

1 Identification of the substance/preparation and of the company /

Stoff-/Zubereitungs und Firmenbezeichnung

Information on the product / Angaben zum Produkt

Microbial enzyme preparation, produced by fermentation, extraction/separation, elimination of depectinase side-activity, concentration, filtration, spray drying, standardisation and granulation. Enzymes act as biocatalysts to perform specific reactions under standard conditions. The enzyme preparation described leads to a degradation of pectin and pectic substances. It is standardized to a specified activity.

Trade name / Handelsname

Clearlyse

Article no./ Artikelnummer

Manufacturer/ Hersteller/Lieferant

Groupe Erbslöh

Erbslöhstraße 1

D-65366 Geisenheim

GERMANY

Department giving information / Auskunftgebender Bereich

Tel: +49 (0) 6722 708-0

Fax: +49 (0) 6722 6098

E-Mail: info@lalittorale.de

Internet: www.lalittorale.de

2 Composition/information on ingredients / Zusammensetzung/Angaben zu den Bestandteilen

Chemical characterization / Chemische Bezeichnung

Easily soluble granulate of a microbially produced enzyme protein, standardized with carbohydrates as inert blend. All ingredients of food-grade quality.

Pectinase: IUB/EC-No.: 3.2.1.15, CAS-No.: 9032-75-1, EINECS-No.: 232-885-6

Hazardous ingredients / Gefährliche Bestandteile

Enzyme protein (2-20 %)

3 Hazards identification / Mögliche Gefahren

Hazard designation / Gefahrenbezeichnung

X_n (harmful),

R 42: Possible sensitisation by breathing.

S 22: Do not inhale dust.

An inhalation of enzyme aerosols and dust as possible consequence of improper handling, may cause sensitisation or lead to allergic reactions with sensitive persons. An exposure limit is not determined. In case of skin contact, irritations may occur. Instructions for proper handling are given under points 6, 7 and 8.

4 First aid measures / Erste Hilfe

Inhalation / Einatmen

No acute toxicity, but when exposed to enzyme dust and aerosols, respiration problems and allergic reactions may occur with sensitive persons. In case of prolonged skin contact, including solutions of the enzyme preparation, skin irritations may occur. In case of health problems, seek medical advice.

Skin contact / Hautkontakt

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

Eye contact / Augenkontakt

Rinse the eyes with plenty of water with the eyelids open. If irritation of the eyes occurs, seek ophthalmological advice.

Ingestion / Verschlucken

Rinse mouth and throat thoroughly with water. In case of health problems, consult doctor.

5 Fire-fighting measures / Brandbekämpfung

Suitable fire extinguishing substances / Geeignete Löschmittel

Water (avoid high-pressure water jet), foam, powder for extinguishing, carbon dioxide.

Special hazards / Besondere Gefahren

No special remarkable hazards. Product itself does not burn. Take measures against electrostatic charging.

Special protective equipment / Persönliche Schutzausrüstung

Not necessary.

Date of printing:	Date of issue / by:	Date of revision / by:	Page
26.03.2009	7.07.2008 / YM	16.07.2008/YM	Page 1 of 3

6 Accidental release measures / Maßnahmen bei unbeabsichtigter Freisetzung

Personal precautions / Persönliche Vorsichtsmaßnahmen

Avoid dust and aerosol formation.

Environmental precautions / Umweltschutzmaßnahmen

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

Methods for cleaning up / taking up / Verfahren zur Reinigung / Aufnahme

Pick up mechanically. Preferably by vacuum, using an efficient dust filter. Dispose of according to regulations.

7 Handling and storage / Handhabung und Lagerung

Handling / Handhabung

Avoid dust and aerosol formation, keep packagings tightly closed. Wear respiratory protection, safety goggles, protective gloves. Provide for good ventilation when handling the product.

Storage / storage conditions / Lagerung / Lagerbedingung

Cooling necessary. Store cool and dry. Keep packagings tightly closed. No special requirements for storage together with other products. Storage class 12 (VCI concept).

8 Exposure limits and personal protective equipment /

Expositionsbegrenzung und persönliche Schutzausrüstung

Respiratory protection / Atemschutz

Half-mask facepiece for fine dust protection or respiratory protective device with P3-filter.

Hand protection / Handschutz

In case of longer skin contact protective gloves.

Eye protection / Augenschutz

Safety goggles or face protector.

Additional protective measures / Andere Vorsichtsmaßnahmen

Do not breath in dust or aerosols, avoid eye contact and skin contact. Keep to the usual professional hygienic measures.

9 Physical and chemical characteristics / Physikalische und chemische Eigenschaften

Appearance / Form :	granulate
Colour / Farbe :	beige, cream-coloured
Smell / Geruch :	characteristic
Bulk density / Schüttgewicht :	0.5 – 0.6 g/cm ³
Density / Dichte :	not applicable
pH-value / pH-Wert :	1 g dissolved in 100 cm ³ distilled water as solvent: pH 4.4 to 5.0 at 20 °C
Melting point / Schmelzpunkt :	No data available.
Boiling point / Siedepunkt :	No data available.
Autoignition / Selbstentzündlichkeit :	Not autoignitable.
Explosive properties / Explosionsgefahr :	Not explosive.
Solubility in water / Wasserlöslichkeit :	easily suspensible

10 Stability and reactivity / Stabilität und Reaktivität

Thermic decomposition / conditions to avoid / Thermische Zersetzung / zu vermeidende Bedingungen

No decomposition, if applied accordingly. Loss of enzyme activity possible when temperatures exceed 10°C, thus cooling necessary.

Materials to avoid / Zu vermeidende Stoffe

No hazardous reactions known.

Hazardous decomposition products / Gefährliche Zersetzungsprodukte

No hazardous decomposition products known.

Date of printing:	Date of issue / by:	Date of revision / by:	Page
26.03.2009	7.07.2008 / YM	16.07.2008/YM	Page 2 of 3

11 Toxicological information / Angaben zur Toxikologie

Acute toxicity / Akute Toxizität

Product does not contain acute toxic components.

Additional toxicological information / Weitere toxikologische Hinweise

When properly applied, the product is unknown to be dangerous to health. In case of repeated breathing in of enzyme dust and/or aerosols, caused by improper handling, allergic reactions, asthmatic bronchitis included, may occur with sensitive persons. Prolonged or frequent skin contact may cause irritations. Eye contact may have irritant effect.

12 Ecological information / Angaben zur Ökologie

Allgemeine Angaben / General information

The product is biodegradable.

According to state-of-the-art knowledge, the product causes no danger for the environment.

Water hazard class 1 (self assessed).

13 Disposal considerations / Hinweise zur Entsorgung

Product / Produkt

Dispose of in compliance with official regulations.

Recommendation / Empfehlung

Observe local regulations of disposal companies and authorities and dispose of, or incinerate together with domestic waste.

Packages / Verpackung

Dispose of in compliance with official regulations. Wash with water. Use local disposal system.

14 Transport information / Angaben zum Transport

Land carriage (ADR/RID) / Landtransport (ADR/RID)

Air transport (IATA) / Lufttransport (IATA)

Ocean transport (IMDG) / See (IMDG), Inland waterway transport (ADN/ADNR) / Binnen (ADN/ADNR)

No hazardous material as defined by the transport regulations.

15 Regulatory information / Vorschriften

Labelling according to EU regulation / Kennzeichnung nach EG-Richtlinien

Hazardous preparation.

Hazard symbol / Gefahrensymbol

X_n (Harmful).

R-Phrases / R- Sätze

R-42: Sensitisation possible by inhalation.

S-Phrases / S- Sätze

S-22: Do not breathe in dust.

Additional labelling / Zusätzliche Kennzeichnung

Sensitizing. The product contains no ingredients listed in annexe I of the EEC Directive 67/548 as hazardous substances. According to the interpretation of EEC Directive 88/379 it is however considered a hazardous preparation.

16 Further information / Andere Angaben

Department issuing safety data sheets / Datenblatt ausstellender Bereich

Quality Assurance.

Contact / Kontakt

Mr Matthias Moeren

17 Additional regulations / Zusätzliche Bestimmungen

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. / 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.

Date of printing:	Date of issue / by:	Date of revision / by:	Page
26.03.2009	7.07.2008 / YM	16.07.2008/YM	Page 3 of 3