

## BIO BASIC INC.

160 TORBAY ROAD, MARKHAM ONTARIO L3R 1G6 CANADA  
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### MATERIAL SAFETY DATA SHEET

REQUIRED UNDER SAFETY AND HEALTH REGULATION FOR SHIP REPAIRING

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#### SECTION 1 - PRODUCT AND COMPANY INFORMATION

PRODUCT NAME KALLIKREIN  
PRODUCT NUMBER KB0545

#### SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENT

SUBSTANCE NAME	CAS #	SARA 313
KALLIKREIN SOLUTION	NONE	NO

INGREDIENT NAME CAS # PERCENT SARA 313  
WATER 7732-18-5 99.367 NO  
SODIUM CHLORIDE 7647-14-5 0.585 NO  
KALLIKREIN, FROM HUMAN SOURCE 9001-01-8 0.028 NO  
TRIS (HYDROXYMETHYL) AMINOMETHANE 77-86-1 0.02 NO  
FREE BASE  
CHEMICAL FAMILY HUMAN SOURCE MATERIAL.

#### SECTION 3 - HAZARDS IDENTIFICATION

##### EMERGENCY OVERVIEW

BIOHAZARD.

HANDLE AS IF CAPABLE OF TRANSMITTING INFECTIOUS AGENTS.

HMIS RATING

HEALTH: 0

FLAMMABILITY: 0

REACTIVITY: 0

SPECIAL HAZARD(S): HUMAN SOURCE

NFPA RATING

HEALTH: 0

FLAMMABILITY: 0

REACTIVITY: 0

SPECIAL HAZARD(S): HUMAN SOURCE

FOR ADDITIONAL INFORMATION ON TOXICITY, PLEASE REFER TO SECTION 11.

#### SECTION 4 - FIRST AID MEASURES

##### ORAL EXPOSURE

IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN IMMEDIATELY.

##### INHALATION EXPOSURE

IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.

##### DERMAL EXPOSURE

IN CASE OF SKIN CONTACT, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND SHOES. CALL A PHYSICIAN.

#### EYE EXPOSURE

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

##### FLASH POINT

N/A

##### AUTOIGNITION TEMP

N/A

##### FLAMMABILITY

N/A

##### EXTINGUISHING MEDIA

SUITABLE: USE EXTINGUISHING MEDIA APPROPRIATE TO SURROUNDING FIRE CONDITIONS.

##### FIREFIGHTING

PROTECTIVE EQUIPMENT: WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.

SPECIFIC HAZARD(S): EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

#### SECTION 6 - ACCIDENTAL RELEASE MEASURES

##### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS, AND HEAVY RUBBER GLOVES.

##### METHODS FOR CLEANING UP

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

##### HANDLING

USER EXPOSURE: AVOID INHALATION. AVOID CONTACT WITH EYES, SKIN, AND CLOTHING. AVOID PROLONGED OR REPEATED EXPOSURE.

##### STORAGE

SUITABLE: KEEP TIGHTLY CLOSED.

STORE AT -20°C

#### SECTION 8 - EXPOSURE CONTROLS / PPE

##### ENGINEERING CONTROLS

SAFETY SHOWER AND EYE BATH. MECHANICAL EXHAUST REQUIRED.

##### PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY: USE RESPIRATORS AND COMPONENTS TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR CEN (EU). WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING RESPIRATORS ARE APPROPRIATE USE A DUST MASK TYPE N95 (US) OR TYPE P1 (EN 143) RESPIRATOR.

HAND: COMPATIBLE CHEMICAL-RESISTANT GLOVES.

EYE: CHEMICAL SAFETY GOGGLES.

##### GENERAL HYGIENE MEASURES

WASH THOROUGHLY AFTER HANDLING.

#### SECTION 9 - PHYSICAL/CHEMICAL PROPERTIES

APPEARANCE PHYSICAL STATE: LIQUID

PROPERTY VALUE AT TEMPERATURE OR PRESSURE

MOLECULAR WEIGHT N/A

PH N/A

BP/BP RANGE N/A

MP/MP RANGE N/A

FREEZING POINT N/A  
VAPOR PRESSURE N/A  
VAPOR DENSITY N/A  
SATURATED VAPOR CONC. N/A  
SG/DENSITY N/A  
BULK DENSITY N/A  
ODOR THRESHOLD N/A  
VOLATILE% N/A  
VOC CONTENT N/A  
WATER CONTENT N/A  
SOLVENT CONTENT N/A  
EVAPORATION RATE N/A  
VISCOSITY N/A  
SURFACE TENSION N/A  
PARTITION COEFFICIENT N/A  
DECOMPOSITION TEMP. N/A  
FLASH POINT N/A  
EXPLOSION LIMITS N/A  
FLAMMABILITY N/A  
AUTOIGNITION TEMP N/A  
REFRACTIVE INDEX N/A  
OPTICAL ROTATION N/A  
MISCELLANEOUS DATA N/A  
SOLUBILITY N/A  
N/A = NOT AVAILABLE

#### SECTION 10 - STABILITY AND REACTIVITY

##### STABILITY

STABLE: STABLE.

MATERIALS TO AVOID: STRONG OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS DECOMPOSITION PRODUCTS: NATURE OF DECOMPOSITION PRODUCTS  
NOT KNOWN.

HAZARDOUS POLYMERIZATION

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

#### SECTION 11 - TOXICOLOGICAL INFORMATION

##### ROUTE OF EXPOSURE

SKIN CONTACT: MAY CAUSE SKIN IRRITATION.

SKIN ABSORPTION: MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN.

EYE CONTACT: MAY CAUSE EYE IRRITATION.

INHALATION: MATERIAL MAY BE IRRITATING TO MUCOUS MEMBRANES AND

UPPER RESPIRATORY TRACT. MAY BE HARMFUL IF INHALED.

INGESTION: MAY BE HARMFUL IF SWALLOWED.

SIGNS AND SYMPTOMS OF EXPOSURE

POTENTIALLY BIOHAZARDOUS MATERIAL.

#### SECTION 12 - ECOLOGICAL INFORMATION

NO DATA AVAILABLE.

#### SECTION 13 - DISPOSAL CONSIDERATIONS

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

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

DOT

PROPER SHIPPING NAME: NONE

NON-HAZARDOUS FOR TRANSPORT: THIS SUBSTANCE IS  
CONSIDERED TO BE NON-HAZARDOUS FOR TRANSPORT.

IATA

NON-HAZARDOUS FOR AIR TRANSPORT: NON-HAZARDOUS FOR AIR  
TRANSPORT.

SECTION 15 - REGULATORY INFORMATION

EU ADDITIONAL CLASSIFICATION

SYMBOL OF DANGER: B

INDICATION OF DANGER: BIOHAZARD.

US CLASSIFICATION AND LABEL TEXT

INDICATION OF DANGER: BIOHAZARD.

US STATEMENTS: HANDLE AS IF CAPABLE OF TRANSMITTING INFECTIOUS  
AGENTS.

UNITED STATES REGULATORY INFORMATION

SARA LISTED: NO

CANADA REGULATORY INFORMATION

WHMIS CLASSIFICATION: THIS PRODUCT HAS BEEN CLASSIFIED IN  
ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR, AND THE MSDS  
CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

DSL: NO

NDSL: NO

SECTION 16 - OTHER INFORMATION

DISCLAIMER

FOR R&D USE ONLY. NOT FOR DRUG, HOUSEHOLD OR OTHER USES.

WARRANTY

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT  
PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. THE  
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