Safety Data Sheet

Kligler Iron Agar, Dehydrated

CAROLINA®
www.carolina.com

Section 1 Product Description

Product Name: Kligler 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 39.5 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Dermal Contains 98.1 % of the mixture consists of ingredient(s) of unknown toxicity

Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%
Agar	9002-18-0	28.8
Peptic Digest of Animal Tissue	N/A	19.2
Pancreatic Digest of Casein	N/A	19.2
Lactose	63-42-3	19.2
Sodium chloride	7647-14-5	9.6
D-glucose, Anhydrous	50-99-7	1.9
Phenol Red, Sodium Salt	34487-61-1	0
Sodium Thiosulfate, Anhydrous	7772-98-7	1
Iron (III) Ammonium Citrate, Green	1185-57-5	1

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, take off immediately all contaminated clothing, and 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 alcohol resistant foam, carbon dioxide, or dry chemical when fighting fires. Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the surface of the fire. Do Not direct a stream of water into the hot burning liquid.
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
Hazardous Combustion Products: Carbon dioxide, Carbon monoxide

Section 6 Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled:

No adverse health affects expected from the clean-up of spilled material.
No adverse health affects expected from the clean-up of spilled material. Follow personal protective equipment recommendations found in Section 8 of this (M)SDS.
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
Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill. Poses little or no immediate hazard Avoid the generation of dusts during clean-up. Ventilate the contaminated area. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.
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. Avoid creating dusts. Eliminate ignition sources. If a vacuum is used, ensure that the material is wetted or otherwise treated so an explosive dust atmosphere is not created within the vacuum. Ventilate area of spill. Clean-up personnel should wear proper protective equipment. Avoid creating dust. Sweep or scoop up and containerize for disposal.

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

	ACGIH		OSHA PEL	
Chemical Name	**(TWA)**	**(STEL)**	**(TWA)**	**(STEL)**
Sodium Chloride	N/A	N/A	N/A	N/A
D-glucose, Anhydrous	N/A	N/A	N/A	N/A
Phenol Red, Sodium Salt	N/A	N/A	N/A	N/A
Iron (III) Ammonium Citrate, Green	1 mg/m3 TWA (as Fe)	N/A	1 mg/m3 TWA (as Fe)	N/A

Control Parameters

Engineering Measures: Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.
Personal Protective Equipment (PPE): Lab coat, apron, eye wash, safety shower.
Respiratory Protection: No respiratory protection required under normal conditions of use.
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 White to off-white
Odor: None
Odor Threshold: No data available
pH: No data available
Melting Point: No data available
Boiling Point: No data available
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: Dusting.
Incompatible Materials: Strong oxidizing agents, Bromine Trifluoride, Lithium, Sodium Nitrate,, Metal Nitrates,, Silver, Free Iodine, Acids
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		
Lactose	63-42-3	Oral LD50 Rat > 10000 mg/kg		
Sodium Chloride	7647-14-5	Oral LD50 Mouse 4000 mg/kg		
D-glucose, Anhydrous	50-99-7	Oral LD50 Rat 25800 mg/kg		
Phenol Red, Sodium Salt	34487-61-1			
Sodium Thiosulfate, Anhydrous	7772-98-7	Oral LD50 Rat > 5000 mg/kg		

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.
Mobility: No data
Persistence: Dissolved into water, Biodegradation
Bioaccumulation: No data
Degradability: No data
Other Adverse Effects: No data

Chemical Name	CAS Number	Eco Toxicity
Sodium chloride	7647-14-5	96 HR LC50 LEPOMIS MACROCHIRUS 12946 MG/L [STATIC] 48 HR EC50 DAPHNIA MAGNA 1000 MG/L
D-glucose, Anhydrous	50-99-7	
Sodium Thiosulfate, Anhydrous	7772-98-7	96 HR LC50 GAMBUSIA AFFINIS 24000 MG/L [STATIC]

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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
Sodium Chloride	7647-14-5	No	No	No	No	No
D-glucose, Anhydrous	50-99-7	No	No	No	No	No
Phenol Red, Sodium Salt	34487-61-1	No	No	No	No	No
Iron (III) Ammonium Citrate, Green	1185-57-5	No	No	1000 lb final RQ; 454 kg final RQ	No	No

California Prop 65: No California Proposition 65 ingredients

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