

## BIO BASIC INC.

160 TORBAY ROAD, MARKHAM ONTARIO L3R 1G6 CANADA  
TEL: (905) 474 4493, (800) 313 7224 FAX: (905) 474 5794

### MATERIAL SAFETY DATA SHEET

REQUIRED UNDER SAFETY AND HEALTH REGULATION FOR SHIP REPAIRING

MANUFACTURER'S NAME: BIO BASIC INC.  
TEL: (905) 474 4493  
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ADDRESS: 160 TORBAY ROAD, MARKHAM ONTARIO L3R 1G6 CANADA

DATE PREPARED: AUGUST 9, 2007

#### SECTION 1 - PRODUCT AND COMPANY INFORMATION

PRODUCT NAME RIBOSTAMYCIN SULFATE  
PRODUCT NUMBER RB0807

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

SUBSTANCE NAME CAS # SARA 313  
RIBOSTAMYCIN SULFATE 53797-35-6 NO  
FORMULA C17H34N4O10  
SYNONYMS LANDAMYCINE \* RIBOFLAVINE SULFATE \* RIBOMYCINE \*  
RIBOSTAMIN \* RIBOSTAMYCIN SULFATE \* SF 733  
ANTIBIOIC SULFATE  
RTECS NUMBER: WK2300000

#### SECTION 3 - HAZARDS IDENTIFICATION

##### EMERGENCY OVERVIEW

TOXIC.

MAY CAUSE HARM TO THE UNBORN CHILD. HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.

TARGET ORGAN(S): KIDNEYS. EARS.

HMIS RATING

HEALTH: 2\*

FLAMMABILITY: 0

REACTIVITY: 0

NFPA RATING

HEALTH: 2

FLAMMABILITY: 0

REACTIVITY: 0

\*ADDITIONAL CHRONIC HAZARDS PRESENT.

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.

##### INHALATION EXPOSURE

IF INHALED, REMOVE TO FRESH AIR. IF BREATHING BECOMES DIFFICULT, CALL A PHYSICIAN.

##### 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: WATER SPRAY. CARBON DIOXIDE, DRY CHEMICAL POWDER, OR APPROPRIATE FOAM.

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 RESPIRATOR, CHEMICAL SAFETY GOGGLES, RUBBER BOOTS, AND HEAVY RUBBER GLOVES.

METHODS FOR CLEANING UP

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.

#### SECTION 7 - HANDLING AND STORAGE

STORAGE

STORE AT 2-8°C

#### SECTION 8 - EXPOSURE CONTROLS / PPE

ENGINEERING CONTROLS

MECHANICAL EXHAUST REQUIRED.

PERSONAL PROTECTIVE EQUIPMENT

OTHER: WEAR APPROPRIATE GOVERNMENT APPROVED RESPIRATOR, CHEMICAL-RESISTANT GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.

#### SECTION 9 - PHYSICAL/CHEMICAL PROPERTIES

APPEARANCE PHYSICAL STATE: SOLID

PROPERTY VALUE AT TEMPERATURE OR PRESSURE

MOLECULAR WEIGHT 454.5 AMU

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.

##### HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS DECOMPOSITION PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE,  
AND NITROGEN OXIDES.

##### HAZARDOUS POLYMERIZATION

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

#### SECTION 11 - TOXICOLOGICAL INFORMATION

##### ROUTE OF EXPOSURE

MULTIPLE ROUTES: MAY CAUSE IRRITATION. HARMFUL IF SWALLOWED,  
INHALED, OR ABSORBED THROUGH SKIN.

##### TARGET ORGAN(S) OR SYSTEM(S)

AMINOGLYCOSIDES ARE ASSOCIATED WITH SIGNIFICANT NEPHROTOXICITY  
AND/OR OTOTOXICITY.

##### SIGNS AND SYMPTOMS OF EXPOSURE

AMINOGLYCOSIDES ARE ASSOCIATED WITH SIGNIFICANT NEPHROTOXICITY  
AND/OR OTOTOXICITY. MAY CAUSE IMPAIRMENT OF EIGHTH NERVE,  
TINNITUS, HEARING LOSS, KIDNEY OR LIVER DAMAGE,  
HYPERSENSITIVITY, DIARRHEA, NAUSEA, VOMITING, HEADACHE,  
NUMBNESS. MAY CAUSE IMPAIRMENT OF AUDITORY PORTION OF EIGHTH  
NERVE IN FETUSES.

##### TOXICITY DATA

###### ORAL ORAL

RAT RAT

> 7000 MG/KG > 7000 MG/KG

LD50 LD50

###### INTRAPERITONEAL INTRAPERITONEAL

RAT RAT

3080 MG/KG 3080 MG/KG

LD50 LD50

###### SUBCUTANEOUS SUBCUTANEOUS

RAT RAT

5600 MG/KG 5600 MG/KG

LD50 LD50

###### INTRAVENOUS INTRAVENOUS

RAT RAT

375 MG/KG 375 MG/KG

LD50 LD50

###### INTRAMUSCULAR INTRAMUSCULAR

RAT RAT

2030 MG/KG 2030 MG/KG

LD50 LD50  
ORAL ORAL  
MOUSE MOUSE  
> 7000 MG/KG > 7000 MG/KG  
LD50 LD50  
INTRAPERITONEAL INTRAPERITONEAL  
MOUSE MOUSE  
1981 MG/KG 1981 MG/KG  
LD50 LD50  
SUBCUTANEOUS SUBCUTANEOUS  
MOUSE MOUSE  
2345 MG/KG 2345 MG/KG  
LD50 LD50  
INTRAVENOUS INTRAVENOUS  
MOUSE MOUSE  
210 MG/KG 210 MG/KG  
LD50 LD50  
INTRAMUSCULAR INTRAMUSCULAR  
MOUSE MOUSE  
1561 MG/KG 1561 MG/KG  
LD50 LD50  
CHRONIC EXPOSURE - TERATOGEN  
RESULT: MAY CAUSE IMPAIRMENT OF AUDITORY PORTION OF EIGHTH NERVE  
IN FETUSES.

SECTION 12 - ECOLOGICAL INFORMATION  
NO DATA AVAILABLE.

SECTION 13 - DISPOSAL CONSIDERATIONS  
APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION  
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  
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: T  
INDICATION OF DANGER: TOXIC.  
R: 61-20/21/22  
RISK STATEMENTS: MAY CAUSE HARM TO THE UNBORN CHILD. HARMFUL BY  
INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.  
S: 53-22-36/37/39-45  
SAFETY STATEMENTS: AVOID EXPOSURE - OBTAIN SPECIAL INSTRUCTIONS  
BEFORE USE. DO NOT BREATHE DUST. WEAR SUITABLE PROTECTIVE  
CLOTHING, GLOVES, AND EYE/FACE PROTECTION. IN CASE OF ACCIDENT  
OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE IMMEDIATELY (SHOW THE  
LABEL WHERE POSSIBLE).  
US CLASSIFICATION AND LABEL TEXT

INDICATION OF DANGER: TOXIC.

RISK STATEMENTS: MAY CAUSE HARM TO THE UNBORN CHILD. HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.

SAFETY STATEMENTS: IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE). DO NOT BREATHE DUST. WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES, AND EYE/FACE PROTECTION.

US STATEMENTS: TARGET ORGAN(S): KIDNEYS. EARS.

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

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