

SAFETY DATASHEET ENZYMATIC PREPARATION



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

1.1. Product Identification

Product name: SCOTTZYME KS

Synonyms: Liquid enzymatic preparation (enzymatic protein)

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

Use: Biocatalyst for industry.

1.3. Information on the supplier of the safety datasheet

Company: LYVEN - ZAC Normandial – 14460 COLOMBELLES
France – Tél : +33 (0)2 31 35 05 30

Telephone n°

+33 (0)2 31 35 05 30 (working hours)

Manager's email: fguillamin.lyven@soufflet-group.com

1.4. Emergency contact number

In France: contact ORFILA (INRS) +33 (0)1 45 42 59 59 (24/7)

This number will give the contact details of all French poison centres which provide free medical help (excluding call cost).

SECTION 2: Identification of Dangers

2.1. Classification of the substance or mixture

Classification according to Directive 1999/45/CEE

Risk phrase(s): R42 - May cause sensitization by inhalation.
R36/37/38 - Irritating to eyes, respiratory system and skin.

Symbol(s): Xn

Dangers for health: Repeated inhalation of enzyme spray or dust following inappropriate handling may result in sensitisation and cause allergic reactions in sensitised individuals.
Mild irritation of the skin.
Mild irritation of the eyes.

Dangers for the environment:

No known danger in the current state of knowledge.

Physical or chemical dangers:

No known danger in the current state of knowledge.

Effect of excessive exposure: see section 4.

Classification according to Regulation 1272/2008/CE (CLP)

Classification: Respiratory sensitizer category 1
Irritant for the eyes category 2
Irritant for the skin category 2
Specific toxicity for certain target organs – exposure only category 3

Risk phrase(s): H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H319 - Causes serious eye irritation.
H315 - Causes skin irritation.
H335 - May cause respiratory irritation.

2.2 Labelling

Labelling according to Directive 1999/45/CE

Danger symbol:



harmful

Risk phrase(s): R42 - May cause sensitization by inhalation.
R36/37/38 - Irritating to eyes, respiratory system and skin.

S phrase(s): S23 - Do not breathe spray.
S24 - Avoid contact with skin.
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37 - Wear suitable protective clothing and gloves.

Labelling according to Regulation 1272/2008/CE (CLP)

Danger notice: Danger

Danger symbol:



H phrase: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H319 - Causes serious eye irritation.
H315 - Causes skin irritation.
H335 - May cause respiratory irritation.

P phrases:

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

P285 - In case of inadequate ventilation wear respiratory protection.

P304+P340+ P312 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

P342 + 311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

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

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P264 - Wash hands thoroughly after handling.

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P501 - Dispose of contents/container according to the local regulations.

2.3. Other dangers

The substance is not considered as a PBT or VPVB substance.

SECTION 3: Composition/Information on the Ingredients

Substance/Mixture:

Dangerous ingredients

Chemical name	CAS N°	CE N°	IUB N°	%	DSD Classification (Dir. 1999/45/EEC)	CLP Classification (Reg. 1272/2008)
Polygalacturonase	9032-75-1	232-885-6	3.2.1.15	10-15%	Xn ; R42	Resp. Sens. 1 ; H334
Pectin esterase	9025-98-3	232-807-0	3.1.1.11	5-10%	Xn ; R42	Resp. Sens. 1 ; H334
Pectin lyase	9033-35-6	232-894-5	4.2.2.10	5-10%	Xn ; R42	Resp. Sens. 1 ; H334
Cellulase	9012-54-8	232-734-4	3.2.1.4	1-5%	Xn ; R42	Resp. Sens. 1 ; H334
Protease	9001-92-7	232-642-4	3.4.23.18	1-5%	Xn ; R36/37/38-42	Resp. Sens. 1 ; H334 Eye Irrit. 2 ; H319 Skin Irrit. 2 ; H315 STOT SE 3 ; H335

The other ingredients are not listed as they have no impact on the classification of the substance.

For the full text of the R/H phrases mentioned in this section, see section 16.

SECTION 4: First Aid

4.1. Description of the first aid

General information: Protection of rescue workers: Wear appropriate individual protective equipment (see Section 8). Transport the affected person into the open air. Remove contaminated shoes and clothing.

Inhalation: In the event of inhalation, take into the open air. Do not allow the person to get cold. Keep the victim resting in a semi-seated position. In the absence of breathing, use artificial respiration. Consult a doctor.

Ingestion: In the event of ingestion, rinse the mouth with water (only if the person is conscious). Consult a doctor if symptoms develop.

Contact with the skin: Rinse thoroughly in running water. Remove contaminated shoes and clothing. Consult a doctor if symptoms develop.

Contact with the eyes: Rinse thoroughly in running water. Consult a doctor if symptoms develop.

First aid facilities: Ensure that automatic eye baths and safety showers are located close to the workstations.

4.2. Principal symptoms and effects, acute and deferred

Inhalation: Inhalation of drops or spray may cause irritation to the respiratory system. May entail sensitisation via inhalation. Sensitive people may develop asthma following inhalation of this substance.

Ingestion: Ingestion of the product may entail gastrointestinal problems.

Contact with the skin: Prolonged or repeated contact with the skin may cause irritation.

Contact with the eyes: May cause irritation of the eyes (redness).

SECTION 5: Fire Protection Measures

5.1. Extinguishing resources

Small fire: Use chemical powders or carbonic gas.

Major fire: Use appropriate extinguishers for the surrounding materials.

5.2. Particular dangers resulting from the substance or mixture

Unusual risks of fire/explosion

No risk identified in the current state of knowledge.

Risk linked to the products of thermal breakdown

In the event of fire, may cause toxic and/or corrosive breakdown products.

5.3. Advice to fire officers

Special measures to combat fire

A fire extinguishing network having been contaminated by this product must be kept in a closed environment and must not be spilled into the aquatic environment or any drain or evacuation pipe.

Protection of participants

Wear appropriate protective clothing. Stand-alone isolating respiratory protection.

SECTION 6: Measures to take in the event of Accidental Spillage

6.1. Individual precautions, protective equipment and emergency procedures

Avoid contact with the eyes, skin and clothing. Use appropriate protective equipment (see Section 8). Consult a specialist immediately.

6.2. Precautions to protect the environment

No special measure is required.

6.3. Methods and material for confinement and cleaning

Small accidental spillage or leak: Avoid the formation of dust or spray. Mop up with appropriate material. Place in an appropriate container. Clean the area affected with plenty of water.

Large accidental spillage or leak: Avoid the formation of dust or spray. Prevent spillage into the drains, subsoil or confined areas. Contain if necessary. Mop up the product spilled with inert material (e.g. dry sand or dry earth) and place in a chemical waste container. Recycle if possible.

6.4. Reference to other sections

See section 8 for individual protective equipment and section 13 for waste disposal.

SECTION 7: Handling and Storage

7.1. Precautions to take for risk-free handling

Use in a closed circuit if possible. Use with adequate ventilation. Use appropriate protective equipment. Avoid any contact with the eyes, skin, respiratory system and clothing.

7.2. Conditions for safe storage, including any incompatibilities

Store in a clean, dry place.

7.3. Specific end use(s)

Substance intended to catalyse reactions by enzymatic means during industrial processes.

Section 8: Control of Exposure / Individual Protection

8.1. Control parameters

Limits of professional exposure

Technical measures: Use only in a well ventilated environment.

Hygiene measures: Do not eat, drink or smoke during use. Wash your hands after handling these compounds and before eating, smoking or going to the toilet, and at the end of the day.

8.2. Controls of exposure

Individual protective equipment

Respiratory system: Wear a P3 dust mask.
Skin and body: Wear appropriate protective clothing.
Eyes: Full mask.
Hands: Wear appropriate gloves.

Control of exposure linked to protection of the environment

Notify the local authorities if significant leaks cannot be contained.
Wastewater must be evacuated to a purification plant.

The advice on personal protection is valid for high levels of exposure. Adapt personal protection according to the risk of exposure.

SECTION 9: Physical and Chemical Properties

9.1. Information on the essential physical and chemical properties

Physical state: Liquid.
Colour: Brown
Odour: Slight odour of fermentation.
pH: 5.5 to 7 (concentration 100%).
Solubility: Soluble in water.

Melting/freezing point, olfactory threshold, initial boiling point and boiling interval, flashpoint, evaporation rate, flammability (solid, gas), steam pressure, steam density, partition coefficient (n-octanol/eau), temperature of breakdown, temperature of auto-flammability, viscosity, explosive properties, oxidising properties: Data not relevant

9.2. Other information No information available.

SECTION 10: Stability and Reactivity

10.1. Reactivity: Not relevant.
10.2. Chemical stability: Stable under the recommended storage conditions.
10.3. Possibility of dangerous reactions: N/A under normal conditions of use.
10.4. Conditions to avoid: See sections 5 and 7.
10.5. Incompatible materials: No special recommendations.
10.6. Dangerous breakdown products: Does not break down under the stipulated conditions of handling and storage (see section 7)

SECTION 11: Toxicological Information

11.1. Information on the toxicological effects

Potential acute effects on the health

Inhalation: May entail sensitisation via inhalation.
Ingestion: No information available.
Contact with the skin: No information available.
Contact with the eyes: No information available.

Acute toxicity: No information available.

Irritation/Corrosion

Sensitisation

Potential chronic effects on the health

Chronic effects:	Once sensitised, a strong allergic reaction may be triggered upon later exposure to very low levels.
Carcinogenicity:	No information available.
Mutagenicity:	No information available.
Teratogenicity:	No information available.
Effects on development:	No information available.
Effects on fertility:	No information available.

Chronic toxicity: No information available.

Carcinogenicity: No information available.

Mutagenicity: No information available.

Teratogenicity: No information available.

Toxicity for reproduction: No information available.

SECTION 12: Ecological Information

12.1. Toxicity

Effects on the environment: No information available.

Eco-toxicity in the aquatic environment: No information available.

12.2. Persistence/degradability: No information available.

12.3. Potential for bioaccumulation No information available.

12.5. Results of PBT and vPvB evaluations See section 2.3.

12.6. Other harmful effects: No information available.

12.4. Mobility in the soil: For data on the physical state and solubility, see section 9.

Comments: The preparation is considered as non-hazardous for the environment, mobility, persistence, degradability, bioaccumulation potential, toxicity in the aquatic environment and other data relative to eco-toxicity.

SECTION 13: Considerations Relative to Disposal

13.1. Methods of treating waste (residues, soiled packaging)

Dispose of waste in compliance with national/local environmental protection rules.

Wastewater must be evacuated to a purification plant.

The waste code must be allocated by the user according to the application of the product.

SECTION 14: Information Relative to Transport

European legislation for international transport

ADR/RID: not applicable. **IMDG:** not applicable.

ADNR: not applicable. **IATA:** not applicable.

SECTION 15: Regulatory Information

15.1. Health, safety and environmental regulations/legislation specific to the substance or mixture

The substance complies with article 16 of regulation 689/2008 on the export and import of hazardous chemical products.

It complies with regulation 882/2004 relative to the official controls undertaken to check conformity with the legislation on animal feed and foodstuffs and Regulation 178/2002 establishing the general principles and the general prescriptions of the food legislation instituting the European Food Safety Authority and fixing procedures on the safety of foodstuffs....

15.2. Evaluation of chemical safety

The substance has not been subject to an evaluation of chemical safety.

SECTION 16: Other Data

Text of the R/H phrases mentioned in sections 2 and 3

R42 - May cause sensitization by inhalation.

R36/37/38 - Irritating to eyes, respiratory system and skin.

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H319 - Causes serious eye irritation.

H315 - Causes skin irritation.

H335 - May cause respiratory irritation.

Additional information

The format of this safety datasheet complies with regulation CE/453/2010. A REACH registration number may be allocated to enzymes owing to their possible technical applications. Enzymes used as manufacturing auxiliaries for the "food" or "feed" products are exempt from REACH registration, including the establishment of scenarios of exposure. The legislation in force applicable to these areas must be taken into account.

Disclaimer

The information contained in this safety datasheet is considered to be true and accurate on the date of publication. However, the precision and exhaustiveness of this information, and any recommendation or suggestion, are given without guarantee. As the conditions of use are outside of the control of our company, it is down to the user to determine the conditions of safe use of this product. The information contained in this datasheet does not represent analytical specifications; for these specifications see our technical datasheet.

Reason for revision: the whole datasheet has been revised to ensure conformity with regulation CE/453/2010.