



# Material Safety Data Sheet

Date prepared: 24<sup>th</sup> February 2003

Date revised: 7<sup>th</sup> January 2008

## 1. Identification of the Preparation and the Company

Substance or preparation trade name: **FEEDZYME 2000**  
Unique reference numbers(s): E403  
Company/undertaking name & address: **Kiotechagil**  
Hercules 2, Calleva Park  
Aldermaston, READING  
RG7 8DN, England

Telephone: +44 118 9813333  
Fax: +44 118 9810909  
Emergency telephone number: +44 1488 608178  
+44 118 9474407

## 2. Composition

Substance:	<b><i>Endo-1,3(4)-<math>\beta</math>-glucanase</i></b>	<b><i>Endo-1,4-<math>\beta</math>-xylanase</i></b>
EC #	<b><i>EC 3.2.1.6</i></b>	<b><i>EC 3.2.1.8</i></b>
CAS Number:	<b><i>62213-14-3</i></b>	<b><i>9025-57-4</i></b>
Classification:		
EINECS:	<b><i>263-462-4</i></b>	<b><i>232-800-2</i></b>

Carrier: Calcium carbonate

## 3. Hazards Identification

Not regarded as a health hazard.

Enzyme powders are dusty preparations. Prolonged direct contact may cause skin, eye and respiratory irritation to susceptible persons. Repeated inhalation of enzyme dust may cause allergic response in hypersensitive individuals.

## 4. First aid measures

Skin contact: S28 After contact with skin, wash immediately with plenty of soap and water  
Eye contact: S26 In case of contact with eyes, rinse immediately with plenty of water  
Ingestion: S64 If swallowed, rinse mouth with water (only if person is conscious)

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

## 5. Fire fighting measures

Suitable extinguishing media: Dry powder, carbon dioxide, foam or water spray.  
Special hazards in fire: None

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## 6. Accidental release measures

Personal precautions: Wastes are not classified as hazardous  
Environmental precautions: Wastes are not classified as hazardous and do not bioaccumulate

## 7. Handling and storage

Handling: Avoid the formation of dust.  
Storage: Store in clean dry conditions. Keep container closed and ensure label is intact and legible.

## 8. Exposure Controls

Engineering measures: N/A  
Control Parameters: None  
Personal protection equipment:



Eye protection: S22 Do not breathe dust  
S36 Wear suitable protective clothing  
S39 Wear eye/face protection.  
Hand protection: S37 Wear suitable (impervious) gloves.  
Hygiene measures: S20/21 When using do not eat, drink or smoke

## 9. Physical and chemical properties

Appearance: Buff to off white free flowing powder  
Odour: Slight fermentation odour  
pH: N/A  
Relative density: Loose powder – 682 kg/M<sup>3</sup>  
Packed powder – 1000 kg/M<sup>3</sup>  
Solubility: Carrier is insoluble in water

## 10. Stability and reactivity

The material is stable under normal conditions of use

Conditions to avoid: Heat, flame, freezing and physical damage  
Materials to avoid: Acids, peroxides and all combustible organic or easily oxidised materials,

## 11. Toxicological information

Practically non-toxic.

Excessive exposure to the dust may affect human health as follows:

Skin contact: R38 Irritating to the skin  
Eye contact: R36 Irritating to eyes  
Inhalation: R37 Irritating to respiratory system

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## 12. Ecological information

Wastes are not classified as hazardous to the environment.

## 13 Disposal Considerations

Disposal must be in accordance with local and national legislation.

Dispose of through an authorised waste contractor to a licensed site.

Provided care is taken to inhibit airborne dust, normal factory disposal procedures may be employed using skips and tips, then landfill. Spillages may be swept up and then hosed away without additional hazard other than slipperiness caused by wetting.

## 14. Transport information

No special precautions are necessary. In case of spillages mark roads and warn other road users. Keep public away from the immediate area. Keep upwind to avoid inhaling dust particles. Sweep up keeping airborne dust to a minimum. Flush road with water. If material has entered a watercourse or sewer or contaminated soil or vegetation, advise appropriate authorities - e.g. police

## 15. Regulatory information

**LABEL FOR SUPPLY:** No label required

**RISK PHRASES:**  
R36 Irritating to eyes  
R37 Irritating to respiratory system  
R38 Irritating to skin

**SAFETY PHRASES:**  
S22 Do not breathe dust  
S26 In case of contact with eyes, rinse immediately with plenty of water  
S28 After contact with skin, wash immediately with plenty of soap and water  
S36 Wear suitable protective clothing  
S39 Wear eye/face protection  
S37 Wear suitable gloves  
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)  
S64 If swallowed, rinse mouth with water (only if person is conscious)

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**STATUTORY INSTRUMENTS:** Health and Safety at Work Act 1974.

Chemicals (Hazard Information and Packaging for supply) Regulations 1994.

Control of Substances Hazardous to Health Regs 1988 (Si 1657).

Environmental Protection Act 1990.

**CODES OF PRACTICE:** Waste management: The duty of care.

**GUIDANCE NOTES:** Health and Safety Executive:-

Occupational exposure limits (EH 40/94)  
Classification, Packaging and Labelling of Dangerous Substances Regulations 1984

## 16. Other Information

Recommendations/restrictions: It is important to follow the inclusion instructions detailed in the Product Data Sheet. Do not use the product for any other application without obtaining advice from Kiotechagil beforehand.

If this product is for resale, ensure that the purchaser receives a copy of this information.

The information herein is believed to be correct as of the date hereof but is provided without warranty of any kind. The recipient of our product is responsible for ensuring that, where applicable, existing laws and guidelines are observed.

Sources of key data: National Chemical Emergency Centre (website)

The Physical and Theoretical Chemistry Laboratory Oxford University (website)

The format of this enzyme Material Safety Data Sheet complies with the EEC Directive 91/155/EEC and is recommended by the Association of Microbial Food Enzyme Producers "AMFEP".