorough skin-cleansing after handling the product.
Hand protection: The selsection of suitable gloves not only depends on the material, but also on other quality characteristics. These may vary from manufacturer to manufacturer. Since the product is a preparation from several substances, the resistance of glove materials cannot be determined in advance and must therefore be checked prior to the application.
Suitable material: The glove material has to be impermeable and resistant to the product/the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/the preparation/the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
Breakthrough time:: The exact break through time has to be found out by the manufacturer of the protective gloves nad has to be observed.

Respiratory protection:

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.
Suitable respiratory protection apparatus: Particle filter device (DIN EN 143) P 3

Other protection measures:

Protective clothing: lab coat
General health and safety measures: The usual precautionary measures are to be adhered to when handling chemicals.

8.2.3. Environmental exposure controls

No data available

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8.3. Additional information

Long-term – inhalation, local effects
DMEL worker : 60 ng/m³

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid
Colour: light brown - dark brown
Odour: slight fermentation odour

Safety relevant basis data

parameter		at °C	Method	Remark
pH	*not determined*			
Melting point	*not determined*			
Freezing point	*not determined*			
Initial boiling point and boiling range	*not determined*			
Decomposition temperature	*not determined*			
Flash point	*not determined*			
Evaporation rate	*not determined*			
Auto-ignition temperature	*not determined*			
Upper/lower flammability or explosive limits	*not determined*			
Vapour pressure	*not determined*			
Vapour density	*not determined*			
Density	1.17 g/ml			
Relative density	*not determined*			
Bulk density	*not determined*			
Water solubility	*not determined*			
Partition coefficient: n-octanol/ water	*not determined*			
Dynamic viscosity	*not determined*			
Kinematic viscosity	*not determined*			

9.2. Other information

Odour, ph Value, Boiling Point, Melting Point, Flash Point, Ignition temperature, Vapour pressure, Density and Solubility are not relevant to safety. For further information see the Product Specification and the Product Sheet for this preparation.

SECTION 10: Stability and reactivity

10.1. Reactivity

not relevant

10.2. Chemical stability

Substance is, under normal conditions, chemically stable.

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to avoid

none

10.5. Incompatible materials

none

10.6. Hazardous decomposition products

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

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SECTION 11: Toxicological information

* **11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

Substance name	Toxicological information
Amylase, gluco- CAS No.: 9032-08-0 EC No.: 232-877-2	**LD_{50} oral:** 2,000 mg/kg OECD 401, 420

Skin corrosion/irritation:
slightly irritant, (OECD 404)

Serious eye damage/irritation:
slightly irritant, (OECD 405)

Respiratory or skin sensitisation:
May cause sensitization by inhalation.

Germ cell mutagenicity:
No data available

Carcinogenicity:
No indications of human germ cell mutagenicity exist.
OECD 471 (Ames test), OECD 476

Reproductive toxicity:
No data available

STOT-single exposure:
No data available

STOT-repeated exposure:
No data available

Aspiration hazard:
No data available

* **11.2. Information on other hazards**

Endocrine disrupting properties:
No data available

SECTION 12: Ecological information

12.1. Toxicity

Aquatic toxicity:
Acute Daphnia toxicity
EC50 (48h): 31,7-457 mg aep/l (OECD 202)
Algae toxicity
ErC50: (72h): > 5,2 mg aep/l (OECD 201)
Acute fish toxicity
LC50: (96h): 58,3-326,7 mg aep/l (OECD 203

Terrestrial toxicity:
No data available

Effects in sewage plants:
No data available

12.2. Persistence and degradability

Additional information:
Further ecological information: Partition coefficient: n-octanol/water: < 0
The organic part of the product is biodegradable.
According to the present state of knowledge negative ecological effects are not expected.

12.3. Bioaccumulative potential

Accumulation / Evaluation:
No indication of bioaccumulation potential.

12.4. Mobility in soil

not relevant

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12.5. Results of PBT and vPvB assessment

Substance name	Results of PBT and vPvB assessment
Amylase, gluco- CAS No.: 9032-08-0 EC No.: 232-877-2	—

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

12.6. Endocrine disrupting properties
No data available

12.7. Other adverse effects
No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.
Do not allow to enter into surface water or drains.

Waste treatment options
Appropriate disposal / Package:
Non-contaminated packages may be recycled.

SECTION 14: Transport information

No dangerous good in sense of these transport regulations.

14.1. UN number or ID number
not relevant

14.2. UN proper shipping name
not relevant

14.3. Transport hazard class(es)
not relevant

14.4. Packing group
not relevant

14.5. Environmental hazards
not relevant

14.6. Special precautions for user
not relevant

14.7. Maritime transport in bulk according to IMO instruments
not relevant

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU legislation
No data available

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15.1.2. National regulations

[DE] National regulations

Water hazard class

WGK:
1 - schwach wassergefährdend

Source:
S Selbsteinstufung

15.2. Chemical Safety Assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

16.1. Indication of changes

7.1.	Precautions for safe handling
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008
11.2.	Information on other hazards

16.2. Abbreviations and acronyms

No data available

16.3. Key literature references and sources for data

No data available

16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Classification according to Regulation (EC) No 1272/2008 [CLP]:

Hazard classes and hazard categories	Hazard statements	Classification pro cedure
Respiratory or skin sensitisation *(Resp. Sens. 1)*	H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.	

16.5. Relevant R-, H- and EUH-phrases (Number and full text)

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

16.6. Training advice

No data available

16.7. Additional information

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.

* Data changed compared with the previous version