

Safety Data Sheet

CAFFEINE

CAROLINA[®]
www.carolina.com

Section 1 Product Description

Product Name: CAFFEINE
Recommended Use: Science education applications
Synonyms: No-Doz, Coffeine, Theine
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;

DANGER



Toxic if swallowed.

GHS Classification:
Acute Toxicity - Oral Category 3

Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Caffeine	58-08-2	100

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: Immediately call a POISON CENTER or doctor/physician.

Section 5 Firefighting Procedures

Extinguishing Media: Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.
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. Explosive when mixed with oxidising substances.
Hazardous Combustion Products: Carbon dioxide, Carbon monoxide, Nitrogen oxides

Section 6 Spill or Leak Procedures

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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. Avoid the generation of dusts during clean-up. 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. Do not allow the spilled product to enter public drainage system or open waterways.

Section 7 Handling and Storage

Handling: Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid creating and inhaling dust. Take off immediately all contaminated clothing.

Storage: Store locked up. 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)
No data available	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. Wear a NIOSH approved respirator if any exposure is possible.

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. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly.

Gloves:

Nitrile

Section 9 Physical Data

Formula: C₈H₁₀N₄O₂

Molecular Weight: 194.19

Appearance: Crystalline Solid

Odor: No data available

Odor Threshold: No data available

pH: No data available

Melting Point: No data available 234 - 236 C

Boiling Point: No data available

Flash Point: > 93 C

Flammable Limits in Air: N/A

Vapor Pressure: N/A

Evaporation Rate (BuAc=1): N/A

Vapor Density (Air=1): N/A

Specific Gravity: 1.23 at 18 °C

Solubility in Water: Slightly 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

Section 10 Reactivity Data

Reactivity:

No data available

Chemical Stability:

Stable under normal conditions.

Conditions to Avoid:

None known.

Incompatible Materials:

Strong oxidizing agents

Hazardous Decomposition Products:

Nitrogen oxides, Carbon dioxide, Carbon monoxide

Hazardous Polymerization:

Will not occur

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Section 11

Toxicity Data

Routes of Entry: Inhalation and ingestion.
Symptoms (Acute): Cardiovascular system
Delayed Effects: No data available

Acute Toxicity:

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Caffeine	58-08-2	Oral LD50 Rat 192 mg/kg	Not determined	Not determined

Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
No data available	58-08-2	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: Mutation data cited., Reproductive data cited., Not listed as a carcinogen by IARC, NTP or OSHA.

Section 12

Ecological Data

Overview: This material is not expected to be harmful to the ecology. Components of this product are hazardous to wildlife and aquatic life.

Mobility: No data
Persistence: No data
Bioaccumulation: No data
Degradability: No data
Other Adverse Effects: No data

Chemical Name	CAS Number	Eco Toxicity
Caffeine	58-08-2	4 HR EC50 DAPHNIA SPECIES 182.12 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:	Air - IATA Proper Shipping Name:
UN2811, Toxic solids, organic, n.o.s.(caffeine), 6.1, III	UN2811, Toxic solids, organic, n.o.s.(caffeine), 6.1, III

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
No data available	58-08-2	No	No	No	No	No

Section 16

Additional Information

Revised: 09/09/2015

Replaces: 09/03/2014

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Safety Data Sheet

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