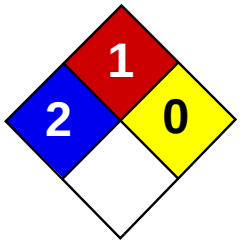

Health	2
Fire	1
Reactivity	0
Personal Protection	E

Material Safety Data Sheet
Streptozocin MSDS

Section 1: Chemical Product and Company Identification

Product Name: Streptozocin

Catalog Codes: SLS4141

CAS#: 18883-66-4

RTECS: LZ5775000

TSCA: TSCA 8(b) inventory: No products were found.

CI#: Not available.

Synonym: Streptozocin, Zanosar; 2-Deoxy-2-[[(methylnitrosoamino)carbonyl]amino]-D-glucopyranose; 2-Deoxy-2-(3-methyl-3-nitrosoureido)-alpha(and beta)-D-glucopyranose; 2-Deoxy-2-(3-methyl-3-nitrosoureido)-D-glucopyranose; D-Glucopyranose, 2-deoxy-2-(((methylnitrosoamino)carbonyl)amino)-; D-Glucose, 2-deoxy-2-(((methylnitrosoamino)carbonyl)amino)- (9CI); D-Glucose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-; N-D-Glucosyl-(2)-N'-nitrosomethylurea

Chemical Name: Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D-

Chemical Formula: C8H15N3O7

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Streptozocin	18883-66-4	100

Toxicological Data on Ingredients: Streptozocin: ORAL (LD50): Acute: >3000 mg/kg [Mouse]. >5150 mg/kg [Rat].

Section 3: Hazards Identification

Potential Acute Health Effects: Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

Potential Chronic Health Effects:
CARCINOGENIC EFFECTS: Classified 2B (Possible for human.) by IARC. Classified 2 (Some evidence.) by NTP. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast. TERATOGENIC EFFECTS: Classified POSSIBLE for human. DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female,

Reproductive system/toxin/male [SUSPECTED]. The substance may be toxic to kidneys, the reproductive system. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

Eye Contact:
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Skin Contact:
In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used.Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact:
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion:
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2...).

Fire Hazards in Presence of Various Substances:
Slightly flammable to flammable in presence of heat. Non-flammable in presence of shocks.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:
SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill:
Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:
Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7: Handling and Storage

Precautions:
Keep locked up.. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.

Storage:
Keep container tightly closed. Keep container in a cool, well-ventilated area. Refrigerate. Do not store above 6°C (42.8°F).

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:
Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (Crystalline solid.)

Odor: Not available.

Taste: Not available.

Molecular Weight: 265.22 g/mole

Color: Yellow. (Light.)

pH (1% soln/water): Not available.

Boiling Point: Not available.

Melting Point: 46.111°C (115°F)

Critical Temperature: Not available.

Specific Gravity: Not available.

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water.

Solubility:
Soluble in cold water, hot water. Soluble in lower alcohols, and Ketones. Insoluble in non-polar organic solvents. Slightly soluble in polar organic solvents.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Excess heat

Incompatibility with various substances: Not available.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): >3000 mg/kg [Mouse].

Chronic Effects on Humans:
CARCINOGENIC EFFECTS: Classified 2B (Possible for human.) by IARC. Classified 2 (Some evidence.) by NTP. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast. TERATOGENIC EFFECTS: Classified POSSIBLE for human. DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Reproductive system/toxin/male [SUSPECTED]. May cause damage to the following organs: kidneys, the reproductive system.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals:
Lowest Published toxic dose: TDL [Human] - Route: Intravenous; Dose; 1044 mg/kg/5 days TDL [Woman] - Route: Intravenous: Dose; 13513 ug/kg Lowest Publish Lethal Dose: LDL [Woman] - Route: Intravenous; Dose: 440 mg/kg/65 weeks. LDL [Monkey] - Route: Intravenous; Dose: 80 mg/kg Lethal Dose/Conc 50% Kill: LD50 [Rat] - Route - Intravenous; Dose: 138 mg/kg LD50 [Mouse] - Route - Intraperitoneal; Dose: 360 mg/kg LD50 [Mouse] - Route - Intravenous; Dose: 275 mg/kg LD50 [Mouse] - Route - Parenteral; Dose: 264 mg/kg

Special Remarks on Chronic Effects on Humans:
May cause adverse reproductive effects and birth defects (teratogenic). It is a teratogen in animals as a result of induced diabetes. May cause cancer

Special Remarks on other Toxic Effects on Humans:
Acute Potential Health Effects: Skin: May cause irritation. Eyes: May cause eye irritation. Inhalation: May cause respiratory tract irritation. May cause systemic effects similar to that of ingestion. Ingestion: May cause gastrointestinal tract irritation with nausea, and/or vomiting. May affect the blood/bone marrow (anemia, reduced white blood cells, reduced platelets), liver (impaired liver function), and kidneys (kidney damage). May affect behavior (toxic psychosis). Chronic Potential Health Effects: Prolonged or repeated exposure by inhalation or ingestion may also affect the blood/bone marrow and cause kidney or liver damage or cancer. It may also affect the pancreas causing diabetes.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information

Federal and State Regulations:
California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Streptozocin California prop. 65: This product contains the following ingredients for which the State of California has found to cause reproductive harm (female) which would require a warning under the statute: Streptozocin California prop. 65: This product contains the following ingredients for which the State of California has found to cause reproductive harm (male) which would require a warning under the statute: Streptozocin California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Streptozocin California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Streptozocin Connecticut hazardous material survey.: Streptozocin Illinois toxic substances disclosure to employee act: Streptozocin Illinois chemical safety act: Streptozocin New York release reporting list: Streptozocin Pennsylvania RTK: Streptozocin Minnesota: Streptozocin Massachusetts RTK: Streptozocin Massachusetts spill list: Streptozocin New Jersey: Streptozocin New Jersey spill list: Streptozocin Louisiana spill reporting: Streptozocin California Director's List of Hazardous Substances: Streptozocin CERCLA: Hazardous substances.: Streptozocin: 1 lbs. (0.4536 kg)

Other Regulations:
OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada): CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC):
R45- May cause cancer. R60- May impair fertility. R63- Possible risk of harm to the unborn child. S24/25- Avoid contact with skin and eyes. S36/37- Wear suitable protective clothing and gloves. S38- In case of insufficient ventilation, wear suitable respiratory equipment.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 1

Reactivity: 0

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 1

Reactivity: 0

Specific hazard:

Protective Equipment:
Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

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