

## **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 5794  
FAX: (416) 995 9730  
FOR CHEMICAL EMERGENCY: (416) 995 9730  
ADDRESS: 160 Torbay Road, Markham Ontario. L3R 1G6 Canada

**UPDATED: May 2007**

### **SECTION 1 - PRODUCT AND COMPANY INFORMATION**

PRODUCT NAME: DEXTRAN SULFATE SODIUM AV. MOL.WT. OF &  
PRODUCT NUMBER: DB0160

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

SUBSTANCE NAME CAS # 9011-18-1  
DEXTRAN SULFATE SODIUM SALT  
SYNONYMS ASURO,DEXNON,DEXTRAN, HYDROGEN SULFATE,  
SODIUM SALT (9CI),DEXTRAN SODIUM SULFATE,  
DEXTRAN SULFATE SODIUM SALT,DEXTRARINE,DEXULATE,  
DS-M-1,MDS,MDS (POLYSACCHARIDE),  
SODIUM DEXTRAN SULFATE  
RTECS NUMBER: HH9290000

### **SECTION 3 - HAZARDS IDENTIFICATION**

HMS RATING

HEALTH: 0

FLAMMABILITY: 0

REACTIVITY: 0

NFPA RATING

HEALTH: 0

FLAMMABILITY: 0

REACTIVITY: 0

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 CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS  
AMOUNTS OF WATER.

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)  
EXERCISE APPROPRIATE PRECAUTIONS TO MINIMIZE DIRECT CONTACT WITH SKIN OR EYES AND PREVENT INHALATION OF DUST.  
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  
HANDLING  
USER EXPOSURE: AVOID INHALATION. AVOID CONTACT WITH EYES, SKIN, AND CLOTHING. AVOID PROLONGED OR REPEATED EXPOSURE.  
STORAGE  
SUITABLE: KEEP TIGHTLY CLOSED.  
STORE AT 2-8°C  
SECTION 8 - EXPOSURE CONTROLS / PPE  
ENGINEERING CONTROLS  
SAFETY SHOWER AND EYE BATH. MECHANICAL EXHAUST REQUIRED.  
PERSONAL PROTECTIVE EQUIPMENT  
RESPIRATORY: WEAR DUST MASK.  
HAND: PROTECTIVE GLOVES.  
EYE: CHEMICAL SAFETY GOGGLES.  
GENERAL HYGIENE MEASURES  
WASH THOROUGHLY AFTER HANDLING.  
SECTION 9 - PHYSICAL/CHEMICAL PROPERTIES  
AMOUNTS OF WATER.  
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.  
APPEARANCE PHYSICAL STATE: SOLID  
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  
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: CARBON MONOXIDE, CARBON DIOXIDE,  
SULFUR OXIDES.

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: MAY BE HARMFUL IF INHALED. MATERIAL MAY BE  
IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.

INGESTION: MAY BE HARMFUL IF SWALLOWED.

SIGNS AND SYMPTOMS OF EXPOSURE

DEXTRAN IS A POTENT ANTIGEN. OVEREXPOSURE CAN CAUSE A TEMPORARY  
INCREASE IN CARDIAC OUTPUT.

##### TOXICITY DATA

ORAL

RAT

20600 MG/KG

LD50

REMARKS: BEHAVIORAL:SOMNOLENCE (GENERAL DEPRESSED ACTIVITY).

BEHAVIORAL:ATAXIA. GASTROINTESTINAL:HYPERMOTILITY, DIARRHEA.

INTRAVENOUS

RAT

473 MG/KG

LD50

REMARKS: BEHAVIORAL:SOMNOLENCE (GENERAL DEPRESSED ACTIVITY).

BEHAVIORAL:ATAXIA. LUNGS, THORAX, OR RESPIRATION:RESPIRATORY  
DEPRESSION.

ORAL

MOUSE

25200 MG/KG

LD50

REMARKS: BEHAVIORAL:SOMNOLENCE (GENERAL DEPRESSED ACTIVITY).

BEHAVIORAL:ATAXIA. GASTROINTESTINAL:HYPERMOTILITY, DIARRHEA.

INTRAVENOUS

MOUSE

2350 MG/KG

LD50

REMARKS: BEHAVIORAL:SOMNOLENCE (GENERAL DEPRESSED ACTIVITY).  
BEHAVIORAL:ATAXIA. LUNGS, THORAX, OR RESPIRATION:RESPIRATORY  
DEPRESSION.

INTRAVENOUS

RABBIT

19 GM/KG

LD50

CHRONIC EXPOSURE - CARCINOGEN

SPECIES: RAT

ROUTE OF APPLICATION: ORAL

DOSE: 330 GM/KG

EXPOSURE TIME: 94W

FREQUENCY: C

RESULT: TUMORIGENIC:CARCINOGENIC BY RTECS CRITERIA.

GASTROINTESTINAL:TUMORS. GASTROINTESTINAL:COLON TUMORS.

SPECIES: HAMSTER

ROUTE OF APPLICATION: ORAL

DOSE: 144 ML/KG

EXPOSURE TIME: 26W

FREQUENCY: C

RESULT: TUMORIGENIC:EQUIVOCAL TUMORIGENIC AGENT BY RTECS  
CRITERIA. GASTROINTESTINAL:TUMORS.

SPECIES: RAT

ROUTE OF APPLICATION: ORAL

DOSE: 335 GM/KG

EXPOSURE TIME: 19W

FREQUENCY: C

RESULT: TUMORIGENIC:CARCINOGENIC BY RTECS CRITERIA.

GASTROINTESTINAL:TUMORS. GASTROINTESTINAL:COLON TUMORS.

SPECIES: RAT

ROUTE OF APPLICATION: ORAL

DOSE: 600 GM/KG

EXPOSURE TIME: 69W

FREQUENCY: C

RESULT: TUMORIGENIC:CARCINOGENIC BY RTECS CRITERIA.

GASTROINTESTINAL:COLON TUMORS. ENDOCRINE:TUMORS.

SPECIES: RAT

ROUTE OF APPLICATION: ORAL

DOSE: 645 GM/KG

EXPOSURE TIME: 31W

FREQUENCY: C

RESULT: TUMORIGENIC:CARCINOGENIC BY RTECS CRITERIA.

GASTROINTESTINAL:COLON TUMORS.

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. 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

NOT REGULATED

SECTION 15 - REGULATORY INFORMATION

UNITED STATES REGULATORY INFORMATION

SARA LISTED: NO

TSCA INVENTORY ITEM: YES

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: YES

NDSL: NO

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. BIO BASIC INC. SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT.