

Safety Data Sheet

ROOTFiX[™] EXTENSIVE

based on Regulation 1907/2006/EC, Article 31
Safety Data Sheet dated 10/01/2019, version 1



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

1. 1. PRODUCT IDENTIFIER

Trade name: ROOTFiX EXTENSIVE

1. 2. RELEVANT IDENTIFIED USES OF THE ARTICLE/MIXTURE AND USES ADVISED AGAINST

Application of the substance / the mixture: Seed treatment for agricultural use

1. 3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Company: Legume Technology Ltd, Units 3C & 3D, Kneeton Road, Eastbridgford, Nottinghamshire, NG13 8PJ, United Kingdom

Further information obtainable from:

Phone no.: +44 1158 240 585

E-mail: info@legumetechnology.co.uk

1. 4. EMERGENCY TELEPHONE NUMBER

Telephone number of the company in case of emergencies: +44 1158 240 585
(available 8 am-4 pm, 5 days a week).

SECTION 2: Hazards identification

2. 1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

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

The product is not classified, according to the CLP regulation.

2. 2. LABEL ELEMENTS

Labelling according to Regulation (EC) No 1272/2008: Void

Hazard pictograms: Void

Signal word: Void

Hazard statements: Void

Additional information: EUH208 Contains 2×10^8 cfu of *Bacillus megaterium* + *Bacillus licheniformis* + *Bacillus velezensis* per g . May produce an allergic reaction.

2. 3. OTHER HAZARDS

Results of PBT and vPvB assessment:

This mixture does not meet the PBT- or vPvB-criteria according to Regulation (EC) No 907/2006

Other Hazards:

Minor risk of sensitisation due to micro-organisms present

SECTION 3: Composition/information on ingredients

3. 2. MIXTURES

Description: Culture of *Bacillus* bacteria (3×10^8 CFU/g)
formulated with polymer adhesive and nutrients

SECTION 4: First aid measures

4. 1. DESCRIPTION OF FIRST AID MEASURES

After skin contact: Wash immediately with plenty of water and soap. If irritation persists, call a physician.

After eye contact: In case of contact with eyes, wash immediately with water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. If irritation persists, call a physician.

After swallowing: Wash out mouth with water provided person is conscious. Call a physician.

After inhalation: Remove casualty to fresh air and keep warm and at rest. If necessary, get medical attention

4. 2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

No symptoms known.

4. 3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Symptomatic treatment.

SECTION 5: Firefighting measures

5. 1. EXTINGUISHING MEDIA

Suitable extinguishing media: Water spray, dry chemical, carbon dioxide or appropriate foam.

For safety reasons unsuitable extinguishing agents: None in particular.

5. 2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

No further relevant information available.

5. 3. ADVICE FOR FIREFIGHTERS

Do not inhale explosion gases or combustion gases.

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Additional information:

Collect runoff separately. It must not enter the sewage system Remove receptacles from the endangered area, ensuring one`s own safety whilst doing so.

Dispose of fire debris and contaminated fire fighting water according to the regulations.

SECTION 6: Accidental release measures

6. 1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Exercise appropriate precaution to minimize direct contact with skin or eyes and prevent inhalation of dust.

Keep unprotected persons away.

See protective measures under point 7 and 8.

6. 2. ENVIRONMENTAL PRECAUTIONS

Do not allow to enter sewers/ surface or ground water.

6. 3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Collect with absorbent material, sweep up with spade and Place into suitable and labelled containers for disposal. Ventilate area and wash spill site after material pick-up is completed.

6. 4. REFERENCE TO OTHER SECTIONS

See Section 8 for information on personal protection equipment.

See section 13 for disposal information

SECTION 7: Handling and storage

7. 1. PRECAUTIONS FOR SAFE HANDLING

Avoid contact with skin and eyes.

Wear appropriate protective clothing and safety gloves.

Do not eat, drink or smoking while working.

Ensure adequate ventilation.

7. 2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Requirements to be met by storerooms and receptacles: Keep container tightly closed in a dry and well-ventilated place.

Store in a cool place and under inert gas.

Store in a cool place.

Avoid direct sun exposure.

Keep material away from heat, sparks and flames.

Information about storage in one common storage facility:

Keep away from food, drink and feeding stuff.

Do not store together with herbicides and pesticides.

7. 3. SPECIFIC END USE(S)

Seed treatment for agricultural use.

SECTION 8: Exposure controls/personal protection

Additional information about design of technical facilities:

Provide sufficient ventilation, particularly in closed areas

8. 1. CONTROL PARAMETERS

Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8. 2. EXPOSURE CONTROLS

Personal protective equipment

General protective and hygienic measures:

Avoid unnecessary contact with the product. Do not eat, drink or smoke at workplace and keep it tidy.

Remove contaminated clothing immediately and wash carefully before reuse.

Wash hands before break and at the end of work.

Eye protection:

At risk of splashes, tightly sealed goggles or face protection are recommended.

Body protection:

Chemical protective clothing.

Protection for hands:

For prolonged or repeated contact, protective gloves are recommended.

Respiratory protection:

In case of insufficient ventilation, wear appropriate respiratory protective device.

Limitation and supervision of exposure into the environment:

None known to date

Environmental exposure controls:

Do not allow to enter sewers/ surface or ground water. Inform respective authorities in case of seepage into water course or sewage system.

SECTION 9: Physical and chemical properties

9. 1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid

Appearance and colour: Opaque

Odour: Weak

Odour threshold: No data available

pH: Not applicable

Melting point / freezing point: Not applicable

Solubility in water: Insoluble
Flash point: No data available
Evaporation rate: No data available
Flammability (solid, gas): Not applicable
Upper/lower flammability or explosive limits: No data available
Vapour pressure: No data available
Vapour density: No data available
Relative density: No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Explosive properties: No data available
Oxidising properties: No data available
Solubility in / Miscibility with water: Soluble
Partition coefficient: n-octanol/water: No data available
Viscosity: No data available

9. 2. OTHER INFORMATION

No further relevant information available

SECTION 10: Stability and reactivity

10. 1. REACTIVITY

Stable under normal temperature and pressure.

10. 2. CHEMICAL STABILITY

Stable under normal conditions

10. 3. POSSIBILITY OF HAZARDOUS REACTIONS

No dangerous reaction if used and stored according to specifications.

10. 4. CONDITIONS TO AVOID

Humidity

10. 5. INCOMPATIBLE MATERIALS

Strong oxidising agents, bases.

10. 6. HAZARDOUS DECOMPOSITION PRODUCTS

None

SECTION 11: Toxicological information

11. 1. INFORMATION ON TOXICOLOGICAL EFFECTS

Toxicological information of the mixture:

Culture of naturally occurring soil micro-organisms not infective to humans, with non-toxic polymer adhesive and nutrients

Acute toxicity: Based on available data, the classification criteria are not met
Primary irritant effect

Skin corrosion/irritation: No data available.

Serious eye damage/irritation: No data available.

Respiratory or skin sensitisation: The product contains microorganisms.

Skin contact may cause allergic reactions.

Germ cell mutagenicity: No data available.

Carcinogenicity: No data available.

Reproductive toxicity: No data available.

STOT-single exposure: No data available.

STOT-repeated exposure: No data available.

Aspiration hazard: No data available.

SECTION 12: Ecological information

12. 1. TOXICITY

Adopt good working practices, so that the product is not released into the environment.

Aquatic toxicity: For the product there are no data on ecotoxicology available.

12. 2. PERSISTENCE AND DEGRADABILITY

Readily degradable

12. 3. BIOACCUMULATIVE POTENTIAL

Non bioaccumulative

12. 4. MOBILITY IN SOIL

Non mobile

12. 5. RESULTS OF PBT AND VPvB ASSESSMENT

The product contains no substances classified as PBT or vPvB

12. 6. OTHER ADVERSE EFFECTS

None known

SECTION 13: Disposal considerations

13. 1. WASTE TREATMENT METHODS

Contact a licensed professional waste disposal service to dispose this material. Dissolve or mix the material with a combustible solvent and burn in chemical incinerator equipped with afterburner and scrubber. In so doing, comply with the local and national regulations currently in force. Do not re-use empty containers.

SECTION 14: Transport information

14. 1. UN NUMBER

ADR/IMDG/IATA: Not classified as dangerous goods.

14. 2. UN PROPER SHIPPING NAME

ADR/IMDG/IATA: Not classified as dangerous goods.

14. 3. TRANSPORT HAZARD CLASS(ES)

ADR/IMDG/IATA: Not classified as dangerous goods.

14. 4. PACKING GROUP

ADR/IMDG/IATA: Not classified as dangerous goods.

14. 5. ENVIRONMENTAL HAZARDS

Not applicable

14. 6. SPECIAL PRECAUTIONS FOR USER

Not required.

14. 7. TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL73/78 AND THE IBC CODE

Not applicable.

UN "Model Regulation": Void

SECTION 15: Regulatory information

15. 1. SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications: None

Where applicable, refer to the following regulatory provisions:

Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012 on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC.

Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents.

Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control).

15. 2. CHEMICAL SAFETY ASSESSMENT

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources: ECHA database; GESTIS Database

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Abbreviations and acronym:

ADR: Goods by Road

CFU: Colony forming units

CLP: REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.

IATA: International Air Transport Association

IMDG: International Maritime Code for Dangerous Goods

PBT: persistent, bioaccumulative and toxic properties

vPvB: very persistent and very bioaccumulative properties

STOT: Specific target organ toxicity