

1 Bezeichnung des Stoffes / der Zubereitung und des Unternehmens Identification of the substance/preparation and of the company/undertaking

1.1 Bezeichnung des Stoffes oder der Zubereitung / Identification of the substance or preparation

Microbial enzyme preparation, produced by fermentation, extraction, concentration, filtration, stabilisation and or preservation and standardization. Enzymes act as biocatalysts to perform specific reactions under standard reaction conditions. The enzyme preparation described leads to a degradation of pectin and pectic substances. It is standardized to a specified activity.

Artikelnummer / Art.-no.

2271x
2019x
2139x
2209x
2220x
2210x
2152x
2270x
2002x
2187x
2018x
2111x
2188x
2119x
2157x
2192x
2283x
2006x

Handelsname / Trade name

Fructozym® APPLE CLOUDY
Fructozym® BE
Fructozym® Color
Fructozym® EC Color
Fructozym® Flot
Fructozym® Flow UF
Fructozym® FLUX
Fructozym® LIQ
Fructozym® MA
Fructozym® MA-LG
Fructozym® MB
Fructozym® P
Fructozym® P-LG
Fructozym® P-6 L
Fructozym® P-6 XL
Fructozym® PRESS
Fructozym® NAR
Fructozym® UF

1.2 Verwendung des Stoffes / der Zubereitung / Use of the substance / preparation

1.2.1 Identifizierte Verwendung(en) / Identified use(s)

Industrie / Gewerbe / Industry / Professional: According to Erbslöh product leaflet.

Privat / Private: None.

1.3 EG-Inverkehrbringer / EC market responsible person

1.3.1 Bezeichnung des Unternehmens / Company/undertaking identification

Erbslöh Geisenheim AG, Erbslöhstraße 1, 65366 Geisenheim, Germany

E-Mail: info@erbsloeh.com, Internet: www.erbsloeh.com

1.3.2 Notrufnummer / Emergency telephone:

Tel: +49 (0) 6722 708-0: Diese Nummer ist nur zu Bürozeiten von Mo-Fr besetzt. This number is serviced during office hours from Monday-Friday.

2 Mögliche Gefahren / Hazards identification

2.1 Einstufung / Classification:

The preparation is not dangerous in the sense of EC guidelines.

2.2 Andere Gefahren / Other hazard(s):

May cause sensitization by inhalation.

3 Zusammensetzung/Angaben zu Bestandteilen / Composition/information on ingredients

3.1. Chemische Charakterisierung (Stoff) / Chemical characterization (substance)

Chemische Bezeichnung / Chemical name:

Aqueous solution of a microbial produced enzyme protein stabilized with glycerol. All ingredients in food grade quality.

Enzym-Hauptaktivität main activity of enzyme	EINECS-Nr. EINECS no.	IUB-Nr. IUB no.	CAS-Nr. CAS no.
Pectinase	232-885-6	3.2.1.15	9032-75-1

Synonym(e) / Synonyme(s): ---.

Printed on:	Version:	Date / by:	Page
25.06.2013	002	13.04.13 / MM	Page 1 of 4 (SD_FructozymeFluessig_GB_002)

Gefahrensymbol(e) / Hazard(ous) symbol(s):

R-Sätze / R-phrases: None.

Gefährliche Bestandteile / Verunreinigungen / Hazard(ous) ingredients / impurity(ies):
None.

3.2. Zusätzliche Hinweise / Additional information:

Do not breathe in spray. Avoid contact with skin. Wear suitable protective clothing and gloves.

4 Erste-Hilfe-Maßnahmen / First aid measures

4.1 Allgemeine Hinweise / General informations

No acute toxicity, but if exposed to enzyme aerosols, respiration problems and allergic reactions with sensitive persons might occur. In case of prolonged skin contact, enzyme solution can cause irritations.

4.2 Nach Einatmen / In case of inhalation

Remove to fresh air. Drink water, in case of health problems seek medical advice.

4.3 Nach Hautkontakt / In case of skin contact

Wash off with water and soap. Immediately wash with water and soap, in case of skin irritations consult doctor.

4.4 Nach Augenkontakt / In case of eye contact

In case of contact with eyes, rinse immediately thoroughly with plenty of water and consult an ophthalmologist.

4.5 Nach Verschlucken / In case of ingestion

If swallowed immediately drink water.

4.6 Selbstschutz des Ersthelfers / Self-protection of the first aider

First aider: Pay attention to self-protection!

5 Maßnahmen zur Brandbekämpfung / Fire-fighting measures

5.1 Geeignete Löschmittel / Suitable extinguishing media

Suitable extinguishing media: water, carbon dioxide (CO₂), foam, extinguishing powder.

5.2 Löschmittel, die aus Sicherheitsgründen nicht zu verwenden sind / Extinguishing media which must not be used for safety reasons

Co-ordinate fire-fighting measures to the fire surroundings.

5.3 Besondere Gefährdungen / Special exposure hazards

No special hazards.

5.4 Besondere Schutzausrüstung für die Brandbekämpfung / Special protective equipment for fire-fighters

Wear full protective clothing.

6 Maßnahmen bei unbeabsichtigter Freisetzung / Accidental release measures

6.1 Personenbezogene Vorsichtsmaßnahmen / Personal precautions

Avoid generation of aerosols.

6.2 Umweltschutzmaßnahmen / Environmental precautions

Prevent from flowing off into the sewage system/surface water/ground water.

6.3 Verfahren zur Reinigung / Methods for cleaning up

Take up by liquid-absorbing material (e.g. sand, kieselguhr, acid binding agent, universal binder, sawdust).

6.4 Zusätzliche Hinweise / Additional information

No additional information.

7 Handhabung und Lagerung / Handling and Storage

7.1. Handhabung / Handling

Working places should be designed to allow cleaning at any time. Avoid dust formation.

7.2. Lagerung / Lagerbedingung / Storage / storage conditions

Store in a cool, dry, well-ventilated place, protected from foreign odours.

7.3. Bestimmte Verwendung(en) / Specific use(s)

See product leaflet.

8 Begrenzung und Überwachung der Exposition / persönliche Schutzausrüstung / Exposure controls / Personal protection

8.1. Expositionsgrenzwerte / Exposure limit values

No substance related limit value available.

Printed on:	Version:	Date / by:	Page
25.06.2013	002	13.04.13 / MM	Page 2 of 4 (SD_FructozymeFluessig_GB_002)

8.2. Begrenzung und Überwachung der Exposition / Exposure controls

8.2.1. Begrenzung und Überwachung der Exposition am Arbeitsplatz / Occupational exposure controls.

a) Atemschutz / Occupational exposure controls

Recommended.

b) Handschutz / Hand protection

Recommended.

c) Augenschutz / Eye protection

Not required.

Andere Schutzmaßnahmen / Additional protection measures:

When using do not eat, drink, smoke, sneeze. Keep to the usual hygienic measures for handling foodstuffs.

8.2.2. Begrenzung und Überwachung der Umweltexposition / Environmental exposure controls

See section 7. No additional measures necessary.

8.2.3. Begrenzung und Überwachung des Stoffes in Verbraucher- oder Folgeprodukten / Substance control in consumer or downstream products

No special measures necessary.

9 Physikalische und chemische Eigenschaften / Physical and chemical Properties

9.1 Erscheinungsbild / Appearance

Form / Physical state: Liquid.
Farbe / Colour: Brown.
Geruch / Smell: Typical.

9.2 Wichtige Angaben zum Gesundheits- und Umweltschutz sowie zur Sicherheit / Important health, safety and environmental information

Schüttgewicht / Bulk density: Not applicable.
Dichte / density: 1.1 – 1.2 g/cm³ at 20 °C.
pH-Wert (20 °C) / pH-value: pH 3.5 – 4.5 at 20 °C.
Schmelzpunkt / Melting point : Not applicable.
Siedepunkt / Boiling temperature : approx. 100 °C.
Selbstentzündlichkeit / Autoignition :: No self-ignition.
Explosionsgefahr / Explosive properties: Not applicable.
Wasserlöslichkeit / Water solubility: Miscible.

10 Stabilität und Reaktivität / Stability and Reactivity

10.1 Zu vermeidende Bedingungen / Conditions to avoid

No decomposition, if applied accordingly. Loss of enzyme activity is possible at temperatures exceeding 10°C, thus cooling necessary.

10.2 Zu vermeidende Stoffe / Materials to avoid

No data available.

10.3 Gefährliche Zersetzungsprodukte / Hazardous decomposition products

No hazardous decomposition products known.

11 Toxikologische Angaben / Toxicological information

11.1 Toxikinetik, Stoffwechsel und Verteilung / Toxicokinetics, metabolism and distribution

According to the present state of knowledge toxic effects are not expected.

11.2 Akute Wirkungen (akute Toxizität, Reiz- und Ätzwirkung) / Acute Effects (acute toxicity, Irritant and corrosive effects)

In case of eye contact of prolonged or frequent skin contact, sensitisation and irritation possible. In case of repeated breathing in of enzyme dust and/or aerosol, allergic reactions, asthmatic bronchitis included, can occur with sensitive persons.

Printed on:	Version:	Date / by:	Page
25.06.2013	002	13.04.13 / MM	Page 3 of 4 (SD_FructozymeFluessig_GB_002)

12 Umweltbezogene Angaben / Ecological information

12.1 Ökotoxizität / Ecotoxicity

According to the present state of knowledge negative ecological effects are not expected.

12.2 Mobilität / Mobility

According to the present state of knowledge negative ecological effects are not expected.

12.3 Persistenz und Abbaubarkeit / Persistence and degradability Part of the components is biodegradable.

12.4 Bioakkumulationspotential / Bioaccumulative potential No indication to bioaccumulation potential.

12.5 Ergebnis der Ermittlung der PBT-Eigenschaften / Results of PBT assessment

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

12.6 Andere schädliche Wirkungen / Other adverse effects

According to the present state of knowledge negative ecological effects are not expected.

13 Hinweise zur Entsorgung / Disposal considerations

13.1 Entsorgung / Abfall (Produkt) / Appropriate disposal / product

Dispose of waste according to applicable local, state, and federal regulations.

Empfehlung / Recommendation

Can be disposed of in household waste landfill.

13.2 Entsorgung der Verpackung / Appropriate disposal / packaging

Dispose of waste according to applicable local, state, and federal regulations. RIGK disposal.

14 Angaben zum Transport / Transport information

14.1 Landtransport (ADR/RID/GGVSE) / Land transport (ADR/RID)

No dangerous good in the sense of this transport regulation.

14.2 See (IMDG), Binnen (A.D.N.R.) / Seeschiffstransport (IMDG), Binnenschiffstransport (ADNR)

No dangerous good in the sense of this transport regulation.

14.3 Luft (IATA) / Air transport (IATA)

No dangerous good in the sense of this transport regulation.

15 Rechtsvorschriften / Regulatory information

15.1 EU-Vorschriften / EU-Regulations

According to EU-regulations the product does not have to be labelled.

15.1.1 Stoffsicherheitsbeurteilung / Chemical Safety Assessment

Gefahrensymbole und Gefahrenbezeichnungen / Gefahrensymbol(e) und Gefahrenbezeichnung(en)

None.

Gefahrbestimmende Komponente(n) zu Etikettierung / Hazard(ous) component(s) for labelling:

None.

R- Sätze / r-phrases

None.

S- Sätze / S-phrases

None.

Besondere Kennzeichnung bestimmter Zubereitungen / Special provisions concerning the labelling of certain preparations

According to EU-regulations the product does not have to be labelled.

15.2 Nationale Vorschriften / National regulations

Wassergefährdungsklasse / Water hazard class (WGK): 1 (slightly water polluting substance).

16 Sonstige Angaben / Other information

16.1 Wortlaut der R-Sätze unter Abschnitt 2 / Relevant R-phrases (Number and full text): None.

16.1 Schulungshinweise Training instructions: None.

16.1 Weitere Informationen / Further information: Please refer to our internet website for more information..

Mit den vorstehenden Angaben, die dem heutigen Stand unserer Kenntnisse und Erfahrungen entsprechen, wollen wir unser Produkt im Hinblick auf etwaige Sicherheitserfordernisse beschreiben, verbinden damit jedoch keine Eigenschaftszusicherungen und Qualitätsbeschreibungen. Bestehende Gesetze und Bestimmungen sind vom Anwender in eigener Verantwortung zu beachten.

With the information given, which complies with our present knowledge and experience, we would like to describe our products in view of possible safety requirements, however we do not combine any warranty of product property or quality. Laws and regulations currently in force, have to be adhered to by the user.

Printed on:	Version:	Date / by:	Page
25.06.2013	002	13.04.13 / MM	Page 4 of 4 (SD_FructozymeFluessig_GB_002)