

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 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 | | 4.6 |
| Yeast Extract | | 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

Safety Data Sheet

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

| <u>Chemical Name</u> | <u>ACGIH</u> | | <u>OSHA PEL</u> | |
|-------------------------|---------------------------------|---------------|---|---------------|
| | <u>(TWA)</u> | <u>(STEL)</u> | <u>(TWA)</u> | <u>(STEL)</u> |
| 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

Safety Data Sheet

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 |
|---------------|------------|--------------|
|---------------|------------|--------------|

Triple Sugar Iron Agar, Dehydrated

Safety Data Sheet

| | | |
|-------------------------------|-----------|--|
| 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

Revised: 09/03/2014

Replaces: 08/27/2014

Printed: 04-21-2015

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 |