

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ENZYMAX POWDER

Revision date: 28.02.2018

Product code: 00379-0006

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

1.1. Product identifier

ENZYMAX POWDER

Further trade names

IMS-1230

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

Use of the substance/mixture

Cleaning agent

Uses advised against

There is no information available on applications that are not advised.

1.3. Details of the supplier of the safety data sheet

Company name:	Hu-Friedy Mfg. Co., LLC. Zweigniederlassung Deutschland	
Street:	Kleines Öschle 8	
Place:	D-78532 Tuttlingen	
Telephone:	00800 48 37 43 39	Telefax: 00800 48 37 43 40
e-mail:	info@hu-friedy.eu	
Internet:	www.hu-friedy.eu	
Responsible Department:	Responsible for the safety data sheet: sds@gbk-ingelheim.de	
1.4. Emergency telephone number:	INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a)	
	NATIONAL: In England and Wales: 111, In Scotland: 111	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Dam. 1

Respiratory or skin sensitisation: Resp. Sens. 1

Hazard Statements:

Causes skin irritation.

Causes serious eye damage.

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

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Sodium dodecylbenzenesulfonate

disodium metasilicate

Subtilisin

Signal word:

Danger

Pictograms:



Hazard statements

H315

Causes skin irritation.

H318

Causes serious eye damage.

H334

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

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Precautionary statements

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	Wear respiratory protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
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/doctor.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional advice on labelling

The product is labeled in accordance with Regulation (EC) no. 1272/2008 (GHS).

2.3. Other hazards

Percentage of ingredients in admixture with unknown toxicity: 7%

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Chemical characterization**

Enzymatic cleansing agent

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
533-96-0	Trisodium hydrogencarbonate			60 - 100 %
	208-580-9		01-2119494264-33	
	Eye Irrit. 2; H319			
25155-30-0	Sodium dodecylbenzenesulfonate			1 - 5 %
	246-680-4		01-2120088038-51	
	Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1; H302 H315 H318			
6834-92-0	disodium metasilicate			1 - 5 %
	229-912-9	014-010-00-8	01-2119449811-37	
	Met. Corr. 1, Skin Corr. 1B, STOT SE 3; H290 H314 H335			
9014-01-1	Subtilisin			0,1 - 1 %
	232-752-2	647-012-00-8	01-2119480434-38	
	Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Resp. Sens. 1, STOT SE 3, Aquatic Acute 1, Aquatic Chronic 2; H302 H315 H318 H334 H335 H400 H411			

Full text of H and EUH statements: see section 16.

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

Remove contaminated soaked clothing immediately. If you feel unwell, seek medical advice.

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After inhalation

Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion.
In the event of symptoms refer for medical treatment.

After contact with skin

In case of contact with skin wash off with soap and water.

After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
If eye irritation persists, consult a specialist.

After ingestion

Do not provoke vomiting. Consult physician. Attention in case of vomiting - acute danger of suffocating, produced by foaming ingredients. Rinse mouth. Make drink some glasses of water. The decision whether to provoke vomiting is to be taken by a physician.

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

Causes skin irritation. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptoms.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Product does not burn, fire-extinguishing activities according to surrounding.

Unsuitable extinguishing media

Full water jet.

5.2. Special hazards arising from the substance or mixture

Fire may produce:

Carbon monoxide (CO), carbon dioxide (CO₂), phosphorus oxides (PO_x) and nitrogen oxides (NO_x).

5.3. Advice for firefighters

Use breathing apparatus with independent air supply.

Protective suit.

Additional information

Cool containers at risk with water spray jet. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Avoid contact with skin, eyes and clothing. Breathing apparatus (particle filter) only if dust is formed. Ensure adequate ventilation.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/ground water.

6.3. Methods and material for containment and cleaning up

Pick up mechanically, avoiding dust, and provide disposal in suitable recipients.

6.4. Reference to other sections

Information for disposal see section 13.

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Do not breathe dust. Avoid contact with eyes, skin or mucous membrane.

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Advice on protection against fire and explosion

No special protective measures against fire required.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed in a dry, cool and well-ventilated place.

Advice on storage compatibility

Incompatible with oxidizing agents.

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
9014-01-1	Subtilisins (Bacillus subtilis Carlsberg)	-	0.00004		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

Additional advice on limit values

Obey TLV for common dust, if applicable.

8.2. Exposure controls**Appropriate engineering controls**

Ensure adequate ventilation, especially in confined areas.

Protective and hygiene measures

Wash hands before breaks and immediately after handling the product. When using do not eat, drink or smoke. Take off immediately all contaminated clothing. Avoid contact with skin, eyes and clothing.

Eye/face protection

Tightly fitting goggles (EN 166).

Eye wash bottle with pure water (EN 15154).

Hand protection

Protective gloves (EN 374); Rubber gloves. (recommended: minimum protection index 2, corresponding to a permeation rate > 30 minutes according to EN 374)

Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

Skin protection

Long sleeved clothing (EN 368).

Respiratory protection

No personal respiratory protective equipment normally required.

Breathing apparatus (particle filter) only if dust is formed.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	Powder
Colour:	White
Odour:	Limonene

Test method

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pH-Value: 10,0 Diluted

Changes in the physical state

Melting point: Not determined

Initial boiling point and boiling range: Not determined

Sublimation point: Not determined

Flash point: Not applicable

Sustaining combustion: No data available

Flammability

Solid: Not determined

Explosive properties

Not determined

Lower explosion limits: Not determined

Upper explosion limits: Not determined

Ignition temperature: Not applicable

Auto-ignition temperature

Solid: Not determined

Decomposition temperature: Not determined

Oxidizing properties

Not determined

Vapour pressure: Not determined

Bulk density: 0,79 kg/m³Water solubility:
(at 20 °C) Completely soluble**Solubility in other solvents**

Not determined

Partition coefficient: Not determined

Viscosity / dynamic: Not determined

Viscosity / kinematic: Not determined

Flow time: Not determined

Solvent separation test: Not determined

Solvent content: Not determined

9.2. Other information

Solid content: Not determined

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

No data available.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.

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10.5. Incompatible materials

oxidizing agents

10.6. Hazardous decomposition productsCarbon monoxide (CO), carbon dioxide (CO₂), phosphorus oxides (PO_x) and nitrogen oxides (NO_x).**Further information**

No decomposition if stored and applied as directed.

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

Based on available data, the classification criteria are not met.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
25155-30-0	Sodium dodecylbenzenesulfonate				
	oral	ATE 500 mg/kg			
6834-92-0	disodium metasilicate				
	oral	LD50 600 - 1350 mg/kg	Rat		
9014-01-1	Subtilisin				
	oral	ATE 500 mg/kg			

Irritation and corrosivity

Causes skin irritation.

Causes serious eye damage.

Sensitising effects

May cause allergy or asthma symptoms or breathing difficulties if inhaled. (Subtilisin)

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

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.

Practical experience**Other observations**

Ingestion causes irritation of upper respiratory system and gastrointestinal disturbance. Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons. May cause sensitization of susceptible persons by inhalation of aerosol or dust.

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

No data available.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
6834-92-0	disodium metasilicate					
	Acute fish toxicity	LC50 mg/l	3185	96 h	Brachydanio rerio	
	Acute crustacea toxicity	EC50 mg/l	4857	48 h	Daphnia magna	

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

No data available.

12.6. Other adverse effects

No data available.

Further information

Do not flush into surface water or sanitary sewer system. Hazardous water pollutant. A pH-change becomes possible in water. May contribute to increasing nutrient concentration in stagnant water, so do not discharge into aquatic environment.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Advice on disposal**

Can be disposed of as a solid waste or burned in a suitable installation subject to local regulations. Where possible recycling is preferred to disposal.

Waste disposal number of waste from residues/unused products

070699 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; wastes not otherwise specified

Waste disposal number of contaminated packaging

150102 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); plastic packaging

Contaminated packaging

Empty containers should be taken for local recycling, recovery or waste disposal.

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

Packaging that cannot be cleaned should be disposed of like the product.

SECTION 14: Transport information**Land transport (ADR/RID)****14.1. UN number:**

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)**14.1. UN number:**

No dangerous good in sense of this transport regulation.

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14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.**14.4. Packing group:** No dangerous good in sense of this transport regulation.**Marine transport (IMDG)****14.1. UN number:** No dangerous good in sense of this transport regulation.**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.**14.4. Packing group:** No dangerous good in sense of this transport regulation.**Air transport (ICAO-TI/IATA-DGR)****14.1. UN number:** No dangerous good in sense of this transport regulation.**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.**14.4. Packing group:** No dangerous good in sense of this transport regulation.**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No dangerous good in sense of this transport regulation.

Other applicable information

Not applicable. No hazardous material as defined by the transport regulations.

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

2004/42/EC (VOC): 0 %

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

National regulatory information

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

Water contaminating class (D): 2 - clearly water contaminating

15.2. Chemical safety assessment

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

SECTION 16: Other information**Changes**

Update 2018

Abbreviations and acronyms

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route (Agreement concerning the international carriage of Dangerous goods by Road)

IMDG-Code: International Maritime Code for Dangerous Goods

ICAO: International Civil Aviation Organisation (IATA: The International Air Transport Association)

GHS: Globally Harmonized System of Classification, Labelling and Packaging of Chemicals

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

Classification	Classification procedure
Skin Irrit. 2; H315	Calculation method
Eye Dam. 1; H318	Calculation method
Resp. Sens. 1; H334	Calculation method

Relevant H and EUH statements (number and full text)

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled .
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects .

Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)