

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Issue date: 09/18/2017 Revision date: 02/15/2022 Supersedes: 09/18/2017

Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Product name : α-Amylase (Porcine Pancreatic)

Product code : E-PANAA

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Use as laboratory reagent

1.3. Supplier

Megazyme Bray Business Park Bray, A98 YV29 - Ireland

T +353 12861220 - F +353 12861264 <u>cs@megazyme.com</u> - <u>www.megazyme.com</u>

1.4. Emergency telephone number

Emergency number : +353 12861220 [9 am to 5 pm GMT - Monday to Friday]

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Respiratory sensitization, Category 1 May cause an allergy or asthma symptoms or breathing difficulties if inhaled

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US) : Danger

Hazard statements (GHS US) : May cause an allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary statements (GHS US) : Avoid breathing dust.

[In case of inadequate ventilation] wear Dust respirator.

If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for

breathing.

If experiencing respiratory symptoms: Call a POISON CENTER, a doctor.

Dispose of contents/container to hazardous or special waste collection point, in accordance

with local, regional, national and/or international regulation

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

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Name	Common Name (Synonyms)	Product identifier	%	GHS US classification
		(0.0.1) (0.00.00.5	400	D O
alpha-amylase	1,4alpha-D-glucan	(CAS-No.) 9000-90-2	100	Resp. Sens. 1, H334
	glucanohydrolase / 1,4-			
	alpha-D-glucanase / 1,4-			
	alpha-glucanase / alpha-			
	amylase from hog			
	pancreas / alpha-amylase from human saliva / alpha-			
	amylase, DFP treated			
	from hog pancreas / alpha-amylase, PMSF			
	treated from hog pancreas			
	/ amano AD 1 / amylase			
	AD / amylase THC 250 /			
	amylase, alpha- / amylogal			
	CS / amylolisin 5 /			
	amylopsin / amylosubtilin /			
	annylopsin / annylosubtilin / aquazym 120L /			
	aquazyme 240 / bactosol			
	TK / BAM 240 / ban / ban			
	(enzyme) / BAN 120L /			
	BAN 240 / ban 480L /			
	beisol T 2090 / biobake			
	40000 / bioferm / bioferm			
	P / bioprep TBS / biotex			
	GT / biozyme A / biozyme			
	F / brewers Amylique TS /			
	buclamase / canalpha			
	1000P / canalpha 600L /			
	canalpha 60P / cenazyme			
	SA 7 / clarase / denazyme			
	SA 7 / datase / deflazyme			
	3.2.1.1 / EC 3.2 1.1 /			
	ekikakoso 6T /			
	EMCEmaltex 1000 /			
	endoamylase / FD Super /			
	fortizyme / fungamyl /			
	fungamyl 2500BG /			
	fungamyl 300 L / fungamyl			
	800L / G 995 / G6-			
	Amylase / gamalpha HT			
	120L / gemsize 4A / G-			
	zyme G 995 / hitempase /			
	kleistase KD / kleistase L			
	1 / kleistase T 5 / kokugen			
	K / maltogenase 4000L /			
	maxamyl / maxamyl HT			
	3000 / maxamyl WL			
	15,000 / maxilase / pivozin			
	/ plurafact oxam / ptyalin /			
	speedase HS / speedase			
	M / speedase XP 404 /			
	spitase CP 1 / sumizyme L			
	/ taka-amylase / taka-			
	amylase A / taka-diastase			
	/ takalite / takalite L 340 /			
	takailte / takailte L 340 /			
	termamyl / termamyl 120L			
	/ termamyl 60L / termamyl			
	60T / thermolase / WC 8			
	but / thermolase / WC 8			

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Call a poison center/doctor/physician if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory

symptoms: Call a poison center or a doctor.

First-aid measures after skin contact : Wash skin with plenty of water.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : May cause an allergy or asthma symptoms or breathing difficulties if inhaled.

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4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of

: Toxic fumes may be released.

fire

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting

: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures

: Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapors/spray.

6.1.2. For emergency responders

Protective equipment

: Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

: Mechanically recover the product.

Other information

: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Ensure good ventilation of the work station. Wear personal protective equipment. Avoid

breathing dust/fume/gas/mist/vapors/spray.

Hygiene measures

: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

product

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

α-Amylase (Porcine Pancreatic)

No additional information available

alpha-amylase (9000-90-2)

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls

: Ensure good ventilation of the work station.

Environmental exposure controls

: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

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Туре	Material	Permeation	Thickness (mm)	Penetration
Disposable gloves	Nitrile rubber (NBR)	3 (> 60 minutes)		

Eye protection:

Safety glasses

Туре	Use	Characteristics
Safety glasses	Droplet	With side shields

Skin and body protection:

Wear suitable protective clothing

Туре	
Lab coat	

Respiratory protection:

Wear respiratory protection.

Device	Filter type	Condition
Dust mask	Type P1	Dust protection

Personal protective equipment symbol(s):







SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid Color : white light brown Odor : characteristic Odor threshold : No data available рΗ : No data available Melting point No data available Freezing point : Not applicable : No data available Boiling point : Not applicable Flash point Relative evaporation rate (butyl acetate=1) : No data available : Non flammable. Flammability (solid, gas) Vapor pressure : No data available Relative vapor density at 20 °C : No data available Relative density : Not applicable Solubility : Soluble in water. Partition coefficient n-octanol/water (Log Pow) : No data available : Not applicable Auto-ignition temperature

Auto-ignition temperature : Not applicable
Decomposition temperature : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosion limits : Not applicable
Explosive properties : No data available
Oxidizing properties : No data available

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

alpha-amylase (9000-90-2)

LD50 oral rat > 7500 mg/kg (Rat)

Skin corrosion/irritation : Not classified Serious eye damage/irritation : Not classified

Respiratory or skin sensitization : May cause an allergy or asthma symptoms or breathing difficulties if inhaled.

Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Viscosity, kinematic : No data available

Symptoms/effects after inhalation : May cause an allergy or asthma symptoms or breathing difficulties if inhaled.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

alpha-amylase (9000-90-2)		
LC50 fish 1	> 100 mg/l (LC50)	
EC50 Daphnia 1	> 100 mg/l (EC50)	
Threshold limit algae 1	> 100 mg/l (FC50)	

12.2. Persistence and degradability

alpha-amylase (9000-90-2)	
Persistence and degradability	Readily biodegradable in water.

12.3. Bioaccumulative potential

alpha-amylase (9000-90-2)	
Bioaccumulative potential Bioa	accumulation unlikely.

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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not applicable

Transportation of Dangerous Goods

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

No additional information available

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

No additional information available

SECTION 16: Other information

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Revision date : 02/15/2022

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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