BUMINAL® GMBH

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Version: 1

Language: EN

Revision date: 05/02/2016

1. Identification of the substance/mixture and of the Company/Undertaking

1.1 Product identifier



Trade name:

Buminal 50 / Tech

REACH registration number:

The registration number is not available since the substance or its use is excepted from the registration according to article 2 of the REACH Regulation (EC) No 1272/2008, the yearly amount does not require a registration or the registration is forseen at a later point.

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

Identified uses of the Protein hydrolysate for use as attractant for fruit and olive fruit flies substance/mixture:

Not recommended uses of the none substance/mixture:

1.3 Details of the supplier of the Safety Data Sheet

Manufacturer BUMINAL GmbH Kirchstrasse 18 82211 Herrsching Germany

Telephone: +49 (0)8152 983 547 Fax: +49 (0)8152 983 563 E-mail: info@buminal.com

1.4 Emergency telephone number

Telephone: +49 (0)172 6106 321

2. Hazards identification

2.1 Classification of the substance or mixture

- 2.1.1 Classification according to Regulation (EC) No 1272/2008 (CLP) This mixture is classified as not hazardous according to Regulation (EC) 1272/2008 [GHS].
- **2.1.2 Classification according to Directive 67/548/EEC and 1999/45/EC** The preparation is not dangerous in the sense of Directive 1999/45/EC.

2.1.3 Additional information

This substance does not meet the criteria for classification as PBT or vPvB.

2.2 Label elements

2.2.1 Labelling according to Regulation (EC) No 1272/2008

There is no obligatory labelling requirement according to Regulation (EC) No 1272/2008.

2.2.2 Labelling according to Directive 67/548/EEC or 1999/45/EC

There is no obligatory labelling requirement according to the Directive covering preparations 1999/45/EC.

3. Composition/information on ingredients

3.1 Substances

Buminal is a protein hydrolysate obtained from plant material, which is used as attractant for fruit flies (Ceratitis capitata) and olive fruit flies (Bactrocera/Dacus oleae). Protein content: ~37-39 % (w/w) (38,2 g/100g) Water content: ~54-58 % (w/w) (42.6 g/100g) Can contain minor amounts of aflatoxins (B1, B2, G1 and G2; sum: <1.20 µg/kg) and heavy metals (arsenic: 0.035 mg/kg, cadmium: 0.005 mg/kg, mercury: <0.08 mg/kg).

4. First aid measures

4.1 Description of first aid measures

| General information: | No special measures are necessary. Seek medical attention if problems arise. |
|-------------------------|--|
| Following inhalation: | Provide fresh air. |
| Following skin contact: | After contact with skin, wash immediately with plenty of water and soap. |
| Following eye contact: | Rinse immediately carefully and thoroughly with eye-bath or water. |
| Following ingestion: | If accidentally swallowed rinse the mouth with plenty of water. |
| Self-protection: | First aid assistant: Pay attention to self-protection! |

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: No symptoms known up to now.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment: Treat symptomatically.

5. Fire fighting measures

5.1 Extinguishing media

Suitable:Extinguishing materials should be selected according to the surrounding area.Unsuitable:High power water jet.

5.2 Special hazards arising from the substance or mixture

The product itself is not combustible. Hazardous decomposition products unknown.

5.3 Advice for fire fighters

Wear a self-contained breathing apparatus and chemical resistant suit.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with spilled or released material. No further protection measures are necessary.

6.2 Environmental precautions

No special environmental protection measures are necessary. Do not empty into drains or the aquatic environment.

6.3 Methods and material for containment and cleaning up

Remove with water. Wipe up with absorbent material (eg. cloth, fleece).

6.4 Reference to other sections

See chapter 13 on disposal considerations.

7. Handling and storage

7.1 Precautions for safe handling

Information for safe handling

Personal protection equipment not necessary, since the product is not hazardous. However, avoid contact with the material.

Technical measures

No special technical protective measures are necessary.

Precautions against fire and explosion

not necessary

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep in a cool, well-ventilated place.

Packaging materials Store only in original container.

Requirements for storerooms and containers Keep the packing well sealed to prevent contamination.

Information about storing together in storage facility Keep away from food, drink and animal feedingstuffs.

Further information concerning storage conditions Observe instructions for use.

Storage class: 12 non-combustible liquids

7.3 Specific end use(s)

Except the uses indicated in chapter 1.2 no further specific end uses are foreseen.

8. Exposure controls / Personal protection

8.1 Control parameters

8.1.1 Limits for occupational exposure

No occupational exposure limits have been identifies/indicated.

8.1.2 DNEL and PNEC values

DNEL-values: no data available

PNEC-values: no data available

8.1.3 Control-Banding

Control-Banding: no data available

8.2 Exposure controls

Occupational exposure controls

When using do not eat, drink or smoke.

Chemical handling

Avoid contact with skin, eye and clothing.

Personal protection equipment

The product has been classifies as non hazardous. Personal protection equipment (respiratory, hand, eye, skin protection) is not necessary. However, it is recommended to use appropriate hand protection to avoid contact with skin. (suitable: single-use gloves)

Environmental exposure controls

No special environmental protection measures are necessary.

Consumer exposure controls

See chapter 7.

9. Physical and chemical properties

9.1 Information on the basic physical and chemical properties

| Appearance | |
|------------------|----------------|
| State of matter: | viscous liquid |
| Colour: | dark brown |
| Odour: | neutral |
| Odour threshold: | not relevant |

Safety relevant basis data

| | Value | Unit | Remark |
|------------------------------|-----------|-------------------|--------------------------|
| Density: | 1.29-1.31 | g/cm ³ | at 20°C; |
| | | - | method: areometer, |
| | | | Biegeschwinger, DMA 4500 |
| Package density: | | | not relevant |
| pH: | 5.3-6.12 | - | method: ASU §35 L26.04-3 |
| Melting point / range: | | | not relevant |
| Boiling temperature / range: | ~100 | °C | boiling point water |
| Flash point: | | | non flammable |
| Flammability: | | | not relevant |
| Lower flammability limit: | | | not relevant |
| Upper flammability limit: | | | not relevant |
| Explosion hazard: | | | not explosive |

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| Lower explosion limit: | | | not explosive |
|--------------------------------|---------------|-------|---|
| Upper explosion limit: | not explosive | | |
| Ignition temperature: | | | not relevant |
| Decomposition temperature: | | | not relevant, no hazazardous decomposition products |
| Oxidizing characteristics: | | | not relevant |
| Vapour pressure: | | | not relevant |
| Relative vapour density: | | | not relevant |
| Speed of vaporation rate: | | | not relevant |
| Solubility in water: | | | completely miscible |
| log P O/W (n-octanol / water): | | | not relevant |
| Viscosity: | 52 | mPa*s | method: rotation viscosimetry |

9.2 Other information

Protein: 37.5-39.6 g/100g (method: Kjeldahl; value dependent on raw material source)

10. Stability and reactivity

10.1 Reactivity

No ignition, explosion, self-heating or visible decomposition under standard conditions.

10.2 Chemical stability

Stable under standard conditions.

10.3 Possibility of hazardous reactions

Hazradous reactions unknown.

10.4 Conditions to avoid

Heat: denaturation of proteins if exposed to heat.

10.5 Incompatible materials

unknown

10.6 Hazardous decomposition products

unknown

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product is not toxic.

Specific symptoms in laboratory animals

No information available.

11.2 Irritation and etching

| Safety Data Sheet | Buminal eingestellt | Revision date: 09/08/2013 |
|---|----------------------|------------------------------|
| Irritant effect on the skin | not relevant | |
| Irritant effect on the eye | not relevant | |
| Irritant effect on the respiratory | / tract not relevant | |
| Etching | not relevant | |
| 11.3 Sensitization No information available. | | |
| 11.4 Repeated dose toxicity Product is not toxic. | | |
| 11.5 CMR effects | | |
| Carcinogenicity r | not relevant | |
| Mutagenicity r | not relevant | |
| Reproductive toxicity r | not relevant | |

12. Ecological information

12.1 Toxicity

Product is not toxic

12.2 Persistence and degradability

Substances contained in product are not perstistent.

12.3 Bioaccumulative potential

No indication of bio-accumulation potential.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

Substances contained in product do not meet the criteria for classification as PBT or vPvB.

12.6 Other adverse effects

No information available.

13. Disposal considerations

13.1 Waste treatment methods

Appropriate disposal/product

Waste disposal according to official state regulations.

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Appropriate disposal/packaging

Waste disposal according to official state regulations.

Control report for waste code/ waste marking according to EWC

Consult the appropriate authorities about waste disposal.

14. Transport information

14.1 UN Number

Not classified according to the ADR.

14.2 UN proper shipping name

ARD/RID

Not classified according to the ADR.

IMDG-Code / ICAO-TI / IATA-DGR No information available.

14.3 Transport hazard class(es)

No information available.

14.4. Packing group

No information available.

14.5. Environmental hazards

Hazard code(s) ARD/RID / IMDG-Code / ICAO-TI / IATA – DGR: Marine pollutant:

No information available.

14.6 Special precautions for users

Refer to chapter 6-8.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

| Pollution Category: | No information available. |
|---------------------|---------------------------|
| Ship type: | No information available. |
| Product name: | No information available. |
| Special provisions: | No information available. |

14.8 Further limitations and legal requirements

No information available.

15. Regulatory information

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

The product is classified as biocide (group 3: pest control; product type 19: repellent and attractant) and is

subject to the EU Biocide Directive 98/8/EC.

National regulations

Moreover, national legislation has to be observed!

Information on working limitations

Youths are only allowed to handle this product according to the regulation 94/33/EC, and as long as all effects of dangerous substances are prevented. Observe regulation 98/24/EC for employee health protection against the threat of chemical substances in the workplace.

Storage class according to VCI (DE)

12 non-combustible liquids

Water Hazard Class according to VwVwS (DE)

0 not a water pollutant

15.2 Chemical safety assessment

For this preparation a chemical safety assessment has been carried out:

16. Other information

16.1 Wording of the H and R-phrases under paragraph 2 and 3

Regulation (EC) No 1272/2008

This mixture is classified as not hazardous according to Regulation (EC) 1272/2008 [GHS].

Directive 67/548/EEC

The preparation is not dangerous in the sense of Directive 1999/45/EC.

16.2 Training instructions

The product should only be handled by persons over the age of 18, who were informed sufficiently about the dangerous nature or the product and about the necessary safety precautions.

16.3 Further remarks

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

16.4 Documentation of changes

none

16.5 Data sources

Data arise from reference works and literature.

Herrsching, 05.02.2016

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no

Last printed 16/05/2016 13:15:00

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