



SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006

Creation date: 28/11/ 2024

Revision: 0

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

1.1 Product identifier:

Product name LIGNASE

Product number LIGNASE001

Brand SW Agronomy

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

Identified uses Turfgrass surfaces

Uses advised against Other than those recommended

1.3 Details of the supplier of the Safety Data Sheet

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1.4 Emergency telephone number

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SECTION 2: Hazard identification

2.1 Classification of the substance or mixture according to Regulation (EC) No 1272/2008 as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567

2.1.1 Classification Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

2.2 Label elements Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

2.3 Other hazards The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No.1907/2006 (REACH) as amended.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical characterization Mixture

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
	Water	<65		
	Enzyme complex	<25		
	Surfactants	<10		

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show

information from this safety data sheet.

Inhalation	After inhalation: fresh air.
Eye contact	After eye contact: rinse out with plenty of water. Remove contact lenses.
Skin contact	Soap, soap solution or shampoo should be used if there is no skin injury. Remove contaminated clothes.
Ingestion	Rinse out the mouth with clean water. Call medical rescue service.

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

No known acute or delayed effects from exposure to the product

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

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

Unsuitable extinguishing media

Do not use a direct stream of water to extinguish. In the presence of electrical voltage, you cannot use water or foam as extinguishing media.

5.2. Special hazards arising from the substance or mixture

Fire can cause thick, black smoke. As a result of thermal decomposition, dangerous products can form: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products can be harmful to your health.

5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with chemical resistant gloves. Use a self-contained breathing apparatus and full-body protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For exposure control and individual protection measures, see sections 7 & 8.

6.2. Environmental precautions

Product not classified as hazardous for the environment, avoid spillage as much as possible.

6.3. Methods and material for containment and cleaning up

The contaminated area should be immediately cleaned with an appropriate de-contaminator. Pour the decontaminator on the remains in an opened container and let it act various days until no further reaction is produced.

6.4 Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Take action to prevent static discharges. Do not inhale dust.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Protect from sunlight. Keep cool. Recommended storage temperature is from +5 °C to +30 °C.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains no substances for which occupational exposure limits are set.

8.2. Exposure controls

Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye / face protection

EN 166(EU). Safety glasses



Skin protection

Other protection: protective workwear.

**Hand protection**

Tested protective gloves must be worn EN ISO 374. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Body protection No special measures are necessary.

Respiratory protection Respirator

Thermal hazards No special measures are necessary.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1 Physical & chemical properties

Physical state	Liquid
Colour	Yellowish
Odour	Charateristic
pH	5,3-7,0
Melting/freezing point	No data available
Boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability	No data available
Upper explosive limit	No data available
Lower explosive limit	No data available
Vapour pressure	No data available
Vapour density	No data available
Specific gravity	No data available
Solubility	Soluble in water
Partition n-octonol/water	No data available
Autoignition temperature	No data available
Thermal decomposition	No data available
Viscosity	No data available
Oxidizing properties	No data available
Density	1,03-1,08 g/cm ³

SECTION 10: Stability and reactivity

10.1 Reactivity	This product does not present hazards by their reactivity
10.2 Chemical stability	Stable under normal conditions (room temperature)
10.3 Possibility of hazardous reactions	This product does not present possibility of hazardous reactions
10.4 Conditions to avoid	The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.
10.5 Incompatible materials	Protect against strong acids, bases and oxidizing agents. Protect against strong acids, bases and oxidizing agents, disinfectants, biocides, chemical pesticides.
10.6 Hazardous decomposition products	In the event of fire see Section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity	No data is available
Skin corrosion/irritation	May cause irritation to skin. May cause irritation to eyes.
Serious eye damage/irritation	No data is available
Respiratory or skin sensitisation	May cause sensitisation by inhalation and skin contact.
Germ cell mutagenicity	No data is available
Carcinogenicity	No data is available
Reproductive toxicity	No data is available
Specific target organ toxicity - single exposure	No data is available

Specific target organ toxicity	
- repeated exposure	No data is available
Aspiration hazard	No data is available

11.2 Additional information

Prolonged contact with eyes, skin and respiratory tract may cause irritation. Product consists of microorganisms specially selected from the natural environment that are not pathogenic to humans, animals or plants. Open wounds during use are recommended to cover.

SECTION 12: Ecological information

12.1 Toxicity May cause long lasting harmful effects to aquatic life.

12.2 Persistence and degradability The mixture is biodegradable.

12.3 Bio accumulative potential No data is available

12.4 Mobility in soil No data is available

12.5 Results of PBT and vPvB Assessment

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

12.6 Endocrine disrupting properties No data is available

12.6 Other adverse effects No data is available

SECTION 13: Disposal considerations

13.1 Waste treatment methods Proceed in accordance with valid regulations on waste disposal.

Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended.

Decision 2000/532/EC establishing a list of wastes, as amended.

SECTION 14: Transport information

14.1 UN Number Not subject to transport regulations

14.2 UN proper shipping name Not relevant

14.3 Transport hazard class(es) Not relevant

14.4 Packing group Not relevant

14.5 Environmental hazards Not relevant

14.6 Special precautions Reference in Sections 4 to 8

14.7 Transport in bulk according to Annex II of Marpol and the IBC code
Not relevant

SECTION 15: Regulatory information

15.1 Safety legislation specific for the substance or mixture

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended.

15.2 Chemical safety assessment

No information available

SECTION 16: Other information

16.1 Indication of changes None

16.2 Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

ASTM: ASTM International, originally known as American Society for Testing and Materials (ASTM)

EINECS: European Inventory of Existing Commercial Chemical Substances

EC50:	Effective Concentration 50 (Maximum Effective Concentration for 0% of Individuals)
LC50:	Lethal Concentration 50 (Lethal Concentration for 50% of Individuals)
IC50:	Inhibitor Concentration 50 (Inhibitory Concentration for 50% of Individuals)
NOEL:	No Observed Effect Level (Maximum dose without effect)
DNEL:	Derived No Effect Level (Derived no-effect dose)
DMEL:	Derived Minimum Effect Level (Derived dose of minimal effect)
CLP:	Classification, Labelling and Packaging
CSR:	Chemical Safety Report
LD50:	Lethal Dose 50 (Lethal Dose for 50% of Individuals)
IATA:	International Air Transport Association
ICAO:	International Civil Aviation Organization
Codice IMDG:	International Maritime Dangerous Goods code
PBT:	Persistent, bioaccumulative and toxic
RID:	Regulations concerning the international rail transport of Dangerous Goods
STEL:	Short term exposure limit
TLV:	Threshold limit value
TWA:	Time Weighted Average
EU:	European Union
vPvB:	Very persistent very bioaccumulative
N.D.:	Unavailable
N.A.:	Not applicable
VvVwS.:	Text of Administrative Regulation on the Classification of Substances hazardous to waters into Water Hazard Classes

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. South West Agronomy and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.
