

## Safety Data Sheet


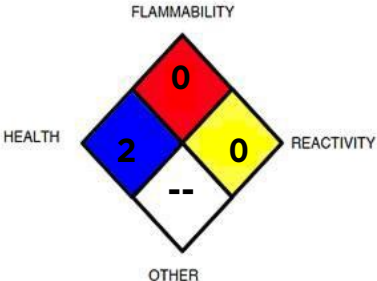
### Section 1: Product & Company Identification

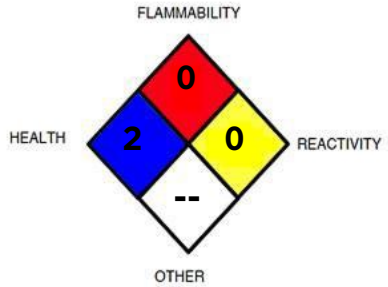
<b>Product Name:</b>	Streptozotocin
<b>Product #:</b>	S-2044
<b>Synonyms:</b>	Streptozocin; STZ; Zanosar; 1-methyl-1-nitroso-3-[(2S,3R,4R,5S,6R)-2,4,5-trihydroxy-6-(hydroxymethyl)oxan-3-yl]urea
<b>Supplier:</b>	AG Scientific Holdings, LLC 9950 Scripps Lake Drive, Suite 104 San Diego CA 92131 Tele# + 858-452-9925
<b>Emergency Tele#:</b>	ChemTel, Tele# in USA 1-800-255-3924, International 1-813-248-0585

### Section 2: Composition / Information on Ingredients

Component	CAS#	EC #	% Composition
Streptozotocin	18883-66-4		≥ 97%

### Section 3: Hazards Identification

<b>Symbols</b>	
<b>HMIS Classification</b>	<p style="text-align: center;">FLAMMABILITY</p>  <p style="text-align: center;">OTHER</p>

<b>NFPA Classification</b>	
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## Section 4: First Aid Measures

<b>General Overview:</b>	Immediate medical attention is required. If symptoms persist, call a physician.
<b>Inhalation:</b>	Remove to fresh air Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation Immediate medical attention is required If not breathing, give artificial respiration Oxygen or artificial respiration if needed Call a physician Move to fresh air in case of accidental inhalation of vapors If symptoms persist, call a physician
<b>Skin:</b>	Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash off immediately with soap and plenty of water. Consult a physician if necessary. If skin irritation persists, call a physician.
<b>Eyes:</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Call a physician immediately. Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. If symptoms persist, call a physician.
<b>Ingestion:</b>	Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Clean mouth with water and drink afterwards plenty of water. Call a physician.
	See section 11 for more detailed information on health effects & symptoms.

## SECTION 5: Fire Fighting Measures

<b>Flammability of the product:</b>	No data available
<b>Extinguishing Media:</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Hazardous thermal (de)composition products:</b>	Carbon oxides, Nitrogen oxides (NO <sub>x</sub> )

<b>Special Fire Fighting Procedures:</b>	In the event of fire and/or explosion do not breathe fumes. May cause sensitization by inhalation and skin contact. Thermal decomposition can lead to release of irritating and toxic gases and vapors.
<b>Flash Point:</b>	No data available


## Section 6: Accidental Release Measures




<b>Personal Precautions:</b>	Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.
<b>Environmental Precautions:</b>	Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information.
<b>Methods for Clean-up:</b>	Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.

## SECTION 7: Handling & Storage

<b>Storage:</b>	Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. Protect from moisture. Store at -20 °C.
<b>Handling:</b>	Avoid contact with skin, eyes, or clothing. Wash contaminated clothing before reuse. Do not eat, drink, or smoke when using this product. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Use with local exhaust ventilation.

## SECTION 8: Exposure controls / Personal Protection

<b>Respiratory Protection:</b>	 <p>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.</p>
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<b>Skin and Body:</b>	  <p>Wear protective gloves and protective clothing.</p>
<b>Eyes:</b>	 <p>Tight sealing safety goggles. Face protection shield.</p>
<b>Ventilation/Engineering Measures:</b>	Showers, Eyewash stations, Ventilation systems
<b>Hygiene:</b>	Handle in accordance with good industrial hygiene and safety practice.
<b>Other:</b>	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies.

## SECTION 9: Physical and Chemical Properties

<b>Appearance &amp; Odor:</b>	Pale yellow powder
<b>Formula</b>	$C_8H_{15}N_3O_7$
<b>Molecular Wt.</b>	265.2
<b>Melting Pt.</b>	121°C
<b>Boiling Pt.</b>	475.23°C
<b>Liquid Density:</b>	1.9 g/cm <sup>3</sup>
<b>Vapor Pressure:</b>	No data available
<b>Evaporation Rate:</b>	No data available
<b>Partition coefficient:</b>	-1.45
<b>Vapor Density:</b>	No data available
<b>Solubility:</b>	Water, Ethanol, DMSO
<b>Flash Point:</b>	No data available
<b>Decomposition Temp:</b>	121°C

## SECTION 10: Stability and Reactivity

<b>Stability:</b>	Stable under recommended storage conditions.
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<b>Hazardous decomposition products:</b>	Carbon oxides, Nitrogen oxides (NO <sub>x</sub> )
<b>Materials to Avoid:</b>	Strong oxidizing agents
<b>Conditions to avoid:</b>	Exposure to air or moisture over prolonged periods.

## SECTION 11: Toxicological Information

<b>RTECS#:</b>	N/A
<b>ACUTE Toxicity:</b>	N/A
<b>CHRONIC Toxicity:</b>	Prolonged or repeated exposure increases the risk. Possible risk of irreversible effects. Avoid repeated exposure.
<b>Chronic Exposure:</b> <b>Carcinogen:</b> <b>Mutagen:</b> <b>Teratogen:</b> <b>Reproductive:</b>	IARC: Streptozotocin (CAS 18883-66-4), IARC Group 2B AGGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, potential human carcinogen by ACGIH. NTP: Streptozotocin (CAS 18883-66-4), NTP Reasonably Anticipated OSHA: Streptozotocin (CAS 18883-66-4) EPA: No classification on carcinogenic data is available from EPA

## SECTION 12: Ecological Information

<b>Ecotoxicity:</b>	May cause long lasting harmful effects to aquatic life.
<b>Mobility:</b>	No data available
<b>Persistence and degradability:</b>	No data available
<b>Bioaccumulative potential:</b>	No data available
<b>Other adverse effects:</b>	No data available
<b>Corrosivity Characteristic:</b>	No data available
<b>General Notes:</b>	To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

## SECTION 13: Disposal Considerations

<b>Residue Waste or Unused product:</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated Packaging:</b>	Do not reuse container. Waste codes should be assigned by the user based on the application for which the product was used.

## SECTION 14: Transportation Information

<b>UN ID#:</b>	N/A
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<b>ADR / RID (LAND):</b>	Not regulated
<b>DOT regulations:</b>	Not regulated
<b>IMDG/IMO (SEA):</b>	Not regulated
<b>IATA/DGR (AIR):</b>	Not regulated
<b>Special Provisions:</b>	N/A

## SECTION 15: Regulatory Information

<b>Health Phrases:</b>	H350 May cause cancer P201 Obtain special instructions before use P202 Do not handle until all safety precautions have been read and understood P281 Use personal protective equipment as required P308 + P313 IF exposed or concerned: Get medical advice/attention P405 Store locked up P501 Dispose of contents/container to an approved waste disposal plant
<b>Risk Phrases:</b>	N/A
<b>Safety Phrases:</b>	N/A
<b>EU Regulations:</b>	N/A
<b>US Regulations:</b>	TSCA: Not listed California Proposition 65: Streptozotocin (CAS 18883-66-4): Carcinogen, Developmental, Female Reproductive, Male Reproductive
<b>U.S. Federal Regulations:</b>	SARA 302/304 emergency planning and notification: No products were found. SARA 311/312 MSDS distribution-chemical inventory-hazard identification: Acute Health Hazard, Chronic Health Hazard SARA 313 toxic chemicals notification and release reporting: No products were found.  Clean Water Act (CWA) 307: No products were found. Clean Water Act (CWA) 311: No products were found. Clean Air Act (CAA) 112 accidental release prevention: No products were found. Clean Air Act (CAA) 112 regulated flammable substances: No products were found. Clean Air Act (CAA) 112 regulated toxic substances: No products were found. OSHA: Streptozotocin (CAS 18883-66-4): Carcinogenicity (Cat. 1B)
<b>WHMIS (Canada):</b>	DSL: Listed

## SECTION 16: Other Information

**LIABILITY STATEMENT:** *The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. AG Scientific shall not be held liable for any damages resulting from handling or from contact with the above product. AG Scientific products are for research purposes only. Not for human use or consumption.*