

LAFASE[®] XL CLARIFICATION

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 12.07.2018 Revision date: 05.07.2023 Supersedes version of: 27.10.2021 Version: 4.3

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

1.1. Product identifier

| Product form | : Mixture |
|-------------------------------|----------------------------|
| Trade name | : LAFASE® XL CLARIFICATION |
| UFI | : J9JJ-T8HV-T10H-RXUJ |
| 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 Industrial/Professional use spec

Use of the substance/mixture Use of the substance/mixture Professional useFor professional users only

: For œnological use

: Liquid clarification enzyme for white, rosé and red musts

Distributor

LAFFORT ARGENTINA

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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USA

T +1 (707) 775 4530

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1.4. Emergency telephone number Address Comment Country **Organisation/Company Emergency number** Australia **NSW Poisons Information Centre** Locked Bag 4001 13 11 26 The Children's Hospital at Westmead NSW 2145 Canada Ontario Poison Centre (OPC) The Hospital for Sick Children 1-800-268-9017 555 University Avenue (416) 813-5900 ON M5G 1X8 Toronto Canada BC Drug and Poison Information Centre (DPIC) 655 West 12th Avenue 1-800-567-8911 BC V5Z 4R4 Vancouver (604) 682-5050 China National Poison Control Center Chinese Center for Disease +86 10 831 32 046 **Control and Prevention** Nanwei road, No.29 100050 Beijing Croatia Centar za kontrolu otrovanja Ksaverska Cesta 2 +385 1 234 8342 Information available Institut za medicinska istraživanja i medicinu p.p. 291 24/7 in Croatian and rada 10000 Zagreb English Czech Republic +420 224 919 293 Toxikologické informační středisko Na Bojišti 1 Klinika pracovního lékařství VFN a 1. LF UK 120 00 Praha 2 +420 224 915 402 Denmark Giftlinjen Bispebjerg Bakke 23 +45 82 12 12 12 Opgang 20 C 2400 København NV Georgia National Toxicology Information Advisory Tbilisi State Medical University +995 99 533320 Center Department of Toxicology - 7 Asatiani St. 380 077 Tbilisi Greece **Poisons Information Centre** 11762 Athens +30 2 10 779 3777 Children's Hospital P&A Kyriakou Országos Kémiai Biztonsági Intézet Nagyvárad tér 2. +36 80 20 11 99 Hungary Egészségügyi Toxikológiai Tájékoztató 1437 Budapest, Pf. 839 Szolgálat 1097 Budapest Israel Israel Poison Information Center 6 Ha'Aliya Street +972 4 854 1900 Rambam Health Care Campus 31096 Japan Japan Poison Information Center Tsukuba Medical Center +81-29-856-3566 1-1-1 Amakubo +81-72-727-2499 305-0005 Tsukuba City, Ibaraki Jordan National Drug & Poison Information Center of 0798506755 Iordan 00962-6-5353444 Kazakhstan Republican Toxicology Center Tole-bi 93 +7 3272 925 868 480083 Almaty Malta Medicines & Poisons Info Office +356 2545 6504 Mater Dei Hospital MSD Msida New Zealand National Poisons Centre Dunedin School of Medicine, 0800 764 766 University of Otago +56 2 2 247 3600 PO Box 913 9054 Dunedin

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| Country | Organisation/Company | Address | Emergency number | Comment | |
|-----------------------------|--|--|--|--|--|
| Poland | 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 | | |
| Romania | Department of Clinical Toxicology Spitalul de Urgenta Floreasca | Calea Floreasca Bucuresti | +40 21 230 8000 | | |
| Russia | 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) | | |
| Serbia | Nacionalni centar za kontrolu trovanja - VMA | Crnotravska 17 11000 Beograd | +381 11 360 84 40 | | |
| Slovenia | Center za klinično toksikologijo in farmakologijo Interna klinika, UKCL | Zaloška 7 1000 Ljubljana | +386 522 52 83 | | |
| South Africa | 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 | | |
| Sweden | Giftinformationscentralen | Solna Strandväg 21 171 54 Solna | 112 – begär Giftinformation | | |
| Turkey | 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. | |
| United Kingdom | National Poisons Information Service (Belfast Centre) Royal Victoria Hospital | Grosvenor Road BT12 6BA | 0344 892 0111 | Only for healthcare professionals | |
| United Kingdom | National Poisons Information Service (Birmingham Centre) City Hospital | Dudley Road B18 7QH | 0344 892 0111 | Only for healthcare professionals | |
| United Kingdom | National Poisons Information Service (Cardiff Centre) University Hospital Llandough | Penlan Road CF64 2XX | 0344 892 0111 | Only for healthcare professionals | |
| United Kingdom | National Poisons Information Service (Edinburgh Centre) Royal Infirmary of Edinburgh | Little France Crescent EH16 4SA | 0344 892 0111 | Only for healthcare professionals | |
| United Kingdom | Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust | Avonley Road SE14 5ER | +44 20 7188 7188 | | |
| United Kingdom | 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 | |
| United States of America | American Association of Poison Control Centers | 515 King St., Suite 510 VA 22314 Alexandria | 1-800-222-1222 +56 2 2 247 3600 | | |

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| 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 | H334 |
| Adverse physicochemical, human health and environment | al effects |
| May cause allergy or asthma symptoms or breathing difficul | ties if inhaled. |
| 2.2. Label elements | |
| Labelling according to Regulation (EC) No. 1272/2008 [CLP] | l |
| Hazard pictograms (CLP) : | |
| Signal word (CLP) : | GHS08 Danger |
| Contains : | Pectinase 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] |
|------------------|---|-------|--|
| Pectinase enzyme | CAS-No.: 9033-35-6 EC-No.: 232-894-5 | 2 – 5 | Resp. Sens. 1, H334 |

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

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| 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 t immediate vicinity of any potential exposure. Sensitisation : contact can cause allergic reactions 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 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 inse 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 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: More detailed information: See section 11. | SECTION 4: First aid measures | |
|--|---|--|
| 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 t immediate vicinity of any potential exposure. Sensitisation : contact can cause allergic reactions 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 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 inse 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 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: More detailed information: See section 11. | 4.1. Description of first aid measures | |
| First-aid measures after skin contact: After contact with skin, take off immediately all contaminated clothing, and wash immediately of 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 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: May cause allergy or asthma symptoms or breathing difficulties if inhaled. Cough, difficult breathing | First-aid measures general | 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 |
| 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 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 breat | First-aid measures after inhalation | |
| First-aid measures after ingestion I 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 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 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 breat | First-aid measures after skin contact | : 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. |
| vomiting : risk of inhalation. Immediately give plenty of water. Never give anything by mouth to 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 breat | First-aid measures after eye contact | lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical |
| 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 breat | 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. |
| Symptoms/effects after inhalation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. Cough, difficult breat | 4.2. Most important symptoms and effects, | both acute and delayed |
| | | More detailed information: See section 11. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Cough, difficult breathing |
| Symptoms/effects after skin contact : Slight irritation. Symptoms/effects after eye contact : mild eye irritation. | Symptoms/effects after skin contact | or other symptoms of poisoning may occur within some hours. : Slight 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.

| 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. Do not use water jet. |
|---|
| e or mixture |
| In case of fire and/or explosion do not breathe fumes. 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. |
| |
| : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment. |
| Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. 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 equ | Jipment 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 conta | inment 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, include | ing 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

| LAFASE® XL CLARIFICATION | | | |
|---------------------------------------|--|--|--|
| DNEL/DMEL (Workers) | | | |
| Long-term - local effects, inhalation | 0,00006 mg/m ³ Pectinase enzyme | | |

8.1.5. Control banding

No additional information available

| 8.2. Exposure of | 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

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

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

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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. |
| Odour threshold | | Not available |
| Melting point | | Not applicable |
| 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 |
| Н | : | 4 – 9 |
| Viscosity, kinematic | : | Not available |
| 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 | : | 1,1 – 1,2 g/cm³ |
| Relative density | : | Not available |
| Relative vapour density at 20°C | : | Not available |
| Particle size | : | Not applicable |
| Particle size distribution | : | Not applicable |
| Particle shape | : | Not applicable |
| Particle aspect ratio | : | Not applicable |
| Particle aggregation state | : | Not applicable |
| Particle agglomeration state | : | Not applicable |
| Particle specific surface area | : | Not applicable |
| Particle dustiness | : | Not applicable |

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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.

| 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) |
| Pectinase enzyme (9033-35-6) | |
| LD50 oral rat | > 2000 mg/kg |
| 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) |

11.2.1. Endocrine disrupting properties

No additional information available

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11.2.2. Other information

Potential adverse human health effects and symptoms : Sensit

: Sensitisation : contact can cause allergic reactions in humans

| 12.1. Toxicity | |
|--|---|
| Ecology - general | : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effect: 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 acute) | : Not classified (Based on available data, the classification criteria are not met) |
| Hazardous to the aquatic environment, long–term chronic) | : Not classified (Based on available data, the classification criteria are not met) |
| Pectinase enzyme (9033-35-6) | |
| LC50 - Fish [1] | 58,3 – 326,7 mg/l |
| EC50 - Crustacea [1] | 2000 mg/l Test organisms (species): Daphnia magna |
| EC50 - Crustacea [2] | 212 mg/l Test organisms (species): Daphnia magna |
| ErC50 algae | > 5,2 mg/l 72h |
| 12.2. Persistence and degradability | |
| LAFASE® XL CLARIFICATION | |
| Persistence and degradability | Biodegradable. |
| Pectinase enzyme (9033-35-6) | |
| Persistence and degradability | Biodegradable. |
| 12.3. Bioaccumulative potential | |
| Pectinase enzyme (9033-35-6) | |
| 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 | |
| lo additional information available | |
| 12.7. Other adverse effects | |
| Other adverse effects | : Do not allow to enter drains or water courses |

| SECTION 13: Disposal considerations | | | | |
|-------------------------------------|---|--|--|--|
| 13.1. Waste treatment methods | | | | |
| Waste treatment methods | : Dispose of contents/container in accordance with licensed collector's sorting instructions. | | | |

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| Sewage disposal recommendations | | No known adverse effects on the functioning of water treatment plants under normal use |
|--|---|---|
| Product/Packaging disposal recommendations | : | conditions as recommended. 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) UN-No. (IATA) | : Not regulated : Not regulated |
| UN-No. (ADN) | : Not regulated |
| UN-No. (RID) | : Not regulated |
| 14.2. UN proper shipping name | - |
| Proper Shipping Name (ADR) | · Net regulated |
| Proper Shipping Name (IMDG) | : Not regulated : 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 |
| | |
| ΙΑΤΑ | |
| 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 |
| 14.6. Special precautions for user | |
| Overland transport | |
| | |

Not regulated

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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 | : Pectinase enzyme is listed |
| SZW-lijst van mutagene stoffen | : Pectinase 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 | Modified | |
| 1.3 | Manufacturer/Supplier | Modified | |

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| Abbreviations and | d 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 |
| ΙΑΤΑ | 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 |
| PBT | 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 |
| 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. | |

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| Full text of H- and EUH-statements: | |
|-------------------------------------|---------------------------------------|
| 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.