

Safety Data Sheet

LIQUIFIX^{MC™}

Safety Data Sheet dated 09/11/2022, version 2

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

1. 1. PRODUCT IDENTIFIER

Trade name: LIQUIFIX

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

Recommended use: 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

1. 4. EMERGENCY TELEPHONE NUMBER

Phone no.: +44 1158 240 585

E-mail: info@legumetechnology.co.uk

In case of accident, locate the nearest anti-poison centres in the following link:

WHO <http://apps.who.int/poisoncentres/>

SECTION 2: Hazards identification

2. 1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

EC regulation criteria 1272/2008 (CLP): the product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Properties / Symbols: None.

Adverse physicochemical, human health and environmental effects: No other hazards

2. 2. LABEL ELEMENTS

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Symbols: None

Hazard statements: None

Precautionary statements: None

Special Provisions: None

Special provisions according to Annex XVII of REACH and subsequent amendments: None

2. 3. OTHER HAZARDS

vPvB Substances: None

PBT Substances: None

Other Hazards: Minor risk of sensitisation due to micro-organisms present

SECTION 3: Composition/information on ingredients

3. 1. SUBSTANCES

Not available

3. 2. MIXTURES

Components: Culture of *Bradyrhizobium/Rhizobium* bacteria formulated with polymer adhesive and nutrients (with or without *Bacillus subtilis*)

SECTION 4: First aid measures

4.1. DESCRIPTION OF FIRST AID MEASURES

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

In case of 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.

In case of ingestion: Wash out mouth with water provided person is conscious. Call a physician.

In case of 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 known symptoms to date.

4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Treatment: No known treatment to date.

SECTION 5: Firefighting measures

5.1. EXTINGUISHING MEDIA

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

Extinguishing media which must not be used for safety reasons: None in particular.

5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Do not inhale explosion and combustion gases.

5.3. ADVICE FOR FIREFIGHTERS

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

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

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.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. ENVIRONMENTAL PRECAUTIONS

Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

Suitable material for taking up: absorbing material, organic, sand

6.3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Collect with absorbent material, sweep up with spade and transfer to a dry, clean, lidded container for disposal. Ventilate area and wash spill site after material pickup is complete.

6.4. REFERENCE TO OTHER SECTIONS

See also section 8 and 13

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.

See also section 8 for recommended protective equipment.

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

Keep container tightly closed in a dry and well-ventilated place.

Store in a cool place and under inert gas.

Store away from direct light.

Keep material away from heat, sparks and flames.

Keep away from food, drink and feed.

Incompatible materials: Store away from herbicides and pesticides.

Instructions as regards storage premises: Adequately ventilated premises.

7. 3. SPECIFIC END USE(S)

Industrial use

SECTION 8: Exposure controls/personal protection

8. 1. CONTROL PARAMETERS

DNEL Exposure Limit Values: Not available

PNEC Exposure Limit Values: Not available

8. 2. EXPOSURE CONTROLS

Eye protection: Goggles.

Protection for skin: Chemical protection clothing.

Protection for hands: Use protective gloves.

Respiratory protection: In case of insufficient ventilation wear appropriate respiratory equipment.

Thermal Hazards: None known to date

Environmental exposure controls: Local aspiration and general ventilation system.

SECTION 9: Physical and chemical properties

9. 1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid

Appearance and colour: Opaque liquid

Odour: Weak

pH: Not applicable

Melting point / freezing point: Not applicable

Solubility in water: Insoluble

Density: 1,017.5 + 1.5 g/l

9. 2. OTHER INFORMATION

None

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

None in particular known to date.

10. 4. CONDITIONS TO AVOID

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

If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered as not available:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

SECTION 12: Ecological information

12.1. TOXICITY

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

vPvB Substances: None

PBT Substances: None

12.6. OTHER ADVERSE EFFECTS

None known to date.

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.

SECTION 14: Transport information

14.1. UN NUMBER

Not classified as dangerous in the meaning of transport regulations.

14.2. UN PROPER SHIPPING NAME

Not classified as dangerous in the meaning of transport regulations.

14.3. TRANSPORT HAZARD CLASS(ES)

Not classified as dangerous in the meaning of transport regulations.

14. 4. PACKING GROUP

Not classified as dangerous in the meaning of transport regulations.

14. 5. ENVIRONMENTAL HAZARDS

Marine pollutant: No.

14. 6. SPECIAL PRECAUTIONS FOR USER

Not classified as dangerous in the meaning of transport regulations.

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

Not classified as dangerous in the meaning of transport regulations.

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)

Directive (EC) n. 1999/45

Regulation (EC) n. 790/2009 (ATP 1 CLP)

Regulation (EU) n. 453/2010 (Annex I)

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 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 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments.

Regulation (EC) nr 648/2004 (detergents).

1999/13/EC (VOC directive)

15. 2. CHEMICAL SAFETY ASSESSMENT

No

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.

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

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

PNEC: Predicted No Effect Concentration.

STEL: Short Term Exposure limit.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).