ATTN: SAFETY DIRECTOR
UNIV OF WISCONSIN - WHITNEY
PURCHASING OFFICE
800 W MAIN ST
WHITNEY, WI 53190-1705

EMERGENCY PHONE 1-314-771-5765
DATE 09/29/99
CUST#: 0-495-04629
PO#: CC/092999/MORSE

SECTION 1. --- --- --- --- CHEMICAL IDENTIFICATION--- --- --- --- ---
CATALOG #: H3375
NAME: HEPES FREE ACID

SECTION 2. --- --- --- COMPOSITION/INFORMATION ON INGREDIENTS --- --- --- ---
CAS #: 7365-45-9
MF: C8H18N2O4S
EC NO: 230-907-9
SYNONYMS: HEPES * 4-(2-HYDROXYETHYL)-1-PIPERAZINEETHANESULFONIC ACID *

SECTION 3. --- --- --- --- HAZARDS IDENTIFICATION --- --- --- --- ---
DATA NOT AVAILABLE

SECTION 4. --- --- --- --- FIRST-AID MEASURES--- --- --- --- ---
IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.
CALL A PHYSICIAN.
IF INHALED, REMOVE TO FRESH AIR. IF BREATHING BECOMES DIFFICULT,
CALL A PHYSICIAN.
IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS
AMOUNTS OF WATER.
IN CASE OF CONTACT WITH EYES, FLUSH WITH COPIOUS AMOUNTS OF WATER
FOR AT LEAST 15 MINUTES. ASSURE ADEQUATE FLUSHING BY SEPARATING
THE EYELIDS WITH FINGERS. CALL A PHYSICIAN.

SECTION 5. --- --- --- --- FIRE FIGHTING MEASURES --- --- --- --- ---
EXTINGUISHING MEDIA
WATER SPRAY.
CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM.

SPECIAL FIREFIGHTING PROCEDURES
WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO
PREVENT CONTACT WITH SKIN AND EYES.

UNUSUAL FIRE AND EXPLOSIONS HAZARDS
EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

SECTION 6. --- --- --- --- ACCIDENTAL RELEASE MEASURES--- --- --- --- ---
WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY
RUBBER GLOVES.
Sweep up, place in a bag and hold for waste disposal.
AVOID RAISING DUST.
VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.
CONTINUED ON NEXT PAGE

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SECTION 7. - - - - - - HANDLING AND STORAGE - - - - - - - - -
REFER TO SECTION 8.

SECTION 8. - - - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION - - - - - -

SAFETY SHOWER AND EYE BATH.
MECHANICAL EXHAUST REQUIRED.
AVOID INHALATION.
AVOID CONTACT WITH EYES, SKIN AND CLOTHING.
AVOID PROLONGED OR REPEATED EXPOSURE.
NIOSH/MSHA-APPROVED RESPIRATOR.
COMPATIBLE CHEMICAL-RESISTANT GLOVES.
CHEMICAL SAFETY GOGGLES.
KEEP TIGHTLY CLOSED.
STORE IN A COOL DRY PLACE.
WASH THOROUGHLY AFTER HANDLING.
HYGROSCOPIC.

SECTION 9. - - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - - - -

PHYSICAL PROPERTIES
MELTING POINT: 234°C
SOLUBILITY:
WATER 26130
PH: 5.0 - 6.5

SECTION 10. - - - - - - STABILITY AND REACTIVITY - - - - - -

STABILITY
STABLE.

INCOMPATIBILITIES
PROTECT FROM MOISTURE.
STRONG OXIDIZING AGENTS

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
CARBON MONOXIDE, CARBON DIOXIDE
NITROGEN OXIDES
SULFUR OXIDES

HAZARDOUS POLYMERIZATION
WILL NOT OCCUR.

SECTION 11. - - - - - - TOXICOLOGICAL INFORMATION - - - - - -

ACUTE EFFECTS
MAY CAUSE SKIN IRRITATION.
MAY CAUSE EYE IRRITATION.
MATERIAL MAY BE IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.

CONTINUED ON NEXT PAGE
CATALOG #: H3375
NAME: HEPES FREE ACID

MAY BE HARMFUL BY INHALATION, INGESTION, OR SKIN ABSORPTION. TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

RTECS #: TL68090000
1-PIPERAZINEETHANESULFONIC ACID, 4-(2-HYDROXYETHYL)-

TOXICITY DATA
ORL-QAL LD50: >316 MG/KG
ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR COMPLETE INFORMATION.

SECTION 12. - - - - - - ECOLOGICAL INFORMATION - - - - - - - -
DATA NOT YET AVAILABLE.

SECTION 13. - - - - - - - - DISPOSAL CONSIDERATIONS - - - - - - -
DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER. OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.

SECTION 14. - - - - - - - - TRANSPORT INFORMATION - - - - - - -
CONTACT SIGMA CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

SECTION 15. - - - - - - - - REGULATORY INFORMATION - - - - - - -
REVIEWS, STANDARDS, AND REGULATIONS
OEL=MAK
NOES 1983: HZD X9468; NIS 2; TNF 239; NOS 7; TNE 3025; TFE 2233
EPA TSCA SECTION 8(B) CHEMICAL INVENTORY

SECTION 16. - - - - - - - - OTHER INFORMATION - - - - - - -
THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. SIGMA SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT. SEE REVERSE SIDE OF INVOICE OR PACKING SLIP FOR ADDITIONAL TERMS AND CONDITIONS OF SALE.

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UNIV OF WISCONSIN - WHITewater
TERRE
BIOLOGICAL SCIENCE
UPHAM HALL RM 303
800 W MAIN ST

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