

Material Safety Data Sheet



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Form: Single Item, Liquid
Updated: June 6, 2001

Section 1: Identification

Product Name: Alkaline Protease
Chemical Family: Enzyme
Molecular Weight: N/A
Hazard Classification: None
CAS Number: 9014-01-1

I.U.B. Number: 3.4.21.62

Chemical Name: Bacterial serine endopeptidase
Formula: N/A
Synonyms: N/A
Shipping Name: None
Source: *Bacillus spp.*

Section 2: Physical Data

Boiling Point, 760 mm Hg: 100-105°C
Vapor Density: (air=1): 0.62
Appearance & Odor: Brown liquid-typical fermentation odor
Vapor Pressure at 20 degrees: As water
Solubility in water, % by weight: Completely miscible

Specific Gravity: 1.1 to 1.3
% Volatile by Volume: 0
Pour Point: N/A
Evaporation rate (butyl acetate = 1): As water

Section 3: Hazardous Components

Material: This product does not meet the definition of hazardous material given in 29 CFR part 1910.1200 (OSHA). Information on this form is furnished as a customer service.

Inhalation: May cause sensitization by inhalation in hypersensitive individuals. Avoid dust generation. If inhaled remove from contaminated area to fresh air. Report situation. Seek medical attention if allergic response is exhibited.

Eye Contact: Product is not known to cause eye irritation. However, it is recommended that direct contact with eyes be avoided. In case of contact with eyes, flush eyes with low pressure water for at least 15 minutes. If irritation develops, seek medical attention.

Skin Contact: Product is not irritating to skin. However, it is recommended that prolonged contact with skin be avoided. In case of contact with skin, wash skin with soap and water. Remove contaminated clothing and wash.

Swallowing: Ingestion of material is not known to result in significant adverse health effects. If swallowed, rinse mouth and throat thoroughly with tap water. Drink water.

Section 4: Fire Fighting Measures

Flash Point/Ignition Temperature: HMIS Rating: Health = 1
Flammability = 1
Reactivity = 0

Explosion Characteristics: N/A
Hazardous Decomposition Products: None
Suitable Fire Extinguishing Media: Water, Foam, Halones

Section 5: Accidental Release Measures

After Spillage: Dike and absorb spill with inert materials. Transfer to sealable containers for disposal. Do not use high pressure air or water to clean up. Minimize aerosolization during clean up. Ensure sufficient ventilation. Wash contaminated clothing.

First Aid: In case of contact with skin, wash with soap and water. In case of contact with eyes, flush with water and see a physician. If inhaled, remove from exposure and provide fresh air. If ingested, flush mouth and throat with water. For any exposure, if irritation

Section 6: Personal Protection/Handling and Storage

Technical Protective Measures: Avoid formation of dust. Avoid splashing and high pressure washing. Ensure good ventilation of the room when handling this product. Store container in a dry cool place.

RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT:

Respiratory Protection: None required under usual condition of use. However, if exposure potential exists, refer to NIOSH Criteria Guides to determine appropriate unit.

Hand Protection: Impermeable gloves recommended.

Eye Protection: Protective glasses or eye shield.

Industrial Hygiene: Maintain good conditions of industrial hygiene.

Protection Against Fire & Explosions: Under normal use no special requirements. If extremely high levels generated in ambient air, material can support combustion.

Section 7: Physical Properties

Solubility in water: Readily soluble **Alternative solvent:** Not applicable **pH Value (1% sol.):** 3.8 - 8.0

Section 8: Toxicological Information

Inhalation of dust may cause respiratory allergy in susceptible individuals. Oral rat LD-50 >2g/kg-classifies product as "non-toxic".

Carcinogenicity: NTP? No **IARC Monographs?** No **OSHA Regulated?** No

Section 9: Information on Ecological Effects

Product is readily Biodegradable

Section 10: Disposal Considerations

No special disposal method required, except that in accordance with current local authority regulations.

Section 11: Transport Classification

Road/Rail: Not classified **Sea:** Not classified **Air:** Not classified

Section 12: Regulatory Information

The active ingredient and all components of the enzyme preparation are listed on the TSCA Inventory.

Section 13: Further Information

The information contained in this Safety Data Sheet, as of the issue date, is believed to be true and correct. However, the accuracy or completeness of this information and any recommendations or suggestions is made without warranty or guarantee. Since the conditions of use are beyond the control of the company, it is the responsibility of the user to determine the conditions of safe use of this product. The information does not represent analytical specifications.