

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 12.07.2018 Revision date: 25.07.2023 Supersedes version of: 25.07.2023 Version: 3.3

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

1.1. Product identifier

Product form : Mixture

Trade name : LAFAZYM® 600 XL ICE
UFI : VGJJ-T8WP-E10H-2N0P
Type of product : For œnological use
Product group : Trade product
Other means of identification : E422 - E508

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

1.2.1. Relevant identified uses

Main use category : Professional use

Industrial/Professional use spec : For professional users only

Use of the substance/mixture : Highly concentrated liquid purified pectolytic enzymes preparation high in side activities with

enhanced efficiency on a wide range of pH and temperature.

Use of the substance/mixture : For œnological use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

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 $\underline{\mathsf{laffortusa@laffort.com}} \, \text{-} \, \underline{\mathsf{www.laffortusa.com}}$

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Australia	NSW Poisons Information Centre The Children's Hospital at Westmead	Locked Bag 4001 NSW 2145	13 11 26	
Canada	Ontario Poison Centre (OPC)	The Hospital for Sick Children 555 University Avenue ON M5G 1X8 Toronto	1-800-268-9017 (416) 813-5900	
Canada	BC Drug and Poison Information Centre (DPIC)	655 West 12th Avenue BC V5Z 4R4 Vancouver	1-800-567-8911 (604) 682-5050	
China	National Poison Control Center	Chinese Center for Disease Control and Prevention Nanwei road, No.29 100050 Beijing	+86 10 831 32 046	
Croatia	Centar za kontrolu otrovanja Institut za medicinska istraživanja i medicinu rada	Ksaverska Cesta 2 p.p. 291 10000 Zagreb	+385 1 234 8342	Information available 24/7 in Croatian and English
Czech Republic	Toxikologické informační středisko Klinika pracovního lékařství VFN a 1. LF UK	Na Bojišti 1 120 00 Praha 2	+420 224 919 293 +420 224 915 402	
Denmark	Giftlinjen	Bispebjerg Bakke 23 Opgang 20 C 2400 København NV	+45 82 12 12 12	
Georgia	National Toxicology Information Advisory Center	Tbilisi State Medical University Department of Toxicology - 7 Asatiani St. 380 077 Tbilisi	+995 99 533320	
Greece	Poisons Information Centre Children's Hospital P&A Kyriakou	11762 Athens	+30 2 10 779 3777	
Hungary	Országos Kémiai Biztonsági Intézet Egészségügyi Toxikológiai Tájékoztató Szolgálat	Nagyvárad tér 2. 1437 Budapest, Pf. 839 1097 Budapest	+36 80 20 11 99	
Israel	Israel Poison Information Center Rambam Health Care Campus	6 Ha'Aliya Street 31096	+972 4 854 1900	
Japan	Japan Poison Information Center	Tsukuba Medical Center 1-1-1 Amakubo 305-0005 Tsukuba City, Ibaraki	+81-29-856-3566 +81-72-727-2499	
Jordan	National Drug & Poison Information Center of Jordan		0798506755 00962-6-5353444	
Kazakhstan	Republican Toxicology Center	Tole-bi 93 480083 Almaty	+7 3272 925 868	
Malta	Medicines & Poisons Info Office	Mater Dei Hospital MSD Msida	+356 2545 6504	

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Organisation/Company	Address	Emergency number	Comment
National Poisons Centre	Dunedin School of Medicine, University of Otago PO Box 913 9054 Dunedin	0800 764 766 +56 2 2 247 3600	
National Poisons Information Centre The Nofer Institute of Occupational Medicine (Łódź)	ul. Teresy 8 P.O. BOX 199 90950 Łódź	+48 42 63 14 724	
Department of Clinical Toxicology Spitalul de Urgenta Floreasca	Calea Floreasca Bucuresti	+40 21 230 8000	
Информационно-консультативный центр по токсикология (RTIAC) Министерство здравоохранения Российской Федерации	3 Сухаревская Площадь Блок 7 129090 г. Москва	+7 495 628 1687 (только на русском)	
Nacionalni centar za kontrolu trovanja - VMA	Crnotravska 17 11000 Beograd	+381 11 360 84 40	
Center za klinično toksikologijo in farmakologijo Interna klinika, UKCL	Zaloška 7 1000 Ljubljana	+386 522 52 83	
Tygerberg Poison Information Centre	Division of Clinical Pharmacology Faculty of Medicine and Heath Sciences Stellenbosch University - PO Box 241 8 000 Cape Town	0861 555 777 +56 2 2 247 3600	
Giftinformationscentralen	Solna Strandväg 21 171 54 Solna	112 – begär Giftinformation	
Ulusal Zehir Merkezi (UZEM) Refik Saydam Hıfzısıhha Merkezi Başkanlığı	Cemal Gürsel Cd. No: 18 Sıhhiye Çankaya 06590 Ankara	114	Information is provided to public and medical personnel on poisoning incidents via 114.
National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	Only for healthcare professionals
National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals
National Poisons Information Service (Cardiff Centre) University Hospital Llandough	Penlan Road CF64 2XX	0344 892 0111	Only for healthcare professionals
National Poisons Information Service (Edinburgh Centre) Royal Infirmary of Edinburgh	Little France Crescent EH16 4SA	0344 892 0111	Only for healthcare professionals
Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER	+44 20 7188 7188	
National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre	16/17 Framlington Place Newcastle-upon-Tyne NE2 4AB	0344 892 0111	Only for healthcare professionals
	National Poisons Centre National Poisons Information Centre The Nofer Institute of Occupational Medicine (Łódź) Department of Clinical Toxicology Spitalul de Urgenta Floreasca Информационно-консультативный центр по токсикология (RTIAC) Министерство здравоохранения Российской Федерации Nacionalni centar za kontrolu trovanja - VMA Center za klinično toksikologijo in farmakologijo Interna klinika, UKCL Tygerberg Poison Information Centre Giftinformationscentralen Ulusal Zehir Merkezi (UZEM) Refik Saydam Hıfzısıhha Merkezi Başkanlığı National Poisons Information Service (Belfast Centre) Royal Victoria Hospital National Poisons Information Service (Birmingham Centre) City Hospital National Poisons Information Service (Cardiff Centre) University Hospital Llandough National Poisons Information Service (Edinburgh Centre) Royal Infirmary of Edinburgh Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust National Poisons Information Service (Newcastle Centre)	National Poisons Centre National Poisons Information Centre The Nofer Institute of Occupational Medicine, University of Otago PO Box 913 9054 Dunedin National Poisons Information Centre The Nofer Institute of Occupational Medicine (Lódź) Department of Clinical Toxicology Spitalul de Urgenta Floreasca Информационно-консультативный центр по токсикология (RTIAC) Министерство здравоохранения Российской Федерации Nacionalni centar za kontrolu trovanja - VMA Crnotravska 17 11000 Beograd Center za klinično toksikologijo in Zaloška 7 1000 Ljubljana Center za klinično toksikologijo in Genter aklinika, UKCL Tygerberg Poison Information Centre Division of Clinical Pharmacology Faculty of Medicine and Heath Sciences Stellenbosch University - PO Box 241 8 000 Cape Town Giftinformationscentralen Ulusal Zehir Merkezi (UZEM) Refik Saydam Hıfzısıhha Merkezi Başkanlığı Cemal Gürsel Cd. No: 18 Sıhhiye Çankaya 06590 Ankara National Poisons Information Service (Belfast Centre) Royal Victoria Hospital National Poisons Information Service (Cardiff Centre) University Hospital Llandough National Poisons Information Service (Cardiff Centre) University Hospital Llandough National Poisons Information Service (Cardiff Centre) Royal Infirmary of Edinburgh Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Fram Road Set 14 5ER National Poisons Information Service (Newcastle University Hospital Place Newcastle-upon-Tyne	National Poisons Centre Dunedin School of Medicine, University of Otago PO Box 913 9054 Dunedin National Poisons Information Centre The Nofer Institute of Occupational Medicine (Iddit) Department of Clinical Toxicology Spitalul de Urgenta Floreasca Uнформационно-консультативный центр по токсикология (RTIAC) Министерство адравоохранения Российской Федерации Nacionalni centar za kontrolu trovanja - VMA Nacionalni centar za kontrolu trovanja - VMA Center za klinično toksikologijo in farmakologijo Interna klinika, UKCL Tygerberg Poison Information Centre Division of Clinical Pharmacology Stellenbosch University - PO Box 241 8 000 Cape Town Giftinformationscentralen Ulusal Zehir Merkezi (UZEM) Refik Saydam Hifzishha Merkezi Başkanlığı Ocisyal Victoria Hospital National Poisons Information Service (Belfast Centre) National Poisons Information Service (Cardiff Emilia Pharmacology Brita Saydam Hifzishha Merkezi Başkanlığı Ocisyal Victoria Hospital National Poisons Information Service (Cardiff Penlan Road Centre) Ulivis St Thomas' Poisons Unit Medicina Poisons Information Service (Edimburgh Centre) University Hospital Llandough National Poisons Information Service (Edimburgh Centre) Cuty Kospital Trust National Poisons Information Service (Edimburgh Centre) Cuty's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Volume Trust National Poisons Information Service (Rewcastle Centre) National Poisons Information Service (Refe Saydam Hifzish) Avonley Road Stal SER Noval Victoria Hospital National Poisons Information Service (Cardiff Penlan Road Centre) University Hospital Llandough National Poisons Information Service (Edimburgh Centre) Cuty's & St Thomas' Poisons Unit Medical Trust National Poisons Information Service (Revecastle Centre) National

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Country	Organisation/Company	Address	Emergency number	Comment
United States of	American Association of Poison Control	515 King St., Suite 510	1-800-222-1222	
America	Centers	VA 22314 Alexandria	+56 2 2 247 3600	

H334

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Respiratory sensitisation, Category 1

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

Adverse physicochemical, human health and environmental effects

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 (CLP)



3HS08

Signal word (CLP) : Danger

Contains : Polygalacturonase enzyme

Hazard statements (CLP) : H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statements (CLP) : P261 - Avoid breathing dust, fume, gas, mist, vapours, spray.

P280 - Wear protective gloves, protective clothing, eye protection, face protection.

P284 - In case of inadequate ventilation wear respiratory protection.

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.

2.3. Other hazards

Other hazards which do not result in classification : May cause sensitization by inhalation and skin contact. mild eye irritation. mild skin irritation.

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier		Classification according to Regulation (EC) No. 1272/2008 [CLP]
Polygalacturonase enzyme	CAS-No.: 9032-75-1 EC-No.: 232-885-6	2-5	Resp. Sens. 1, H334
	EC Index-No.: IUB n°3.2.1.15		

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

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SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : In case of doubt or persistent symptoms, consult always a physician. Remove victim from polluted area. Take off immediately all contaminated clothing. Never give anything by mouth to an

unconscious person. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Sensitisation: contact can cause allergic reactions in

humans. Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If symptoms persist, call a

physician. If experiencing respiratory symptoms: Call a poison center or a doctor.

First-aid measures after skin contact : After contact with skin, take off immediately all contaminated clothing, and wash immediately all

: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap. If symptoms persist, call a physician. Wash skin with plenty of water.

First-aid measures after eye contact : In case of eye contact, immediately rinse with clean water for 10-15 minutes. Remove contact

lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical

advice/attention. Rinse eyes with water as a precaution.

First-aid measures after ingestion : If swallowed, rinse mouth with water (only if the person is conscious). Never attempt to induce vomiting: risk of inhalation. Immediately give plenty of water. Never give anything by mouth to an

unconscious person. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects : More detailed information: See section 11.

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

or other symptoms of poisoning may occur within some hours.

Symptoms/effects after skin contact : Slight irritation.
Symptoms/effects after eye contact : mild eye irritation.

Symptoms/effects after ingestion : May cause irritation to the digestive tract.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : If there is a fire close by, use suitable extinguishing agents. carbon dioxide (CO2), powder, alcohol-

resistant foam, water spray. Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard : In case of fire and/or explosion do not breathe fumes.

Hazardous decomposition products in case of fire : Under normal conditions of storage and use, hazardous decomposition products should not be produced. Hazardous decomposition products may be released during prolonged heating like

smokes, carbon monoxide and dioxide. May cause allergy or asthma symptoms or breathing

difficulties if inhaled.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing.

Other information : Provision to contain effluent from fire extinguishing. Do not contaminate ground and surface water.

Dispose in a safe manner in accordance with local/national regulations.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Do not handle until all safety precautions have been read and understood. Evacuate personnel to a

safe area. Ensure adequate air ventilation. Spilled material may present a slipping hazard.

6.1.1. For non-emergency personnel

Protective equipment : Wear personal protective equipment.

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust, mist or spray. Do not

touch or walk on the spilled product. Avoid breathing dust/fume/gas/mist/vapours/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. Do not flush into surface water or sewer system. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Cover spill with non combustible material, e.g.: sand, earth, vermiculite.

Methods for cleaning up : Mechanically recover the product. Take up liquid spill into absorbent material. Shovel into suitable

and closed container for disposal. Clean contaminated surfaces with an excess of water.

Other information : Dispose of materials or solid residues at an authorized site. Do not allow to enter drains or water

courses.

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Store tightly closed in a dry and cool place. Ensure good ventilation of the work station. Avoid

contact with skin and eyes. Wear personal protective equipment. Do not breathe gas, vapours.

Avoid breathing dust/fume/gas/mist/vapours/spray.

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

If on skin, take off contaminated clothing. Emergency eye wash fountains and safety showers should

be available in the immediate vicinity of any potential exposure.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep only in the original container. Store in a well-ventilated place. Keep container tightly closed.

Containers which are opened should be properly resealed and kept upright to prevent leakage.

Storage conditions : Keep in a well-ventilated room. Store tightly closed in a dry and cool place. Keep out of direct

sunlight. Keep container closed when not in use. Keep container tightly closed. Store in a well-

ventilated place. Keep cool.

7.3. Specific end use(s)

For œnological use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

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8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

LAFAZYM® 600 XL ICE		
DNEL/DMEL (Workers)		
Long-term - local effects, inhalation	0,00006 mg/m³ Polygalacturonase enzyme	

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

8.2.2. Personal protection equipment

Personal protective equipment:

Refer to protective measures listed in Sections 7 and 8.

Personal protective equipment symbol(s):







8.2.2.1. Eye and face protection

Eye protection:

Wear eye or face protection. Safety glasses with side shields. Safety glasses

Eye protection				
Туре	Field of application	Characteristics	Standard	
Safety glasses		With side shields	EN 166	

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Skin and body protection		
Туре	Standard	
Chemically resistant protective gloves	EN 374	

Hand protection:

In case of repeated or prolonged contact wear gloves. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Gloves must be replaced after each use and whenever signs of wear or perforation appear. Protective gloves. ISO 374-1. Nitrile rubber gloves. Butyl rubber gloves. Latex gloves. Wash hands immediately after handling the product

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Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Chemically resistant protective gloves					EN ISO 374

Other skin protection

Materials for protective clothing:

Long sleeved protective clothing. Use chemically protective clothing

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Extra personal protection: P3 filter respirator for toxic particles. [In case of inadequate ventilation] wear respiratory protection.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Do not allow into drains or water courses. Avoid release to the environment. May be discharged to wastewater treatment installation.

Other information

Do not eat, drink or smoke during work. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid Colour : brown. Appearance : Liquid. Odour characteristic. : Not available Odour threshold : Not applicable Melting point Freezing point : Not available **Boiling point** : Not available Flammability : Non flammable. **Explosive limits** : Not available Lower explosion limit : Not available Upper explosion limit : Not available Flash point Not available Auto-ignition temperature Not available Decomposition temperature : Not available рН

: Not available Viscosity, kinematic Solubility : Soluble in water. Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : Not available Vapour pressure at 50°C : Not available Density : Not available Relative density : ≈ 1.17 Relative vapour density at 20°C Not available Particle size Not applicable Particle size distribution : Not applicable Particle shape : Not applicable : Not applicable Particle aspect ratio : Not applicable Particle aggregation state

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Particle agglomeration state : Not applicable
Particle specific surface area : Not applicable
Particle dustiness : Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

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

Heat. flames or sparks.

10.5. Incompatible materials

None to our knowledge.

10.6. Hazardous decomposition products

 $Under \ normal\ conditions\ of\ storage\ and\ use,\ hazardous\ decomposition\ products\ should\ not\ be\ produced.\ Thermal\ decomposition\ generates:\ See\ Section\ 5.$

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)

Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)

Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

Polygalacturonase enzyme (9032-75-1)			
LD50 oral		> 2000 mg/kg bodyweight OECD TG 401, 420	
Skin corrosion/irritation	:	Not irritating to skin (Based on available data, the classification criteria are not met) $pH:4-9$	
Serious eye damage/irritation	:	Not irritating to eyes (Based on available data, the classification criteria are not met) pH: $4-9$	
Respiratory or skin sensitisation	:	May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
Germ cell mutagenicity	:	Not classified (Based on available data, the classification criteria are not met)	
Carcinogenicity	:	Not classified (Based on available data, the classification criteria are not met)	
Reproductive toxicity	:	Not classified (Based on available data, the classification criteria are not met)	
STOT-single exposure	:	Not classified (Based on available data, the classification criteria are not met)	
STOT-repeated exposure	:	Not classified (Based on available data, the classification criteria are not met)	
Aspiration hazard	:	Not classified (Based on available data, the classification criteria are not met)	

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11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Potential adverse human health effects and symptoms : Sensitisation : contact can cause allergic reactions in humans

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects

in the environment. No known adverse effects on the functioning of water treatment plants under

normal use conditions as recommended.

Hazardous to the aquatic environment, short–term

: Not classified (Based on available data, the classification criteria are not met)

(acute)
Hazardous to the aquatic environment, long-term

: Not classified (Based on available data, the classification criteria are not met)

(chronic)

Polygalacturonase enzyme (9032-75-1)		
LC50 - Fish [1] 58,3 – 326,7 mg/l		
EC50 - Crustacea [1]	31,7 – 457 mg/l	
ErC50 algae	> 5,2 mg/l 72h	

12.2. Persistence and degradability

LAFAZYM® 600 XL ICE			
Persistence and degradability Biodegradable.			
Polygalacturonase enzyme (9032-75-1)			
Persistence and degradability	Biodegradable.		

12.3. Bioaccumulative potential

Polygalacturonase enzyme (9032-75-1)		
Partition coefficient n-octanol/water (Log Pow) < 0		
Bioaccumulative potential	There is no bioaccumulation.	

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Other adverse effects : Do not allow to enter drains or water courses

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

Sewage disposal recommendations : No known adverse effects on the functioning of water treatment plants under normal use

conditions as recommended.

Product/Packaging disposal recommendations : Empty remaining contents. Dispose of contents/container in accordance with licensed collector's

sorting instructions.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number

UN-No. (ADR) : Not regulated UN-No. (IMDG) : Not regulated UN-No. (IATA) : Not regulated UN-No. (ADN) : Not regulated UN-No. (RID) : Not regulated UN-No. (RID) : Not regulated UN-No. (RID) : Not regulated UN-No. (RID)

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not regulated Proper Shipping Name (IMDG) : Not regulated Proper Shipping Name (IATA) : Not regulated Proper Shipping Name (ADN) : Not regulated Proper Shipping Name (RID) : Not regulated

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not regulated

IMDG

Transport hazard class(es) (IMDG) : Not regulated

IATA

Transport hazard class(es) (IATA) : Not regulated

ADN

Transport hazard class(es) (ADN) : Not regulated

RID

Transport hazard class(es) (RID) : Not regulated

14.4. Packing group

Packing group (ADR) : Not regulated
Packing group (IMDG) : Not regulated
Packing group (IATA) : Not regulated
Packing group (ADN) : Not regulated
Packing group (RID) : Not regulated

14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

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14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

Contains no substance(s) listed on the REACH Candidate List

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

15.1.2. National regulations

Germany

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen : Polygalacturonase enzyme is listed SZW-lijst van mutagene stoffen : Polygalacturonase enzyme is listed SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed SZW-lijst van reprotoxische stoffen – Ontwikkeling : None of the components are listed

Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
1.1	UFI	Added	

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Indication of changes				
Section	Changed item	Change	Comments	
1.3	Manufacturer/Supplier	Modified		
15.1	WGK - SDS Preview	Modified		

Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
IATA	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
РВТ	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	
voc	Volatile Organic Compounds	
CAS-No.	Chemical Abstract Service number	
N.O.S.	Not Otherwise Specified	

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Abbreviations and acronyms:	
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:	
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Resp. Sens. 1	Respiratory sensitisation, Category 1

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.