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## MATERIAL SAFETY DATA SHEET

Human Urokinase  
Product Number: PA 80  
Aliquot: 0.1 mg

This product is provided and produced by Oxford Biomedical Research for in vitro use for the sole purpose of research.

### Manufacturer:

Oxford Biomedical Research  
2165 Avon Industrial Dr.  
Rochester Hills, MI 48309  
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### SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #: PA 80  
NAME: HUMAN UROKINASE (HMW)

### SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #: 9039-53-6  
SYNONYMS: E.C. 3.4.21.31 \* E.C. 3.4.99.26 \* PLASMINOKINASE, URINARY \* TISSUE CULTURE UROKINASE \* TWO-CHAIN UROKINASE \* TCUK \* UK \* UROKINASE \* UROKINASE \* WIN 22005 \* WIN-KINASE \*

### SECTION 3. HAZARDS IDENTIFICATION

LABEL PRECAUTIONARY STATEMENTS: BIOHAZARD HANDLE AS IF CAPABLE OF TRANSMITTING INFECTIOUS AGENTS. FREEZE.

SECTION 4. FIRST-AID MEASURES- IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.

CALL A PHYSICIAN IMMEDIATELY. IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IN CASE OF SKIN CONTACT, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND SHOES. 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: USE EXTINGUISHING MEDIA APPROPRIATE TO SURROUNDING FIRE CONDITIONS.

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. WIPE UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL. VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

### SECTION 7. HANDLING AND STORAGE

REFER TO SECTION 8.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

SAFETY SHOWER AND EYE BATH. MECHANICAL EXHAUST REQUIRED. WASH THOROUGHLY AFTER HANDLING. 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 AT -70 C.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: FROZEN LIQUID.

## SECTION 10. STABILITY AND REACTIVITY

STABILITY: STABLE.

INCOMPATIBILITIES: STRONG OXIDIZING AGENTS

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

## SECTION 11. TOXICOLOGICAL INFORMATION

ACUTE EFFECTS: PROLONGED OR REPEATED EXPOSURE MAY CAUSE ALLERGIC REACTIONS IN CERTAIN SENSITIVE INDIVIDUALS. MAY CAUSE SKIN IRRITATION. MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN. MAY CAUSE EYE IRRITATION. MAY BE HARMFUL IF INHALED. MATERIAL MAY BE IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT. MAY BE HARMFUL IF SWALLOWED. POTENTIALLY BIOHAZARDOUS MATERIAL.

RTECS #: OB8900000

KINASE (ENZYME-ACTIVATING), URO- UROKINASE TOXICITY DATA:

-ORL-RAT LD50:>2727 UG/KG NIIRDN -,164,1990

-SCU-RAT LD50:>2727 UG/KG NIIRDN -,164,1990

-IVN-RAT LD50:>3000 KU/KG KSRNAM 15,514,1981

-ORL-MUS LD50:>2727 UG/KG NIIRDN -,164,1990

-SCU-MUS LD50:>2727 UG/KG NIIRDN -,164,1990

-IVN-MUS LD50:>3000 KU/KG KSRNAM 15,514,1981

-IVN-DOG LD50:>909 UG/KG NIIRDN -,164,1990

TARGET ORGAN DATA: SPECIFIC DEVELOPMENTAL ABNORMALITIES (MUSCULOSKELETAL SYSTEM)

SPECIFIC DEVELOPMENTAL ABNORMALITIES: (UROGENITAL SYSTEM)

EFFECTS ON NEWBORN (GROWTH STATISTICS)

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

CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF THIS MATERIAL. DISPOSAL SHOULD BE MADE IN ACCORDANCE WITH EXISTING DISPOSAL PRACTICES EMPLOYED FOR INFECTIOUS WASTE AT YOUR INSTITUTION. OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.

## SECTION 14. TRANSPORT INFORMATION

CONTACT OXFORD BIOMEDICAL RESEARCH INC. FOR TRANSPORTATION INFORMATION.

## SECTION 15. REGULATORY INFORMATION

EUROPEAN INFORMATION: AVOID CONTACT WITH SKIN AND EYES. REVIEWS, STANDARDS, AND REGULATIONS

OEL=MAK

NOES 1983: HZD X5370; NIS 1; TNF 10; NOS 1; TNE 340; TFE 180

EPA TSCA SECTION 8(B) CHEMICAL INVENTORY

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