



Issue Date: 26/07/2021

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L.REACH.NOR.EN

GAMAZYME 700 FN

Wilhelmsen Ships Service AS

Part Number: 571711 Version No: 7.10 Safety Data Sheet (Conforms to Annex II of REACH (1907/2006) - Regulation 2020/878)

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

1.1. Product Identifier

	0.1117/0.15 700 511
Product name	GAMAZYME 700 FN
Chemical Name	Not Applicable
Synonyms	Not Available
Chemical formula	Not Applicable
Other means of identification	571711

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

Environment Release Category	ERC7	Use of functional fluid at industrial site	
Sectors of Use	SU22 SU3	Professional uses: Public domain (administration, education, entertainment, services, craftsmen) Industrial uses: Uses of substances as such or in preparations* at industrial sites	
Relevant identified uses	Closed sy	Closed system treatment. Drain treatment Sewage wastes.	
Uses advised against	No specific uses advised against are identified.		

Registered company name	Wilhelmsen Ships Service AS	Outback (M)SDS portal: http://jr.chemwatch.net/outb/account /autologin?login=wilhelmsen	Wilhelmsen Ships Service AS* Central Warehouse
Address	Strandveien 20 Lysaker 1366 Norway	Use our Outback portal to obtain our (M)SDSs in other languages and/or format For questions relating to our SDSs please use Email: WSS.GLOBAL.SDSINFO@wilhelmsen.com Norway	Willem Barentszstraat 50 Rotterdam Netherlands
Telephone	+47 67 58 40 00	Not Available	+31 10 4877 777
Fax	Not Available	Not Available	Not Available
Website	http://www.wilhelmsen.com/	http://www.wilhelmsen.com	http://www.wilhelmsen.com
Email	wss.norway.cs@wilhelmsen.com	wss.global.sdsinfo@wilhelmsen.com	wss.rotterdam@wilhelmsen.com
Registered company name	Wilhelmsen Ships Service AS* Cer	ntral Warehouse	

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Email

wss.rotterdam@wilhelmsen.com

1.4. Emergency telephone number

Association / Organisation	Giftinformasjonssentralen - 24 timer	24hrs - Chemwatch	Dutch nat. poison centre
Emergency telephone numbers	+47 22591300	+31-10-4877700	+ 31 88 7558561
Other emergency telephone numbers	+31-10-4877700	+31-10-4877700	+ 31 10 4877700

Association / Organisation	Dutch nat. poison centre	CHEMWATCH EMERGENCY RESPONSE (24/7)
Emergency telephone numbers	+ 31 30 274 88 88	+47 23 25 25 84
Other emergency telephone numbers	+ 31-10-4877700	+61 3 9573 3188

Once connected and if the message is not in your preferred language then please dial 01

SECTION 2 Hazards identification

2.1. Classification of the substance or mixture

Not considered a hazardous mixture according to Reg. (EC) No 1272/2008 and their amendments. Not classified as Dangerous Goods for transport purposes.

Classification according to regulation (EC) No 1272/2008 [CLP] and amendments [1]

Not Applicable

2.2. Label elements

Hazard pictogram(s)	Not Applicable
riazaru pictogramijaj	I NOT Applicable

Signal word Not

Not Applicable

Hazard statement(s)

Not Applicable

Supplementary statement(s)

EUH210

Safety data sheet available on request.

CLP classification (additional)

Not Applicable

Precautionary statement(s) Prevention

Not Applicable

Precautionary statement(s) Response

Not Applicable

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

2.3. Other hazards

REACH - Art.57-59: The mixture does not contain Substances of Very High Concern (SVHC) at the SDS print date.

SECTION 3 Composition / information on ingredients

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3.1.Substances

See 'Composition on ingredients' in Section 3.2

3.2.Mixtures

1. CAS No 2.EC No 3.Index No 4.REACH No	%[weight]	Name	Classification according to regulation (EC) No 1272/2008 [CLP] and amendments	SCL / M-Factor	Nanoform Particle Characteristics
 7632-05-5 2231-558-5 Not Available Not Available 	30-60	sodium phosphate	Not Classified [3]	Not Available	Not Available
 68439-46-3* Not Available Not Available Not Available 	1-5	Primary C9-C11 alcoholethoxylate	Serious Eye Damage/Eye Irritation Category 2; H319 [1]	Not Available	Not Available
 Not Available Not Available Not Available Not Available 	5-25	This product consist of a synergistic blend of highly selected Bacillus microorganisms.	Not Applicable	Not Available	Not Available
Legend:		by Chemwatch; 2. Classification drawn DELVs available; [e] Substance identified	• , ,		lassification drawn from

SECTION 4 First aid measures

4.1. Description of first aid measures

Eye Contact	If this product comes in contact with eyes: • Wash out immediately with water. • If irritation continues, seek medical attention. • Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin or hair contact occurs: Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	 If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.
Ingestion	 Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11

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

Treat symptomatically.

for phosphate salts intoxication:

- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.
- Ingestion of large quantities of phosphate salts (over 1.0 grams for an adult) may cause an osmotic catharsis resulting in diarrhoea and probable abdominal cramps. Larger doses such as 4-8 grams will almost certainly cause these effects in everyone. In healthy individuals most of the ingested salt will be excreted in the faeces with the diarrhoea and, thus, not cause any systemic toxicity. Doses greater than 10 grams hypothetically may cause systemic toxicity.
- ▶ Treatment should take into consideration both anionic and cation portion of the molecule.
- All phosphate salts, except calcium salts, have a hypothetical risk of hypocalcaemia, so calcium levels should be monitored.

SECTION 5 Firefighting measures

5.1. Extinguishing media

- ▶ There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

5.2. Special hazards arising from the substrate or mixture

Fire Incompatibility	None known.

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5.3. Advice for firefighters

Fire Fighting	 Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses.
Fire/Explosion Hazard	 Non combustible. Not considered a significant fire risk, however containers may burn. Decomposition may produce toxic fumes of: , phosphorus oxides (POx)

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

See section 8

6.2. Environmental precautions

See section 12

6.3. Methods and material for containment and cleaning up

Minor Spills	 Clean up all spills immediately. Avoid contact with skin and eyes. Wear impervious gloves and safety glasses.
Major Spills	 Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Control personal contact with the substance, by using protective equipment and dust respirator.

6.4. Reference to other sections

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Safe handling	 Limit all unnecessary personal contact. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area.
Fire and explosion protection	See section 5
Other information	 Store in original containers. Keep containers securely sealed. Store in a cool, dry area protected from environmental extremes.

7.2. Conditions for safe storage, including any incompatibilities

Suitable container	 Lined metal can, lined metal pail/ can. Plastic pail. Polyliner drum.
Storage incompatibility	Avoid contamination of water, foodstuffs, feed or seed. • Metals and their oxides or salts may react violently with chlorine trifluoride and bromine trifluoride. • These trifluorides are hypergolic oxidisers. They ignite on contact (without external source of heat or ignition) with recognised fuels - contact with these materials, following an ambient or slightly elevated temperature, is often violent and may produce ignition. • Phosphates are incompatible with oxidising and reducing agents. • Phosphates are susceptible to formation of highly toxic and flammable phosphine gas in the presence of strong reducing agents such as hydrides. • Partial oxidation of phosphates by oxidizing agents may result in the release of toxic phosphorus oxides. • Avoid oxidising agents, acids, acid chlorides, acid anhydrides, chloroformates.
Hazard categories in accordance with Regulation (EC) No 1272/2008	Not Available
Qualifying quantity (tonnes) of dangerous	Not Available

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substances as referred to in Article 3(10) for the application of















- X Must not be stored together
- May be stored together with specific preventions
- May be stored together

Note: Depending on other risk factors, compatibility assessment based on the table above may not be relevant to storage situations, particularly where large volumes of dangerous goods are stored and handled. Reference should be made to the Safety Data Sheets for each substance or article and risks assessed accordingly.

7.3. Specific end use(s)

See section 1.2

SECTION 8 Exposure controls / personal protection

8.1. Control parameters

Ingredient	DNELs Exposure Pattern Worker	PNECs Compartment
Primary C9-C11 alcoholethoxylate	Dermal 2 080 mg/kg bw/day (Systemic, Chronic) Inhalation 294 mg/m³ (Systemic, Chronic) Dermal 1 250 mg/kg bw/day (Systemic, Chronic) * Inhalation 87 mg/m³ (Systemic, Chronic) * Oral 25 mg/kg bw/day (Systemic, Chronic) *	0.104 mg/L (Water (Fresh)) 0.014 mg/L (Water - Intermittent release) 0.104 mg/L (Water (Marine)) 13.7 mg/kg sediment dw (Sediment (Fresh Water)) 13.7 mg/kg sediment dw (Sediment (Marine)) 1 mg/kg soil dw (Soil) 1.4 mg/L (STP)

^{*} Values for General Population

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Not Available						

Not Applicable

Emergency Limits

Ingredient	TEEL-1	TEEL-2	TEEL-3
GAMAZYME 700 FN	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
sodium phosphate	Not Available	Not Available
Primary C9-C11 alcoholethoxylate	Not Available	Not Available
This product consist of a synergistic blend of highly selected Bacillus microorganisms.	Not Available	Not Available

Occupational Exposure Banding

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit
Primary C9-C11 alcoholethoxylate	E	≤ 0.1 ppm
Notes:	Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health.	

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8.2. Exposure controls

8.2.1. Appropriate engineering controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

8.2.2. Individual protection measures, such as personal protective equipment









Eye and face protection

- Safety glasses with side shields
- ► Chemical goggles. [AS/NZS 1337.1, EN166 or national equivalent]
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.

Skin protection

See Hand protection below

Hands/feet protection

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.

Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present.

- ▶ polychloroprene.
- ▶ nitrile rubber.

Body protection

See Other protection below

Other protection

No special equipment needed when handling small quantities.

OTHERWISE:

- Overalls.
- Barrier cream.

Respiratory protection

Type -P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	P1	-	PAPR-P1
ap to 10 % 20	Air-line*	-	-
up to 50 x ES	Air-line**	P2	PAPR-P2
up to 100 x ES	-	P3	-
		Air-line*	-
100+ x ES	-	Air-line**	PAPR-P3

* - Negative pressure demand ** - Continuous flow

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

- $\cdot \ \text{Respirators may be necessary when engineering and administrative controls do not adequately prevent exposures.}$
- The decision to use respiratory protection should be based on professional judgment that takes into account toxicity information, exposure measurement data, and frequency and likelihood of the worker's exposure ensure users are not subject to high thermal loads which may result in heat stress or distress due to personal protective equipment (powered, positive flow, full face apparatus may be an option).
- · Published occupational exposure limits, where they exist, will assist in determining the adequacy of the selected respiratory protection. These may be government mandated or vendor recommended.
- · Certified respirators will be useful for protecting workers from inhalation of particulates when properly selected and fit tested as part of a complete respiratory protection program.
- · Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)
- · Use approved positive flow mask if significant quantities of dust becomes airborne.
- · Try to avoid creating dust conditions.

8.2.3. Environmental exposure controls

See section 12

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9.1. Information on basic physical and chemical properties

Physical state Solid Relative density (Water = 1) Not Applicable Odour Not Available Partition coefficient n-octanol / water (°C) Not Available Odour threshold Not Available Auto-ignition temperature (°C) Decomposition temperature (°C) Not Applicable Physical Physicable Decomposition temperature (°C) Not Applicable Not Applicable Melting point / freezing point (°C) Not Applicable Not Applicable Molecular weight (g/mol) Not Applicable Initial boiling point and boiling point and boiling range (°C) Not Applicable Taste Not Available BuAC = 1 Explosive properties Not Available BuAC = 1 Explosive properties Not Available Not Applicable Oxidising properties Not Available Surface Tension (dyn/cm or mN/m) Not Applicable Volatile Component (°%vol) Not Applicable Oxidising properties Not Available Decomposite Limit (%) Not Applicable Volatile Component (°%vol) Not Applicable Oxidising properties Not Available Oxidisin	Appearance	Tan brown, sawdust-like powderfibres, tan,		
Odour Not Available Not Applicable Not Available Evaporation rate Not Available BuAC = 1 Explosive properties Not Available Flammability Not Applicable Not Applicable Oxidising properties Not Available Upper Explosive Limit (%) Not Applicable Volatile Component (%vol) Not Applicable Vapour pressure (kPa) Not Applicable Partly miscible Not Available Not Available Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Volatile Component (%vol) Not Applicable				
Odour Not Available n-octanol / water Not Available Odour threshold Not Available Auto-ignition temperature (°C) Not Applicable pH (as supplied) Not Applicable Decomposition temperature (°C) Not Applicable Melting point (°C) Not Applicable Viscosity (cSt) Not Applicable Initial boiling point and boiling range (°C) Not Applicable Molecular weight (g/mol) Not Applicable Flash point (°C) Not Applicable Taste Not Available Evaporation rate Not Available BuAC = 1 Explosive properties Not Available Flammability Not Applicable Oxidising properties Not Available Upper Explosive Limit (%) Not Applicable Surface Tension (dyn/cm or mN/m) Not Applicable Uapour pressure (kPa) Not Applicable Volatile Component (%vol) Not Applicable Vapour pressure (kPa) Not Applicable Gas group Not Available Vapour density (Air = 1) Not Applicable PH as a solution (1%) 6.5-8.5 Vapour density (Air = 1) Not Available Not Applicable Not Applicable </th <th>Physical state</th> <th>Solid</th> <th>• •</th> <th>Not Applicable</th>	Physical state	Solid	• •	Not Applicable
PH (as supplied) Not Applicable PH (as supplied) Not Applicable Viscosity (cSt) Not Applicable Taste Not Available Evaporation rate Not Available BuAC = 1 Explosive properties Not Available Flammability Not Applicable Oxidising properties Not Available Upper Explosive Limit (%) Not Applicable Volatile Component (%vol) Vapour pressure (kPa) Not Applicable Solubility in water Partly miscible Not Applicable	Odour	Not Available		Not Available
Melting point / freezing point (°C) Melting point (°C) Initial boiling point and boiling range (°C) Flash point (°C) Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Molecular weight (g/mol) Not Applicable Not Available Flash point (°C) Not Applicable Evaporation rate Not Available BuAC = 1 Explosive properties Not Available Flammability Not Applicable Oxidising properties Not Available Surface Tension (dyn/cm or mN/m) Not Applicable Volatile Component (%vol) Not Applicable Vapour pressure (kPa) Not Applicable Partly miscible Not Available Not Available Not Available Not Available Not Applicable Not Available	Odour threshold	Not Available		Not Applicable
Not Applicable Not Applicable Not Applicable Not Applicable	pH (as supplied)	Not Applicable	-	Not Applicable
boiling range (°C) Flash point (°C) Not Applicable Flash point (°C) Not Applicable Taste Not Available Not Available BuAC = 1 Explosive properties Not Available Not Available Not Applicable Oxidising properties Not Available Not Applicable Surface Tension (dyn/cm or mN/m) Lower Explosive Limit (%) Not Applicable Volatile Component (%vol) Vapour pressure (kPa) Not Applicable Solubility in water Partly miscible Vapour density (Air = 1) Not Applicable Not Available Not Applicable Not Applicable Partly miscible Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Available Not Applicable Not Available	• • • • • • • • • • • • • • • • • • • •	Not Applicable	Viscosity (cSt)	Not Applicable
Evaporation rate Not Available BuAC = 1 Explosive properties Not Available Not Applicable Oxidising properties Not Available Upper Explosive Limit (%) Not Applicable Not Applicable Volatile Component (%vol) Vapour pressure (kPa) Not Applicable Vapour pressure (kPa) Not Applicable Partly miscible Partly miscible Vapour density (Air = 1) Not Applicable Not Available		Not Applicable	Molecular weight (g/mol)	Not Applicable
Flammability Not Applicable Oxidising properties Not Available Upper Explosive Limit (%) Not Applicable Surface Tension (dyn/cm or mN/m) Lower Explosive Limit (%) Not Applicable Volatile Component (%vol) Not Applicable Vapour pressure (kPa) Not Applicable Gas group Not Available Solubility in water Partly miscible pH as a solution (1%) 6.5-8.5 Vapour density (Air = 1) Not Applicable VOC g/L Not Applicable Nanoform Solubility Not Available Not Available Not Available	Flash point (°C)	Not Applicable	Taste	Not Available
Upper Explosive Limit (%) Not Applicable Not Applicable Volatile Component (%vol) Vapour pressure (kPa) Not Applicable Vapour pressure (kPa) Not Applicable Partly miscible Vapour density (Air = 1) Not Applicable Not Applicable Partly miscible Not Applicable VOC g/L Not Applicable	Evaporation rate	Not Available BuAC = 1	Explosive properties	Not Available
Upper Explosive Limit (%) Not Applicable Not Applicable Lower Explosive Limit (%) Not Applicable Not Applicable Vapour pressure (kPa) Not Applicable Gas group Not Available Solubility in water Partly miscible pH as a solution (1%) 6.5-8.5 Vapour density (Air = 1) Not Applicable VOC g/L Not Applicable Nanoform Solubility Not Available Not Available Not Available	Flammability	Not Applicable	Oxidising properties	Not Available
Vapour pressure (kPa) Not Applicable Gas group Not Available Solubility in water Partly miscible pH as a solution (1%) 6.5-8.5 Vapour density (Air = 1) Not Applicable VOC g/L Not Applicable Nanoform Solubility Not Available Not Available Not Available	Upper Explosive Limit (%)	Not Applicable		Not Applicable
Solubility in water Partly miscible pH as a solution (1%) 6.5-8.5 Vapour density (Air = 1) Not Applicable VOC g/L Not Applicable Nanoform Solubility Not Available Not Available Not Available Not Available	Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Applicable
Vapour density (Air = 1) Not Applicable VOC g/L Not Applicable Nanoform Solubility Not Available Nanoform Particle Characteristics Not Available	Vapour pressure (kPa)	Not Applicable	Gas group	Not Available
Nanoform Solubility Not Available Not Available Not Available Not Available	Solubility in water	Partly miscible	pH as a solution (1%)	6.5-8.5
Nanoform Solubility Not Available Characteristics Not Available	Vapour density (Air = 1)	Not Applicable	VOC g/L	Not Applicable
Particle Size Not Available	Nanoform Solubility	Not Available		Not Available
	Particle Size	Not Available		

9.2. Other information

Not Available

SECTION 10 Stability and reactivity

10.1.Reactivity	See section 7
10.2. Chemical stability	Product is considered stable and hazardous polymerisation will not occur.
10.3. Possibility of hazardous reactions	See section 7
10.4. Conditions to avoid	See section 7
10.5. Incompatible materials	See section 7
10.6. Hazardous decomposition products	See section 5

SECTION 11 Toxicological information

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

Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.
	The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. The material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g liver, kidney) damage is evident.
Ingestion	Phosphates are slowly and incompletely absorbed from the gastrointestinal tract and are unlikely (other than in abuse) to produce the systemic effects which occur when introduced by other routes. Such effects include vomiting, lethargy, fever, diarrhoea, falls in blood pressure, slow pulse, cyanosis, carpal spasm, coma and tetany. These effects result following sequestration of blood calcium.

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Skin Contact	The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting. Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Еуе	Although the material is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may cause transient discomfort characterised by tearing or conjunctival redness (as with windburn). Slight abrasive damage may also result. The material may produce foreign body irritation in certain individuals.
Chronic	Long-term exposure to the product is not thought to produce chronic effects adverse to health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course. Dogs given daily doses of sodium phosphate dibasic for 9-22 weeks showed calcium deposits in the kidneys (nephrocalcinosis) with disseminated atrophy of the proximal tubule. Animals fed on sodium phosphate dibasic and potassium dihydrogen phosphate, in both short- and long-term studies, showed increased bone porosity; hyperparathyroidism and soft tissue calcification were also evident.

GAMAZYME 700 FN	TOXICITY	IRRITATION
	Not Available	Not Available
	TOXICITY	IRRITATION
	Oral (Rat) LD50: 17000 mg/kg ^[2]	Eye (rabbit): 500 mg/24h - mild
sodium phosphate		Eye: no adverse effect observed (not irritating) ^[1]
		Skin (rabbit): 500 mg/24h - mild
		Skin: no adverse effect observed (not irritating) ^[1]
	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >2000 mg/kg ^[2]	Eye (human): SEVERE
Primary C9-C11	Dermal (rabbit) LD50: >5000 mg/kg *[2]	Eye: adverse effect observed (irritating) ^[1]
alcoholethoxylate	Oral (Rat) LD50: 1378 mg/kg ^[2]	Skin: no adverse effect observed (not irritating) ^[1]
	Oral (Rat) LD50: 1400 mg/kg *[2]	Skin: SEVERE
	Oral (Rat) LD50: 2700 mg/kg *[2]	
This product consist of a synergistic blend of highly	TOXICITY	IRRITATION
selected Bacillus microorganisms.	Not Available	Not Available

Legend:	1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS.
	Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

SODIUM PHOSPHATE

Primary C9-C11

alcoholethoxylate

for sodium phosphate, dibasic

The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis.

Human beings have regular contact with alcohol ethoxylates through a variety of industrial and consumer products such as soaps, detergents, and other cleaning products . Exposure to these chemicals can occur through ingestion, inhalation, or contact with the skin or eyes. Studies of acute toxicity show that volumes well above a reasonable intake level would have to occur to produce any toxic response.

Alcohol ethoxylates are according to CESIO (2000) classified as Irritant or Harmful depending on the number of EO-units:

EO < 5 gives Irritant (Xi) with R38 (Irritating to skin) and R41 (Risk of serious damage to eyes)

EO > 5-15 gives Harmful (Xn) with R22 (Harmful if swallowed) - R38/41

EO > 15-20 gives Harmful (Xn) with R22-41

>20 EO is not classified (CESIO 2000)

Oxo-AE, C13 EO10 and C13 EO15, are Irritating (Xi) with R36/38 (Irritating to eyes and skin) .

AE are not included in Annex 1 of the list of dangerous substances of the Council Directive 67/548/EEC

In general, alcohol ethoxylates (AE) are readily absorbed through the skin of guinea pigs and rats and through the gastrointestinal mucosa of rats. AE are quickly eliminated from the body through the urine, faeces, and expired air (CO2). Orally dosed AE was absorbed rapidly and extensively in rats, and more than 75% of the dose was absorbed. When applied to the skin of humans, the doses were absorbed slowly and incompletely (50% absorbed in 72 hours).

For high boiling ethylene glycol ethers (typically triethylene- and tetraethylene glycol ethers):

Skin absorption: Available skin absorption data for triethylene glycol ether (TGBE), triethylene glycol methyl ether (TGME), and triethylene glycol ethylene ether (TGEE) suggest that the rate of absorption in skin of these three glycol ethers is 22 to 34 micrograms/cm2/hr, with the methyl ether having the highest permeation constant and the butyl ether having the lowest. The rates of absorption of TGBE, TGEE and TGME are at least 100-fold less than EGME, EGEE, and EGBE, their ethylene glycol

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monoalkyl ether counterparts, which have absorption rates that range from 214 to 2890 micrograms/ cm2/hr. Therefore, an increase in either the chain length of the alkyl substituent or the number of ethylene glycol moieties appears to lead to a decreased rate of percutaneous absorption.

The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

The material may produce severe skin irritation after prolonged or repeated exposure, and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) thickening of the epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis. Prolonged contact is unlikely, given the severity of response, but repeated exposures may produce severe ulceration. Dermal (rabbit): 4000 mg/kg * Somnolence, ataxia, diarrhoea recorded.

Acute Toxicity	×	Carcinogenicity	×
Skin Irritation/Corrosion	×	Reproductivity	×
Serious Eye Damage/Irritation	×	STOT - Single Exposure	×
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure	×
Mutagenicity	×	Aspiration Hazard	×

Legend: ★ - Data either not available or does not fill the criteria for classification

✓ – Data available to make classification

11.2 Information on other hazards

11.2.1. Endocrine disrupting properties

No evidence of endocrine disrupting properties were found in the current literature.

11.2.2. Other information

See Section 11.1

SECTION 12 Ecological information

12.1. Toxicity

GAMAZYME 700 FN	Endpoint	Test Duration (hr)	Species		Value	Source
	Not Available	Not Available	Not Available		Not Available	Not Available
	Endpoint	Test Duration (hr)	Species		Value	Source
sodium phosphate	Not Available	Not Available	Not Available	Not Available Not Available		Not Available
Primary C9-C11 alcoholethoxylate	Endpoint	Test Duration (hr)	Species	Valu	e	Source
	EC50	48h	Crustacea	2.21	7-3.523mg/l	4
	EC50	96h	Algae or other aquatic plants	1.4m	ıg/l	2
	LC50	96h	Fish	7mg/	1	Not Available
	NOEC(ECx)	720h	Fish	0.11-	0.28mg/l	2
This product consist of a	Endpoint	Test Duration (hr)	Species		Value	Source
synergistic blend of highly selected Bacillus microorganisms.	Not Available	Not Available	Not Available		Not Available	Not Available
Legend:	4. US EPA, Ec	otox database - Aquatic Toxicity	pe ECHA Registered Substances - Ecotox Data 5. ECETOC Aquatic Hazard Assessi Incentration Data 8. Vendor Data	J		

For Phosphate: The principal problems of phosphate contamination of the environment relates to eutrophication processes in lakes and ponds. Phosphorus is an essential plant nutrient and is usually the limiting nutrient for blue-green algae.

Aquatic Fate: Lakes overloaded with phosphates is the primary catalyst for the rapid growth of algae in surface waters.

12.2. Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air

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Ingredient	Persistence: Water/Soil	Persistence: Air	
	No Data available for all ingredients	No Data available for all ingredients	

12.3. Bioaccumulative potential

Ingredient	Bioaccumulation		
	No Data available for all ingredients		

12.4. Mobility in soil

Ingredient	Mobility
	No Data available for all ingredients

12.5. Results of PBT and vPvB assessment

	Р	В	Т	
Relevant available data	Not Available	Not Available	Not Available	
PBT	×	×	×	
vPvB	X	×	×	
PBT Criteria fulfilled?				
vPvB			No	

12.6. Endocrine disrupting properties

No evidence of endocrine disrupting properties were found in the current literature.

12.7. Other adverse effects

No evidence of ozone depleting properties were found in the current literature.

SECTION 13 Disposal considerations

13.1. Waste treatment methods

Product / Packaging disposal	 DO NOT allow wash water from cleaning or process equipment to enter drains. It may be necessary to collect all wash water for treatment before disposal. In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. Recycle wherever possible or consult manufacturer for recycling options. Consult State Land Waste Management Authority for disposal. Bury residue in an authorised landfill.
Waste treatment options	Not Available
Sewage disposal options	Not Available

SECTION 14 Transport information

Labels Required

	NO
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Land transport (ADR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. UN number or ID number	Not Applicable		
14.2. UN proper shipping name	Not Applicable		
14.3. Transport hazard class(es)	Class Subsidiary Hazard	Not Applicable Not Applicable	
14.4. Packing group	Not Applicable		
14.5. Environmental hazard	Not Applicable		

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	Hazard identification (Kemler)	Not Applicable
	Classification code	Not Applicable
14.6. Special precautions	Hazard Label	Not Applicable
for user	Special provisions	Not Applicable
	Limited quantity	Not Applicable
	Tunnel Restriction Code	Not Applicable

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. UN number Not Applicable Not Applicable Not Applicable Not Applicable ICAO/IATA Class Not Applicable ICAO / IATA Subsidiary Hazard Not Applicable
name Not Applicable ICAO/IATA Class Not Applicable
14.3 Transport hazard
14.3. Iransport nazard ICAO / IATA Subsidiary Hazard Not Applicable
class(es)
ERG Code Not Applicable
14.4. Packing group Not Applicable
14.5. Environmental hazard Not Applicable
Special provisions Not Applicable
Cargo Only Packing Instructions Not Applicable
Cargo Only Maximum Qty / Pack Not Applicable
14.6. Special precautions for user Passenger and Cargo Packing Instructions Not Applicable
Passenger and Cargo Maximum Qty / Pack Not Applicable
Passenger and Cargo Limited Quantity Packing Instructions Not Applicable
Passenger and Cargo Limited Maximum Qty / Pack Not Applicable

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Not Applicable		
IMDG Class	Not Applicable	
IMDG Subsidiary Haza	Not Applicable	
Not Applicable		
Not Applicable		
EMS Number	Not Applicable	
Special provisions	ns Not Applicable	
Limited Quantities	Not Applicable	
-	IMDG Subsidiary Haza Not Applicable Not Applicable EMS Number Special provisions	

Inland waterways transport (ADN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. UN number	Not Applicable		
14.2. UN proper shipping name	Not Applicable		
14.3. Transport hazard class(es)	Not Applicable Not Applicable		
14.4. Packing group	Not Applicable		
14.5. Environmental hazard	Not Applicable		
	Classification code Not Applicable		
14.6. Special precautions for user	Special provisions Not Applicable		
	Limited quantity Not Applicable		

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Equipment required	Not Applicable
Fire cones number	Not Applicable

14.7. Maritime transport in bulk according to IMO instruments

14.7.1. Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

14.7.2. Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
sodium phosphate	Not Available
Primary C9-C11 alcoholethoxylate	Not Available
This product consist of a synergistic blend of highly selected Bacillus microorganisms.	Not Available

14.7.3. Transport in bulk in accordance with the IGC Code

Product name	Ship Type
sodium phosphate	Not Available
Primary C9-C11 alcoholethoxylate	Not Available
This product consist of a synergistic blend of highly selected Bacillus microorganisms.	Not Available

SECTION 15 Regulatory information

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

sodium phosphate is found on the following regulatory lists

Europe EC Inventory

European Union - European Inventory of Existing Commercial Chemical Substances (EINECS)

Primary C9-C11 alcoholethoxylate is found on the following regulatory lists

Not Applicable

This product consist of a synergistic blend of highly selected Bacillus microorganisms. is found on the following regulatory lists

Not Applicable

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable -: Directives 98/24/EC, - 92/85/EEC, - 94/33/EC, - 2008/98/EC, - 2010/75/EU; Commission Regulation (EU) 2020/878; Regulation (EC) No 1272/2008 as updated through ATPs.

Information according to 2012/18/EU (Seveso III):

Seveso Category	Not Available
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15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

National Inventory Status

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No (sodium phosphate; Primary C9-C11 alcoholethoxylate)
China - IECSC	No (sodium phosphate)

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National Inventory	Status	
Europe - EINEC / ELINCS / NLP	No (Primary C9-C11 alcoholethoxylate)	
Japan - ENCS	Yes	
Korea - KECI	Yes	
New Zealand - NZIoC	Yes	
Philippines - PICCS	Yes	
USA - TSCA	Yes	
Taiwan - TCSI	Yes	
Mexico - INSQ	No (sodium phosphate)	
Vietnam - NCI	Yes	
Russia - FBEPH	No (sodium phosphate; Primary C9-C11 alcoholethoxylate)	
	Yes = All CAS declared ingredients are on the inventory	
Legend:	No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.	

SECTION 16 Other information

Revision Date	26/07/2021
Initial Date	11/10/2017

CONTACT POINT

- For quotations contact your local Customer Services - http://wssdirectory.wilhelmsen.com/#/customerservices - - Responsible for safety data sheet Wilhelmsen Ships Service AS - Prepared by: Compliance Manager, - Email: Email: wss.global.sdsinfo@wilhelmsen.com - Telephone: Tel.: +47 67584000

Full text Risk and Hazard codes

H319	Causes serious eye irritation.
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SDS Version Summary

Version	Date of Update	Sections Updated
4.10	30/09/2020	Hazards identification - Classification, Composition / information on ingredients - Ingredients, Identification of the substance / mixture and of the company / undertaking - Use

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios.

For detailed advice on Personal Protective Equipment, refer to the following EU CEN Standards:

EN 166 Personal eye-protection

EN 340 Protective clothing

EN 374 Protective gloves against chemicals and micro-organisms

EN 13832 Footwear protecting against chemicals

EN 133 Respiratory protective devices

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