



RENIZYME LT

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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| 1.1 | CHEMICAL PRODUCT | RENIZYME LT |
| 1.2 | PREPARED BY | ENVIRONMENTAL & REGULATORY AFFAIRS DEPARTMENT |
| 1.3 | PREPARATION DATE | Dec 08, 2002 |
| 1.4 | CHEMICAL FORMULA | N.AV |
| 1.5 | MOLECULAR WEIGHT | N.AV |
| 1.6 | CHEMICAL FAMILY | ENZYME PROTEIN |
| 1.7 | MATERIAL USE | REFER TO TECHNICAL LITERATURE |

2. COMPOSITION/INFORMATION ON INGREDIENTS

| | | |
|-----|----------------|-------------|
| 2.1 | HAZARD SYMBOLS | NONE LISTED |
| 2.2 | RISK PHRASES | NONE LISTED |



3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

APPEARANCE: NOT AVAILABLE. CAUTION! MAY CAUSE SKIN IRRITATION. MAY CAUSE EYE IRRITATION. THE TOXICOLOGICAL PROPERTIES OF THIS MATERIAL HAVE NOT BEEN FULLY INVESTIGATED.

TARGET ORGANS: NONE.

POTENTIAL HEALTH EFFECTS

EYE MAY CAUSE EYE IRRITATION

SKIN MAY CAUSE SKIN IRRITATION

INGESTION THE TOXICOLOGICAL PROPERTIES OF THIS SUBSTANCE HAS NOT BEEN FULLY INVESTIGATED. THIS IS A HUMAN SOURCE

INHALATION THE TOXICOLOGICAL PROPERTIES OF THIS SUBSTANCE HAS NOT BEEN FULLY INVESTIGATED.

CHRONIC NO INFORMATION FOUND.

4. FIRST AID MEASURES

4.1 EYES FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES, OCCASIONALLY LIFTING THE UPPER AND LOWER EYELIDS. GET MEDICAL AID.

4.2 SKIN GET MEDICAL AID. FLUSH SKIN WITH PLENTY OF SOAP AND WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES.

4.3 INGESTION IF VICTIM IS CONSCIOUS AND ALERT, GIVE 2-4 CUPFULS OF MILK OR WATER. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. GET MEDICAL AID.

4.4 INHALATION REMOVE FROM EXPOSURE TO FRESH AIR IMMEDIATELY. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. GET MEDICAL AID. NOTES TO PHYSICIAN: TREAT SYMPTOMATICALLY AND



5. FIRE FIGHTING MEASURES

GENERAL INFORMATION

AS IN ANY FIRE, WEAR A SELF-CONTAINED BREATHING APPARATUS IN PRESSURE-DEMAND, MSHA/NIOSH (APPROVED OR EQUIVALENT), AND FULL PROTECTIVE GEAR.

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|-----|---------------------------|--|
| 5.1 | EXTINGUISHING MEDIA | FOR SMALL FIRES, USE WATER SPRAY, DRY CHEMICAL, CARBON DIOXIDE OR CHEMICAL FOAM. |
| 5.2 | AUTOIGNITION TEMPERATURES | NOT AVAILABLE |
| 5.3 | FLASH POINT | NOT AVAILABLE |
| 5.4 | EXPLOSION LIMITS, LOWER | NOT AVAILABLE |
| 5.5 | EXPLOSION LIMITS, UPPER | NOT AVAILABLE |
| 5.6 | NFPA RATING | (ESTIMATED) |
| 5.7 | HEALTH: | 1; FLAMMABILITY: 0; INSTABILITY: 0 |

6. ACCIDENTAL RELEASE MEASURES

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|-----|---------------------|---|
| 6.1 | GENERAL INFORMATION | USE PROPER PERSONAL PROTECTIVE EQUIPMENT AS INDICATED IN SECTION 8 |
| 6.2 | SPILLS/LEAKS | VACUUM OR SWEEP UP MATERIAL AND PLACE INTO A SUITABLE DISPOSAL CONTAINER. AVOID GENERATING DUSTY CONDITIONS |

7. HANDLING AND STORAGE

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|-----|----------|--|
| 7.1 | HANDLING | USE WITH ADEQUATE VENTILATION. AVOID CONTACT WITH SKIN AND EYES. AVOID INGESTION AND INHALATION. |
| 7.2 | STORAGE | STORE IN A COOL, DRY PLACE. |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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|-----|----------------------|---|
| 8.1 | ENGINEERING CONTROLS | USE ADEQUATE VENTILATION TO KEEP AIRBORNE CONCENTRATIONS LOW. |
| 8.2 | OSHA VACATED PELS | |
| 8.3 | RENIZYME LT | NO OSHA VACATED PELS ARE LISTED FOR THIS CHEMICAL. |



PERSONAL PROTECTIVE EQUIPMENT

| | |
|----------------|---|
| EYES | WEAR APPROPRIATE PROTECTIVE EYEGLASSES OR CHEMICAL SAFETY GOGGLES AS DESCRIBED BY OSHA'S EYE AND FACE PROTECTION REGULATIONS IN 29 CFR 1910.133 OR EUROPEAN STANDARD EN166. |
| SKIN | WEAR APPROPRIATE GLOVES TO PREVENT SKIN EXPOSURE. |
| CLOTHING | WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT SKIN EXPOSURE. |
| EYE PROTECTION | TIGHTLY FITTING SAFETY GOGGLES (CAGE GOGGLES) (E.G. EN166) AND FACE SHIELD |
| RESPIRATORS | FOLLOW THE OSHA RESPIRATOR REGULATIONS FOUND IN 29 CFR 1910.134 OR EUROPEAN STANDARD EN 149. ALWAYS USE A NIOSH OR EUROPEAN STANDARD EN 149 APPROVED RESPIRATOR WHEN NECESSARY. |

9. PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|------|---------------------------|---------------------|
| 9.1 | PHYSICAL STATE | LIQUID |
| 9.2 | COLOR | BROWN |
| 9.3 | ODOR | NO PECULIAR ODOR |
| 9.4 | PH | NOT AVAILABLE |
| 9.5 | VAPOR PRESSURE | NOT APPLICABLE |
| 9.6 | VAPOR DENSITY | NOT APPLICABLE |
| 9.7 | EVAPORATION RATE | NOT APPLICABLE |
| 9.8 | VISCOSITY | NOT APPLICABLE |
| 9.9 | BOILING POINT | NOT APPLICABLE |
| 9.10 | FREEZING/MELTING POINT | NOT APPLICABLE |
| 9.11 | DECOMPOSITION TEMPERATURE | NOT APPLICABLE |
| 9.12 | SOLUBILITY IN WATER | SOLUBLE IN ANY RATE |
| 9.13 | SPECIFIC GRAVITY/DENSITY | 1.2G/ML |
| 9.14 | MOLECULAR FORMULA | PROTEIN |



9.15 MOLECULAR WEIGHT NOT APPLICABLE

10. STABILITY AND REACTIVITY

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|------|--|--|
| 10.1 | CHEMICAL STABILITY | STABLE UNDER NORMAL TEMPERATURES AND PRESSURES |
| 10.2 | CONDITIONS TO AVOID | NONE REPORTED |
| 10.3 | INCOMPATIBILITIES WITH OTHER MATERIALS | NONE REPORTED |
| 10.4 | HAZARDOUS DECOMPOSITION PRODUCTS | NONE |
| 10.5 | HAZARDOUS POLYMERIZATION | HAS NOT BEEN REPORTED |

11. TOXICOLOGICAL INFORMATION

RTECS#:
n CAS# 9000-90-2: BU7432500
LD50/LC50:
n CAS# 9000-90-2: ORAL, MOUSE: LD50 = >15 GM/KG; ORAL, RAT: LD50 = >7500 MG/KG. CARCINOGENICITY: RENIZYME LT - NOT LISTED BY ACGIH, IARC, NIOSH, NTP, OR OSHA. EPIDEMIOLOGY: NO DATA AVAILABLE. TERATOGENICITY: NO DATA AVAILABLE. REPRODUCTIVE EFFECTS: NO DATA AVAILABLE. NEUROTOXICITY: NO DATA AVAILABLE. MUTAGENICITY: NO DATA AVAILABLE. OTHER STUDIES: NO DATA AVAILABLE.

12. DISPOSAL CONSIDERATIONS

CHEMICAL WASTE GENERATORS MUST DETERMINE WHETHER ADISCARDED CHEMICAL IS CLASSIFIED AS A HAZARDOUS WASTE. US EPA GUIDELINES FOR THE CLASSIFICATION DETERMINATION ARE LISTED IN 40 CFR PARTS 261.3. ADDITIONALLY, WASTE GENERATORS MUST CONSULT STATE AND LOCAL HAZARDOUS WASTE REGULATIONS TO ENSURE COMPLETE AND ACCURATE CLASSIFICATION.
RCRA P-SERIES: NONE LISTED.
RCRA U-SERIES: NONE LISTED.

13. TRANSPORT INFORMATION

NOT CLASSIFIED AS HAZARDOUS FOR TRANSPORT

14. REGULATORY INFORMATION

NONE APPLICABLE



ICI PAKISTAN LTD.

ICI Pakistan Limited
Chemical Business

15. OTHER INFORMATION

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