Safety Data Sheet

Carosafe® Concentrate

CAROLINA®
www.carolina.com

Section 1 Product Description

Product Name: Carosafe® Concentrate
Recommended Use: Science education applications
Synonyms: None
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;

WARNING

Harmful if swallowed. Causes skin irritation. Causes serious eye irritation.

GHS Classification:
Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2A, Acute Toxicity - Oral Category 4

Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%
Propylene Glycol	57-55-6	91
2-Amino-2-Ethyl-1,3-Propanediol	115-70-8	6
2-Phenoxyethanol	122-99-6	3

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: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin Contact: IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Ingestion: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Section 5 Firefighting Procedures

Extinguishing Media: Use dry chemical, CO2 or appropriate foam.
Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Fire and/or Explosion Hazards: Fire or excessive heat may produce hazardous decomposition products.
Hazardous Combustion Products: Carbon oxides, Nitrogen oxides

Section 6 Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled: 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. Ventilate the contaminated area. Isolate area. Keep unnecessary personnel away.
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. Contain the discharged material. Use an inert absorbent such as sand or vermiculite. Place in properly labeled closed container. Do not flush spill to drain.

Section 7 Handling and Storage

Handling: Wash thoroughly after handling. Do no eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe gas/fumes/vapor/spray. Avoid contact with skin and eyes. Avoid contact with clothing. Keep container tightly closed in a cool, well-ventilated place.

Storage: Keep container tightly closed in a cool, well-ventilated place.
Material is hygroscopic (absorbs moisture).

Storage Code: Green - general chemical storage

Section 8 Protection Information

	ACGIH		OSHA PEL	
Chemical Name	**(TWA)**	**(STEL)**	**(TWA)**	**(STEL)**
Propylene Glycol	N/A	N/A	N/A	N/A
2-Amino-2-Ethyl-1,3-Propanediol	N/A	N/A	N/A	N/A
2-Phenoxyethanol	N/A	N/A	N/A	N/A

Control Parameters

Engineering Measures: No exposure limits exist for the constituents of this product. Use local exhaust ventilation or other engineering controls to minimize exposures and maintain operator comfort.

Personal Protective Equipment (PPE): Lab coat, apron, eye wash, safety shower.

Respiratory Protection: No respiratory protection required under normal conditions of use. Provide general room exhaust ventilation if symptoms of overexposure occur as explained Section 11. A respirator is not normally required.

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. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work. Where use can result in skin contact, practice good personal hygiene. Use impervious gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly.

Gloves: Natural rubber, Neoprene, PVC or equivalent., Nitrile

Section 9 Physical Data

Formula: See Section 3
Molecular Weight: N/A
Appearance: Colorless Liquid
Odor: Mild Sweet
Odor Threshold: No data available
pH: No data available
Melting Point: -60 C
Boiling Point: 152 - 153 C
Flash Point: 107 C
Flammable Limits in Air: (Propylene Glycol) LEL: 2.6% UEL: 12.6%
Vapor Pressure: N/A
Evaporation Rate (BuAc=1): N/A
Vapor Density (Air=1): N/A
Specific Gravity: >1
Solubility in Water: Soluble
Log Pow (calculated): 1.13 at 25 °C
Autoignition Temperature: 371 C
Decomposition Temperature: No data available
Viscosity: No data available
Percent Volatile by Volume: N/A

Section 10 Reactivity Data

Reactivity: No data available
Chemical Stability: Stable under normal conditions.
Conditions to Avoid: Sparks, open flame, other ignition sources, and elevated temperatures.
Incompatible Materials: Caustics (bases), Metals, Strong oxidizing agents
Hazardous Decomposition Products: Nitrogen oxides, Carbon oxides
Hazardous Polymerization: Will not occur

Section 11 Toxicity Data

Routes of Entry Inhalation, ingestion, eye or skin contact.
Symptoms (Acute): N/A
Delayed Effects: No data available

Acute Toxicity:

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Propylene Glycol	57-55-6		Dermal LD50 Rabbit 20800 mg/kg	
2-Amino-2-Ethyl-1,3-Propanediol	115-70-8			
2-Phenoxyethanol	122-99-6	Oral LD50 Rat 1260 mg/kg	Dermal LD50 Rabbit 5000 mg/kg Dermal LD50 Rat 14422 mg/kg	

Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
Propylene Glycol	57-55-6	Not listed	Not listed	Not listed
2-Amino-2-Ethyl-1,3-Propanediol	115-70-8	Not listed	Not listed	Not listed
2-Phenoxyethanol	122-99-6	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: Not listed as a carcinogen by IARC, NTP or OSHA.

Section 12 Ecological Data

Overview: Slight ecological hazard. In high concentrations, this product may be dangerous to plants and/or wildlife. Keep out of waterways.
Mobility: This material is expected to have high mobility in soil. It absorbs weakly to most soil types.
Persistence: Biodegradation, Dissolved into water
Bioaccumulation: Bioconcentration is not expected to occur.
Degradability: Biodegrades at a moderate rate.
Other Adverse Effects: No data

Chemical Name	CAS Number	Eco Toxicity
Propylene Glycol	57-55-6	96 HR LC50 PIMEPHALES PROMELAS 710 MG/L 96 HR LC50 PIMEPHALES PROMELAS 51400 MG/L [STATIC] 96 HR LC50 ONCORHYNCHUS MYKISS 51600 MG/L [STATIC] 48 HR EC50 DAPHNIA MAGNA > 1000 MG/L [STATIC] 24 HR EC50 DAPHNIA MAGNA > 10000 MG/L 96 HR EC50 PSEUDOKIRCHNERIELLA SUBCAPITATA 19000 MG/L
2-Amino-2-Ethyl-1,3-Propanediol	115-70-8	Not available

2-Phenoxyethanol	122-99-6	96 HR LC50 PIMEPHALES PROMELAS 366 MG/L [STATIC] 48 HR EC50 DAPHNIA MAGNA > 500 MG/L 72 HR EC50 DESMODESMUS SUBSPICATUS > 500 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:
N/A

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
Propylene Glycol	57-55-6	No	No	No	No	No
2-Amino-2-Ethyl-1,3-Propanediol	115-70-8	No	No	No	No	No
2-Phenoxyethanol	122-99-6	No	No	No	No	No

Section 16 Additional Information

Revised: 12/18/2014 **Replaces: 12/18/2014** **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