

SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

- 1.1** Product identifier: Sil-All 4x4+
- 1.2** Identified use: Premixture of silage additives
- 1.3** Supplier details: Lallemand SAS
19, rue des Briquetiers, B.P. 59, 31702 Blagnac, France
Tel: +33 5 62 74 55 55 Email: sds@lallemand.com
- 1.4** Emergency telephone: Contact your local doctor or hospital.
In the European Union, call 112.

Contacts of national emergency information services are available at:

<http://echa.europa.eu/web/guest/support/helpdesks/national-helpdesks/list-of-national-helpdesks>

SECTION 2 - HAZARD IDENTIFICATION

- 2.1** Classification of the substance/mixture according to:
- Globally Harmonized System of Classification and Labelling of Chemicals (GHS section 1.5.2).
 - Canadian Hazardous Product Act.
 - US Occupational Safety and Health Administration (OSHA)
 - Regulation 1272/2008/EC (CLP)
- 2.2** Labelling elements: none
- 2.3** Other Hazards: EUH208: Contains xylanase, beta-glucanase and alpha-amylase. May produce an allergic reaction.

SECTION 3 - COMPOSITION

Product composition: Live bacteria and enzymes on a sugar carrier

Mixture or substance: mixture.

Ingredient name	CAS no.	CE no.	% of active in mix	IUB	CLP Hazard Classification (Reg. 1272/2008)
Endo-1,4-xylanase	9025-57-4	232-800-2	< 1%	3.2.1.8	Respiratory Sensitizer Cat.1; H334
Endo-1,3(4)-β-glucanase	62213-14-3	263-462-4	< 1%	3.2.1.6	Respiratory Sensitizer Cat.1; H334
α-amylase	9000-90-2	232-565-6	< 1%	3.2.1.1	Respiratory Sensitizer Cat.1; H334

SECTION 4 - FIRST AID MEASURES

4.1 Description of First Aid Measures:

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 Most important symptoms and effects, both acute and delayed:

Eye contact: May cause irritation of the eyes (redness).

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

Inhalation: May cause coughing (irritation) or irritate asthma. May cause sensitization. Subsequent chronic or acute exposure in sensitized persons may cause a respiratory allergic reaction, including asthmatic bronchitis, in minutes or delayed.

Ingestion: Ingestion of the product may elicit gastrointestinal problems.

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

None. If any symptoms persist, seek medical attention.

SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishing media:

Suitable: Water, foam, carbon dioxide, dry powder.

Unsuitable: None

5.2 Special hazards arising from the material: None

5.3 Advice to firefighters: Wear a self-contained breathing apparatus (SCBA) when exposed to confined or enclosed fires as product powder could be in the air.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

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

6.2 Environmental precautions: None**6.3 Methods and material for containment and cleaning up:**

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 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.

6.4 References to other sections: See section 8 for individual protective equipment and section 13 for waste disposal.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for safe handling:

Handling: Avoid breathing dust. Avoid contact with eyes and skin.

Occupational hygiene: Wash hands thoroughly after handling. Do not eat, drink or smoke while working.
Store work clothing separately. See also section 4 for recommended equipment.

7.2 Conditions for safe storage, including any incompatibilities:

Risks: Not at risk for corrosion, fire, explosion, or chemical reaction.

Place of storage: No special instruction to minimize risks (see above).

Store according to label directions to maintain label guarantees.

Incompatible materials: No known incompatibilities.

Fire/explosion protection: None needed

7.3 Specific end use:**SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**

8.1 Control parameters:

Exposure limits: No limit

Biological limits: No limit

8.2 Exposure controls:

Engineering: None

Eye/face protection: Recommended to wear protective glasses in conditions of excessive dusting.

Skin Hand: Gloves are recommended. Wash and dry hands.

Other: None. Wear appropriate clothing for work.

Respiratory protection: None except if ventilation is not sufficient.

Thermal protection: None

Environmental exposure: None

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties:**

Appearance:	White/grey powder
Odour:	Not Applicable
Odour threshold:	Not relevant
pH:	Not relevant
Melting point/Freezing point:	Not relevant
Initial boiling point and boiling range:	Not applicable, product is a solid
Flash point:	Not relevant
Evaporation rate:	Not applicable, product is a solid
Flammability (solid, gas):	Not flammable
Upper/lower flammability or explosive limits:	Not relevant
Vapour pressure:	Not applicable, product is a solid
Vapour density:	Not applicable, product is a solid
Relative density:	Not relevant
Solubility:	Water dispersible
Partition coefficient (n-octanol/water):	Not relevant
Auto-ignition temperature:	Not relevant
Decomposition temperature:	Not relevant
Viscosity:	Not applicable, product is a solid
Explosive properties:	Not relevant
Oxidising properties:	Not relevant

9.2 Other information: None

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity: Not reactive

10.2 Chemical stability: Stable

10.3 Possibility of hazardous reactions: None

10.4 Conditions to avoid: None

10.5 Incompatible materials: See section 7

10.6 Hazardous decomposition products: None

SECTION 11 - TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects:**

Acute toxicity:	No known effects
Skin corrosion/irritation:	Possible irritation to skin
Serious eye damage/irritation:	Possible irritation to eye
Respiratory /Skin sensitization:	Possible allergic reaction or sensitization
Germ cell mutagenicity	No information available
Carcinogenicity	No information available
Reproductive toxicity	No information available
STOT-single exposure	No information available
STOT-repeated exposure	No information available
Aspiration hazard:	No information available
Chronic effects:	Once sensitised, a strong allergic reaction may be triggered upon later exposure to very low levels.

SECTION 12 - ECOLOGICAL INFORMATION

12.1 Toxicity: No known ecological effects

12.2 Persistence and degradability: Most ingredients of the product are assumed to be readily biodegradable. Hence it is not expected to persist in the environment.

12.3 Bioaccumulative potential: No risk of bioaccumulation expected.

12.4 Mobility in soil: No information available

12.5 Results of PBT and vPvB assessment: Not considered to be a PBT and vPvB substance.

12.6 Other adverse effects: No adverse effects reported

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

No special disposal method recommended. Follow all applicable local laws for recycling, bagging, and disposal of trash.

SECTION 14 - TRANSPORT INFORMATION

- 14.1** UN Number: Not relevant
14.2 UN proper shipping name: Not relevant
14.3 Transportation hazard class: Not classified as dangerous
14.4 Packing group: Not relevant
14.5 Environmental hazards: None
14.6 Special precautions: None
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: Not relevant.

SECTION 15 - REGULATORY INFORMATION

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

The format of this safety data sheet complies with the requirements of:

- **Globally Harmonised System of Classification and Labelling of Chemicals (GHS)**
- **Regulation (EC) No 1907/2006** (as amended) on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).
- **EU Regulations:** Authorisation and/or restriction of use: Regulation EC 1831/2003 on additives for use in animal nutrition.
- **Other EU regulations:** Regulation EC 1272/2008 on the classification, labelling and packaging of substances and mixtures - This product is not required to be registered under EC Regulation 1907/2006. Concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2 Chemical safety assessment:

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

SECTION 16 - OTHER INFORMATION

Disclaimer:

The information, data and recommendations contained in this SDS are provided in good faith, obtained from reliable sources and believed to be true and accurate as of the date of revision. The SDS serves as description of the products in regard to necessary safety measures. No warranty, expressed or implied, regarding the product described in this SDS shall be created or inferred by any statement in this SDS.

Revision date: March 2022 – creation of the document

Date of preparation: April 21, 2022