



**MATERIAL SAFETY DATA SHEET**  
**REQUIRED UNDER SAFETY AND HEALTH REGULATION FOR SHIP REPAIRING**

DATE UPDATED: JANUARY 12, 2016

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

**Product Name** Dextran Sulfate  
**Product Code(s)** DB0160  
**Recommended Use** For Laboratory Use Only  
Not for Human or Animal Drug Use

**SECTION 2. ----- HAZARDS IDENTIFICATION -----**

**GHS - Classification**

**Classification**

**OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3

**Label elements**

**Emergency Overview**

**Warning**

**Hazard Statements**

H315 - Causes skin irritation

H319 - Causes serious eye irritation



**Appearance** White to off-white  
available

**Physical State** Crystalline Powder

**Odor** No information

**Precautionary Statements**

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after

handling P271 - Use only outdoors or in a well-ventilated area

P280 - Wear protective gloves/protective clothing/eye protection/face

protection P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P312 - Call a POISON CENTER or doctor if you feel unwell

P321 - Specific treatment (see supplemental first aid instructions on this label) P332 + P313 - If skin irritation occurs: Get medical advice/attention

P337 + P313 - If eye irritation persists: Get medical advice/attention

P362 - Take off contaminated clothing and wash before reuse

P403 + P233 - Store in a well-ventilated place. Keep container tightly

closed P405 - Store locked up

P501 - Dispose of contents/ container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information****SECTION 3. ----- COMPOSITION/INFORMATION ON INGREDIENTS -----**

Chemical Name	EC No.	REACH Reg. No.	CAS-No	Weight %	Classification
Dextran, hydrogen sulfate, sodium salt	-	Not available	9011-18-1	95-100	-

**SECTION 4. ----- FIRST-AID MEASURES-----****First Aid Measures**

**Eye Contact** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**Skin Contact** Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

**Inhalation** Move to fresh air. If not breathing, give artificial respiration.

**Ingestion** Clean mouth with water and afterwards drink plenty of water.

**Most important symptoms and effects, both acute and delayed**

**Most Important Symptoms/Effects** No information available.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically.

**SECTION 5. ----- FIRE FIGHTING MEASURES -----****Suitable Extinguishing Media**

Dry chemical, CO<sub>2</sub>, water spray or regular foam.

**Unsuitable Extinguishing Media** No information available.

**Specific Hazards Arising from the Chemical**

No information available.

**Hazardous Combustion Products** Carbon oxides. Sulfur oxides.

**Explosion Data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and

full protective gear.

## SECTION 6. ----- ACCIDENTAL RELEASE MEASURES-----

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions** Avoid contact with the skin and the eyes. Use personal protective equipment.

### Environmental Precautions

**Environmental Precautions** See Section 12 for additional Ecological information.

### Methods and material for containment and cleaning up

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up** Pick up and transfer to properly labeled containers. Avoid dust formation. Ventilate area and wash spill site after material pickup is complete.

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

### Precautions for Safe Handling

**Handling** Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Storage** Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Protect from light.

**Incompatible Products** None known based on information supplied.

## SECTION 8. ----- EXPOSURE CONTROLS/PERSONAL PROTECTION-----

### Control parameters

**Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Dextran, hydrogen sulfate, sodium salt 9011-18-1	-	-	-

### Engineering Measures

Showers  
Eyewash stations  
Ventilation systems

### Personal Protective Equipment

#### Eye/Face Protection

Safety glasses with side-shields.

#### Skin and Body Protection

Wear protective gloves/clothing

#### Respiratory Protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA Approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations

### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

## SECTION 9. ----- PHYSICAL AND CHEMICAL PROPERTIES -----

### Information on basic physical and chemical properties

#### Physical State

Crystalline Powder

#### Appearance

White to off-white

#### Color

No information available

#### Odor

No information available

#### Odor Threshold

No information available

<u>Property</u>	<u>Values</u>	<u>Remarks •Method</u>
pH	No information available.	
Melting point/freezing point		
Boiling Point/Range	No information available.	
Flash Point (High in °C)	No information available.	
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available.	
Lower flammability limit:	No information available.	
Vapor pressure	No information available.	
Vapor Density	No information available.	
Specific Gravity	No information available	
Water Solubility	No information available	
Solubility in other solvents	No information available.	
Partition coefficient	No information available	
Autoignition Temperature		
Decomposition Temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available.	
Explosive Properties	No information available	
Oxidizing Properties	No information available	

#### Other Information

Softening Point	No information available.
Molecular Weight	No information available
VOC Content	No information available.
Density	No information available
Bulk Density	No information available

### SECTION 10. -----STABILITY AND REACTIVITY -----

#### Reactivity

No data available

#### Chemical Stability

Stable under recommended storage conditions.

#### Possibility of Hazardous Reactions

None under normal processing.

#### Conditions to Avoid

Extremes of temperature and direct sunlight.

#### Incompatible Materials

None known based on information supplied.

#### Hazardous Decomposition Products

Carbon oxides. Sulfur oxides.

### SECTION 11. ----- TOXICOLOGICAL INFORMATION -----

#### Information on likely routes of exposure

##### Product Information

Inhalation	May cause irritation of respiratory tract.
Eye Contact	Irritating to eyes.
Skin Contact	Irritating to skin.

**Ingestion**

No known effect based on information supplied.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Dextran, hydrogen sulfate, sodium salt 9011-18-1	= 20600 mg/kg ( Rat )	-	-

**Information on toxicological effects****Symptoms** No information available.**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Sensitization** No information available.**Mutagenic Effects** No information available.**Carcinogenicity** No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Dextran, hydrogen sulfate, sodium salt 9011-18-1	-	-	-	-

**Reproductive Toxicity** No information available.**STOT - single exposure** No information available.**STOT - repeated exposure** No information available.**Aspiration hazard** No information available.**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

**SECTION 12. ----- ECOLOGICAL INFORMATION -----****Ecotoxicity**

100% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Dextran, hydrogen sulfate, sodium salt 9011-18-1	-	-	-

**Persistence and Degradability**

No information available.

**Bioaccumulation/Accumulation**

No information available.

Chemical Name	Log Pow
Dextran, hydrogen sulfate, sodium salt 9011-18-1	-

**Other Adverse Effects** No information available**SECTION 13. ----- DISPOSAL CONSIDERATIONS -----**

**Waste treatment methods**

**Waste Disposal Method**  
**Contaminated Packaging**

Dispose of material in accordance with all federal, state, and local regulations.

Do not re-use empty containers.

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Dextran, hydrogen sulfate, sodium salt 9011-18-1	-	-	-	-

Chemical Name	California Hazardous Waste Status
Dextran, hydrogen sulfate, sodium salt 9011-18-1	-

**SECTION 14. ----- TRANSPORT INFORMATION -----**

**DOT**

Not regulated

**IATA**

Not regulated

**SECTION 15. ----- REGULATORY INFORMATION -----**

**International Inventories**

TSCA	Complies
DSL/NDL	Complies
EINECS/ELINCS	Does not Comply
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Does not Comply
AICS	Complies

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Dextran, hydrogen sulfate, sodium salt	67-66-3	95-100	-

**SARA 311/312 Hazard Categories**

Acute Health Hazard

Yes

<b>Chronic Health Hazard</b>	No
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

#### Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Dextran, hydrogen sulfate, sodium salt 9011-18-1	-	-	-	-

#### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Component	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Dextran, hydrogen sulfate, sodium salt – 9011-18-1	-	-

#### U.S. State Regulations

##### **California Proposition 65**

This product contains the following Proposition 65 chemicals:

Component	California Prop. 65
Dextran, hydrogen sulfate, sodium salt - 9011-18-1	-

#### U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
extran, hydrogen sulfate, sodium salt - 9011-18-1	X	X	X	X	X

#### U.S. EPA Label Information

**EPA Pesticide Registration Number** Not applicable

**Canada**

#### **WHMIS Hazard Class**

D2B Toxic materials



**SECTION 16. ----- OTHER INFORMATION-----**

<b>Issuing Date</b>	13-Aug-2009
<b>Revision Date</b>	12-Jan-2016
<b>Revision Note</b>	No information available.
<b>Recommended Restrictions</b>	No information available

**Disclaimer**

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of MSDS**