

SAFETY DATA SHEET

SECTION 1 Identification of the substance or preparation and of the company/undertaking

- 1.1 Product identifier
 - Product Name: GAMAZYME DPCProduct Part Number: 587055 (4 kg)
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
 - Use of the substance/preparation: Closed system treatment
- 1.3 Details of the supplier of the safety data sheet

Name of Supplier:

Head Office:

Wilhelmsen Ships Service AS Strandveien 20, N1324 Lysaker, Norway Tel: (47) 6349 440 35

Supplier:

Wilhelmsen Ships Service AS Willem Barentszstraat 50 3165AB Rotterdam Telephone: +31 4877 777 Fax: +31 4877 888 The Netherlands

Other suppliers SEE SECTION 16!!!

For quotations contact your local Customer Services

Responsible Person: Product HSE Manager,

- Email: Email: WSS.GLOBAL.SDSINFO@wilhelmsen.com
- Telephone: Tel.: +31 10 4877775
- 1.4 Emergency telephone number

Emergency Telephone: -ONLY TO BE USED IN CASE OF AN INCIDENTNCEC:+

44 1865 407333, CHEMTREC (800) 424 9300

American Chemistry Council +1 703 527 3887,

Greece +30 210 7793777Australia: +61 3 9630 0998

Giftinformasjonsentralen in Norway Tel.: +47 22591300

Wilhelmsen Ships Service, Melbourne, AUSTRALIA Emergency 24hrs: +61 3 9630 0998 **FOR QUOTATIONS PLEASE CONTACT YOUR LOCAL CUSTOMER SERVICES**

SECTION 2 Hazards identification

- 2.1 Classification of the substance or mixture
 - Refer to current The Dangerous Substances Directive (67/548/EEC)
 - Counsil Directive 1999/45/EEC Classification, packing and labelling of dangerous preparations.
 - May cause sensitisation by skin contact (R43)
 - Symbols: Xn
 - Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations
 - May cause allergy or asthma symptoms or breathing difficulties if inhaled (H334).
 - Resp. Sens. 1
 - Symbols: GHS08

SECTION 2 Hazards identification (....)

- Signal Word: Danger

2.2 Label elements



- Signal Word:
- Resp. Sens. 1
- _
- Contains:
- Subtilisin

- Hazard phrases
 - May cause allergy or asthma symptoms or breathing difficulties if inhaled (H334).
- Precautionary Phrases
 - Avoid breathing dust/fume/gas/mist/vapours/spray (P261).

Wear protective gloves/protective clothing/eye protection/face protection (P280).

2.3 Other hazards

- Not applicable
- Not a PBT according to REACH Annex XIII
- Appearance: powder, brown, soluble in water
- Odour: Characteristic odour

SECTION 3 Composition/information on ingredients

3.1 Mixtures

- Subtilisin

Concentration: 1-5 % CAS Number: 9014-01-1 EC Number: 232-752-2

R/H Phrases: R22, R37/38, R41, R42 - H315, H318, H334, H335

Symbols: Xn, GHS07, GHS05, GHS08

Categories: Skin Irrit. 2, Eye Dam. 1, Resp. Sens. 1, STOT SE 3

SECTION 4 First aid measures

- 4.1 Description of first aid measures
 - Contact with skin:
 - Remove contaminated clothing immediately and drench affected skin with plenty of water. Then wash with soap and water
 - When in doubt or symptoms persist, seek medical attention
 - Contact with eyes:
 - If substance has got into eyes, immediately wash out with plenty of water for at least 15 minutes
 - Irrigate eyes thoroughly whilst lifting eyelids
 - When in doubt or symptoms persist, seek medical attention
 - Ingestion:
 - Never give anything by mouth to an unconscious person
 - Give plenty of water to drink
 - Inhalation:
 - Remove patient to fresh air
 - Keep warm and at rest, in a half upright position. Loosen clothing
- 4.2 Most important symptoms and effects, both acute and delayed
 - In cases of severe exposure, asthma may develop

SECTION 4 First aid measures (....)

- 4.3 Indication of any immediate medical attention and special treatment needed
 - No information available

SECTION 5 Fire-fighting measures

- 5.1 Extinguishing media
 - Not flammable. In case of fire use extinguishing media appropriate to surrounding conditions
- 5.2 Special hazards arising from the substance or mixture
 - In case of fire: (P370)
 - Nitrogen oxides may be formed
 - Carbon oxides may be formed
- 5.3 Advice for firefighters
 - Wear Breathing Apparatus

SECTION 6 Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
 - Wear protective clothing as per section 8
- 6.2 Environmental Precautions
 - No special precautions are required for this product
- 6.3 Methods and material for containment and cleaning up
 - Sweep or shovel-up spillage and remove to a safe place
 - Ventilate the area and wash spill site after material pick-up is complete
- 6.4 Reference to other sections
 - See Section 13

SECTION 7 Handling and storage

- 7.1 Precautions for safe handling
 - The usual precautions for handling chemicals should be observed
- 7.2 Conditions for safe storage, including any incompatibilities
 - Store in a dry place. Store in a closed container (P402+P404).
 - Store in a well-ventilated place (P403).
- 7.3 Specific end use(s)
 - Contact supplier for further information

SECTION 8 Exposure controls/personal protection

- 8.1 Control parameters
 - WEL (long term) (total dust Organic dust) 4-10 mg/m3
- 8.2 Exposure controls
 - No special precautions are required for this product
- 8.3 Occupational exposure controls







- Wear suitable protective clothing, including eye/face protection and gloves (plastic or rubber are recommended)
- Eyewash bottles should be available

SECTION 8 Exposure controls/personal protection (....)

- Respiratory protection may be required under exceptional circumstances when excessive air contamination exists
- Wear suitable dustmask e.g.to BS 2091

SECTION 9 Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
 - Odour: Characteristic odour
 - Appearance: powder, brown, soluble in water
 - Boiling point not applicable
 - Vapour pressure not known
 - Melting point not applicable
- 9.2 Other information
 - No information available

SECTION 10 Stability and reactivity

- 10.1 Reactivity
 - This article is considered stable under normal conditions
- 10.2 Chemical stability
 - This article is considered stable under normal conditions
- 10.3 Possibility of hazardous reactions
 - No hazardous reactions known if used for its intended purpose
- 10.4 Conditions to avoid
 - Excessive temperature variations, below 0 °C or above 45 °C.
- 10.5 Incompatible materials
 - Strong acids, alkali compounds and strong oxidising agents may inactivate biological cultures.
- 10.6 Hazardous Decomposition Products
 - In case of fire: (P370)
 - Decomposition products may include nitrogen oxides
 - Decomposition products may include carbon oxides

SECTION 11 Toxicological information

- 11.1 Information on toxicological effects
 - No experimental data available
- 11.2 Contact with eyes
 - May cause irritation
- 11.3 Contact with skin
 - In cases of severe exposure, redness and irritation may develop
- 11.4 Ingestion
 - The ingestion of significant quantities may cause gastro-intestinal disturbances
- 11.5 Inhalation
 - Inhalation is unlikely to occur
 - In cases of severe exposure, irritation may develop

SECTION 12 Ecological information

SECTION 12 Ecological information (....)

- 12.1 Toxicity
 - This product does not contain ingredients which are classified in the EU as dangerous for the environment.
- 12.2 Persistence and degradability
 - The components in this product are readily biodegradable.
- 12.3 Bioaccumulation Potential
 - Bioaccumulation of the components in this product is insignificant.
- 12.4 Mobility in soil
 - Dispersible
- 12.5 Results of PBT and vPvB assessment
 - Not a PBT according to REACH Annex XIII
- 12.6 Other Adverse Effects
 - Not applicable

SECTION 13 Disposal considerations

- 13.1 Waste treatment methods
 - No special precautions are required for this product
- 13.2 Classification
 - EU Waste class: -

SECTION 14 Transport information

Not classified as hazardous for transport

- 14.1 UN
 - UN No.: Not applicable
 - Proper Shipping Name: Not applicable
 - Hazard Class: Not applicable
 - Packing Group: Not applicable

Not classified as hazardous for transport

- 14.2 Environmental hazards
 - Not Classified
- 14.3 Special precautions for user
 - Not Classified
- 14.4 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code
 - Not applicable
- 14.5 Road/Rail (ADR/RID)
 - ADR UN No.: Not applicable
 - Proper Shipping Name: Not applicable
 - ADR Hazard Class: Not applicable
 - ADR Packing Group: Not applicable
- 14.6 Sea (IMDG)
 - IMDG UN No.: Not applicable
 - Proper Shipping Name: Not applicable
 - IMDG Hazard Class: Not applicable
 - IMDG Pack Group.: Not applicable
 - IMDG EmS: Not applicable

SECTION 14 Transport information (....)

14.7 Air (ICAO/IATA)

- ICAO Un No.: Not applicable

- Proper Shipping Name: Not applicable

- ICAO Hazard Class: Not applicable

- ICAO Packing Group: Not applicable

14.8 DOT / CFR (US Department of Transportation)

- Identification Number: Not applicable

- DOT Proper Shipping Name: Not applicable

DOT Labels: Not applicableProduct RQ (lbs): Not applicable

SECTION 15 Regulatory information

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

- Counsil Directive 1999/45/EEC Classification, packing and labelling of dangerous preparations.
- Refer to current The Dangerous Substances Directive (67/548/EEC)
- Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations
- Microbial classification: All the bacteria contained in this formulation are of group 1 according to Directive 2000/54/EC (on the protection of workers from risks related to exposure to biological agents at work). Microorganisms from group 1 are unlikely to cause a human disease. When handling the product, precautions described in Annex VI of Directive 2000/54/EC have to be taken into consideration in order to make a risk assessment. Annex VI: Containment principles for industrial processes involving group 2, 3 or 4 biological agents

15.2 Chemical Safety Assessment

- None

SECTION 16 Other information

Text not given with phrase codes where they are used elsewhere in this safety data sheet:- H315: Causes skin irritation. H318: Causes serious eye damage. H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335: May cause respiratory irritation. R22: Harmful if swallowed. R37/38: Irritating to respiratory system and skin. R41: Risk of serious damage to eyes. R42: May cause sensitisation by inhalation.

The information provided about the product on this Safety Data Sheet has been compiled from knowledge of the individual constituents

The data given here only applies when product used for proper application(s). The product is not sold as suitable for other applications - usage in such may cause risks not mentioned in this sheet. Do not use for other application(s) without seeking advice from manufacturer

The data given here is based on current knowledge and experience. This Safety Data Sheet describes the product in terms of safety requirements and does not signify any warranty with regard to the product's properties

SECTION 16 Other information (....)

The most up-to-date version of this MSDS can be found on www.wilhelmsen.com/shipsservice

OTHER CONTACT INFORMATION MAJOR CHEMICAL OFFICES

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