

Safety Data Sheet

Triple Sugar Iron Agar, Dehydrated

CAROLINA[®]
www.carolina.com

Section 1 Product Description

Product Name: Triple Sugar Iron Agar, Dehydrated
Recommended Use: Science education applications
Synonyms: None known
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

GHS Classification:

Other Safety Precautions: May cause eye irritation.
May cause gastrointestinal discomfort.
May cause irritation to respiratory tract.
May cause irritation to skin.

Acute Toxicity Oral Contains 41.2 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Dermal Contains 98.5 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Inhalation Dust/Mist Contains 98.5 % of the mixture consists of ingredient(s) of unknown toxicity

Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%
Pancreatic Digest of Casein	N/A	23.2
Agar	9002-18-0	18.6
Sucrose	57-50-1	15.5
Lactose	63-42-3	15.5
Sodium Chloride	7647-14-5	7.7
Proteose Peptone	N/A	7.7
Beef Extract	N/A	4.6
Yeast Extract	8013-01-2	4.6
D-glucose, Anhydrous	50-99-7	1.5
Sodium Thiosulfate, Anhydrous	7772-98-7	0.5
Iron (II) Sulfate	7720-78-7	0.3
Phenol Red, Sodium Salt	34487-61-1	0

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.
Eyes: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin Contact: After contact with skin, wash immediately with plenty of water.
Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Section 5 Firefighting Procedures

Extinguishing Media: Use media suitable to extinguish surrounding fire.
Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Fire and/or Explosion Hazards: N/A

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Hazardous Combustion Products: Sodium Oxides, Sulfur Oxides, Metal Oxides, , Carbon oxides, Nitrogen oxides

Section 6 Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled:

No health affects expected from the clean-up of this material if contact can be avoided. Follow personal protective equipment recommendations found in Section 8 of this (M)SDS. Avoid the generation of dusts during clean-up. Poses little or no immediate hazard. Ventilate the contaminated area. Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Reduce airborne dust and prevent scattering by moistening with water. Vacuum or sweep up material and place in a disposal container. Do not flush to sewer. Contain the discharged material.

Section 7 Handling and Storage

Handling: Avoid creating and inhaling dust.
Storage: Keep container tightly closed in a cool, well-ventilated place.
Storage Code: Green - general chemical storage

Section 8 Protection Information

Chemical Name	ACGIH		OSHA PEL	
	(TWA)	(STEL)	(TWA)	(STEL)
Sucrose	10 mg/m ³ TWA	N/A	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)	N/A
Sodium Chloride	N/A	N/A	N/A	N/A
D-glucose, Anhydrous	N/A	N/A	N/A	N/A
Iron (II) Sulfate	1 mg/m ³ TWA (as Fe)	N/A	N/A	N/A
Phenol Red, Sodium Salt	N/A	N/A	N/A	N/A

Control Parameters

Engineering Measures:

No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.

Personal Protective Equipment (PPE):

Lab coat, apron, eye wash, safety shower.

Respiratory Protection:

No respiratory protection required under normal conditions of use.

Respirator Type(s):

NIOSH approved air purifying respirator with dust/mist filter.

Eye Protection:

Wear chemical splash goggles when handling this product. Have an eye wash station available.

Skin Protection:

Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves:

Nitrile

Section 9 Physical Data

Formula: See Section 3

Molecular Weight: N/A

Appearance: White to off-white Colorless to White White Solid

Odor: None

Odor Threshold: No data available

pH: No data available

Melting Point: 186 C

Boiling Point: 1461 C

Flash Point: No data available

Flammable Limits in Air: N/A

Vapor Pressure: N/A

Evaporation Rate (BuAc=1): N/A

Vapor Density (Air=1): N/A

Specific Gravity: N/A

Solubility in Water: Soluble

Log Pow (calculated): No data available

Autoignition Temperature: No data available

Decomposition Temperature: No data available

Viscosity: No data available

Percent Volatile by Volume: N/A

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Section 10

Reactivity Data

Reactivity: No data available
Chemical Stability: Stable under normal conditions.
Conditions to Avoid: Exposure to moisture Dusting.
Incompatible Materials: Strong oxidizing agents, Strong acids, Bromine Trifluoride, Lithium, Oxidizing materials
Hazardous Decomposition Products: Nitrogen oxides, Carbon oxides, Metal Oxides, , Sulfur Oxides, Sodium Oxides
Hazardous Polymerization: Will not occur

Section 11

Toxicity Data

Routes of Entry: Inhalation and ingestion.
Symptoms (Acute): N/A
Delayed Effects: No data available

Acute Toxicity:

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Agar	9002-18-0	Oral LD50 Mouse 16000 mg/kg		
Sucrose	57-50-1	Oral LD50 Rat 29700 mg/kg		
Lactose	63-42-3	Oral LD50 Rat > 10000 mg/kg		
Sodium Chloride	7647-14-5	Oral LD50 Rat 3000 mg/kg Oral LD50 Mouse 4 GM/KG		
D-glucose, Anhydrous	50-99-7	Oral LD50 Rat 25800 mg/kg		
Sodium Thiosulfate, Anhydrous	7772-98-7	Oral LD50 Rat > 5000 mg/kg		
Iron (II) Sulfate	7720-78-7	Oral LD50 Rat 319 mg/kg		
Phenol Red, Sodium Salt	34487-61-1			

Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
Sodium Chloride	7647-14-5	Not listed	Not listed	Not listed
D-glucose, Anhydrous	50-99-7	Not listed	Not listed	Not listed
Phenol Red, Sodium Salt	34487-61-1	Not listed	Not listed	Not listed

Chronic Effects:

Mutagenicity: No evidence of a mutagenic effect.
Teratogenicity: No evidence of a teratogenic effect (birth defect).
Sensitization: No evidence of a sensitization effect.
Reproductive: No evidence of negative reproductive effects.

Target Organ Effects:

Acute: See Section 2
Chronic: N/A

Section 12

Ecological Data

Overview: This material is not expected to be harmful to the ecology. Keep out of waterways.
Mobility: No data
Persistence: Biodegradation, Dissolved into water
Bioaccumulation: No data
Degradability: No data
Other Adverse Effects: No data

Chemical Name	CAS Number	Eco Toxicity
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Sucrose	57-50-1	96 HR LC50 LEPOMIS MACROCHIRUS 12946 MG/L [STATIC]
Sodium Chloride	7647-14-5	48 HR EC50 DAPHNIA MAGNA 1000 MG/L
D-glucose, Anhydrous	50-99-7	96 HR LC50 GAMBUSIA AFFINIS 24000 MG/L [STATIC]
Sodium Thiosulfate, Anhydrous	7772-98-7	96 HR LC50 POECILIA RETICULATA 925 MG/L [STATIC]
Iron (II) Sulfate	7720-78-7	48 HR EC50 DAPHNIA MAGNA 152 MG/L

Section 13 Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

Waste Disposal Code(s): Not Determined

Section 14 Transport Information

Ground - DOT Proper Shipping Name: Not Regulated for Transport

Air - IATA Proper Shipping Name: Not regulated for air transport by IATA.

Section 15 Regulatory Information

TSCA Status: All components in this product are on the TSCA Inventory.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
Sucrose	57-50-1	No	No	No	No	No
Sodium Chloride	7647-14-5	No	No	No	No	No
D-glucose, Anhydrous	50-99-7	No	No	No	No	No
Iron (II) Sulfate	7720-78-7	No	1000 lb RQ	1000 lb final RQ; 454 kg final RQ	No	No
Phenol Red, Sodium Salt	34487-61-1	No	No	No	No	No

Section 16 Additional Information

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The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health