ATTN: SAFETY DIRECTOR  
UNIVERSITY OF WISCONSIN  
WHITESTONE  
ACCOUNTS PAYABLE  
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WHITESTONE WI 53190-0296

EMERGENCY PHONE 1-314-771-5765  
DATE 06/04/96  
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M T E R I A L S A F E T Y D A T A S H E E T  
P A G E 1

THIS MSDS IS FOR A COMPONENT OF CATALOG #: 35-A

SECTION 1. -- -- -- -- -- -- CHEMICAL IDENTIFICATION-- -- -- -- -- --

CATALOG #: 366-2  
NAME: GAPD/PGK ENZYMES MIXTURE

SECTION 2. -- -- -- -- -- -- COMPOSITION/INFORMATION ON INGREDIENTS -- -- -- --

CAS #: NONE

SECTION 3. -- -- -- -- -- -- HAZARDS IDENTIFICATION -- -- -- --

LABEL PRECAUTIONARY STATEMENTS:  
CAUTION: AVOID CONTACT AND INHALATION.

SECTION 4. -- -- -- -- -- -- FIRST-AID MEASURES-- -- -- --

IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN.  
IN CASE OF SKIN CONTACT, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND SHOES. CALL A PHYSICIAN.  
IF INHALED, REMOVE TO FRESH AIR. IF BREATHING BECOMES DIFFICULT, CALL A PHYSICIAN.  
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 PROTECTIVE EQUIPMENT.  
ABSORB ON SAND OR VERMICULITE AND PLACE IN CLOSED CONTAINERS FOR DISPOSAL. VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

SECTION 7. -- -- -- -- -- -- HANDLING AND STORAGE-- -- -- --

CONTINUED ON NEXT PAGE
MATERIAL SAFETY DATA SHEET

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CATALOG #: 366-2
NAME: GAPD/PGK ENZYMES MIXTURE

REFER TO SECTION 8.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING. MECHANICAL EXHAUST REQUIRED.

SECTION 9. APPEARANCE AND ODOR
PHYSICAL AND CHEMICAL PROPERTIES
SUSPENSION.

SECTION 10. STABILITY AND REACTIVITY
STABILITY
CONDITIONS TO AVOID
HEAT
HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
TOXIC FUMES OF:
CARBON MONOXIDE, CARBON DIOXIDE
HAZARDOUS POLYMERIZATION
WILL NOT OCCUR.

SECTION 11. TOXICOLOGICAL INFORMATION
ACUTE EFFECTS
MAY BE HARMFUL BY INHALATION, INGESTION, OR SKIN ABSORPTION.
MAY CAUSE IRRITATION.
PROLONGED OR REPEATED EXPOSURE MAY CAUSE ALLERGIC REACTIONS IN CERTAIN SENSITIVE INDIVIDUALS.
THE TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

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.

CONTINUED ON NEXT PAGE
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SECTION 15. - - - - - - - REGULATORY INFORMATION - - - - - - -
EUROPEAN INFORMATION
CAUTION: SUBSTANCE NOT YET FULLY TESTED.

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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