

Safety Data Sheet

Naphthalene

CAROLINA[®]
www.carolina.com

Section 1 Product Description

Product Name: Naphthalene
Recommended Use: Science education applications
Synonyms: Moth flakes, White Tar; Tar Camphor
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



Flammable solid. Harmful if swallowed. Causes eye irritation. Suspected of causing cancer. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

GHS Classification:

Flammable Solid Category 1, Hazardous to the aquatic environment - Acute Category 1, Hazardous to the aquatic environment - Chronic Category 1, Serious Eye Damage/Eye Irritation Category 2B, Carcinogenicity Category 2, Acute Toxicity - Oral Category 4

Other Safety Precautions: IF exposed or concerned: Get medical advice/attention.

Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Naphthalene	91-20-3	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: 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: After contact with skin, wash immediately with plenty of water.
Ingestion: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

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: May cause fire. Heating may cause an explosion.
Hazardous Combustion Products: Carbon dioxide, Carbon monoxide

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 severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits. Persons not wearing appropriate protective equipment should be excluded from area of spill until clean-up has been completed.

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. Shut off ignition sources; including electrical equipment and flames. Do not allow smoking in the area. Collect spillage.

Section 7

Handling and Storage

Handling:

Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/.../ equipment. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required. Keep container tightly closed in a cool, well-ventilated place. Keep away from combustible material. Do not breathe gas/fumes/vapor/spray. Avoid contact with skin and eyes. Take off immediately all contaminated clothing. Retained residue may make empty containers hazardous.

Storage:

Store locked up. Keep container tightly closed in a cool, well-ventilated place.

Storage Code:

Red - Flammables. Store in approved flammable containers. Store away from oxidizing materials.

Section 8

Protection Information

Chemical Name

Naphthalene

ACGIH

(TWA)

10 ppm TWA

(STEL)

15 ppm STEL

OSHA PEL

(TWA)

10 ppm TWA; 50 mg/m3 TWA

(STEL)

N/A

Control Parameters

Engineering Measures:

Local exhaust ventilation, process enclosures, or other engineering controls are necessary when handling or using this product to avoid overexposure.

Personal Protective Equipment (PPE):

Lab coat, apron, eye wash, safety shower.

Respiratory Protection:

Respiratory protection will be required when handling this product. Use respirators only if ventilation cannot be used to eliminate symptoms or reduce the exposure to below acceptable levels.

Respirator Type(s):

NIOSH approved air purifying respirator with HEPA filter.

Eye Protection:

Wear safety glasses with side shields and a Face shield

Skin Protection:

Prevent contact with this product. Wear a full protective suit, protective gloves, face and further skin protection depending upon condition of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment thoroughly after each use. Do not wear surgical style latex gloves. Wash hands and other exposed areas with mild soap and water before eating, drinking. Change contaminated clothing immediately and launder only at a commercial facility.

Gloves:

Nitrile

Section 9

Physical Data

Formula: C₁₀H₈

Molecular Weight: 128.17

Appearance: White Crystalline Solid

Odor: Moderate Characteristic

Odor Threshold: 0.2 mg/m³ OT (Punter)

pH: No data available

Melting Point: 78 - 82 °C

Boiling Point: 218 °C

Flash Point: 79 °C

Flammable Limits in Air: LEL: 0.9%, UEL: 5.9%

Vapor Pressure: 0.082 at 25 °C

Evaporation Rate (BuAc=1): 1

Vapor Density (Air=1): 4.4

Specific Gravity: 1.162

Solubility in Water: Practically Insoluble

Log Pow (calculated): 3.3 at 20 °C

Autoignition Temperature: 526 °C

Decomposition Temperature: No data available

Viscosity: 95+%

Percent Volatile by Volume: 95+%

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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:	Strong oxidizing agents
Hazardous Decomposition Products:	Carbon oxides
Hazardous Polymerization:	Will not occur

Section 11

Toxicity Data

Routes of Entry	Inhalation, ingestion, eye or skin contact.
Symptoms (Acute):	Respiratory disorders, , Eye disorders, Gastrointestinal,
Delayed Effects:	No data available

Acute Toxicity:

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Naphthalene	91-20-3	Oral LD50 Mouse 316 mg/kg Oral LD50 Rat 490 mg/kg	Dermal LD50 Rat > 2500 mg/kg	Not determined

Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
Naphthalene	91-20-3	Listed	Listed	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:	Tests on laboratory animals indicate material may produce adverse mutagenic and reproductive effects.

Section 12

Ecological Data

Overview:	Severe ecological hazard. This product may be toxic to plants and/or wildlife. Highly/very toxic to fish and other water organisms.
Mobility:	No data
Persistence:	No data
Bioaccumulation:	No data
Degradability:	Biodegrades slowly.
Other Adverse Effects:	No data

Chemical Name	CAS Number	Eco Toxicity
Naphthalene	91-20-3	96 HR LC50 PIMEPHALES PROMELAS 1.99 MG/L [STATIC] 96 HR LC50 LEPOMIS MACROCHIRUS 31.0265 MG/L [STATIC] 48 HR LC50 DAPHNIA MAGNA 2.16 MG/L 48 HR EC50 DAPHNIA MAGNA 1.96 MG/L [FLOW THROUGH] 72 HR EC50 SKELETONEMA COSTATUM 0.4 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

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Ground - DOT Proper Shipping Name:

UN1334, Naphthalene, Refined, 4.1, III

Air - IATA Proper Shipping Name:

UN number: 1334 Class: 4.1 Packing group: III Proper shipping name: Naphthalene, refined

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
Naphthalene	91-20-3	Naphthalene	100 lb RQ	100 lb final RQ; 45.4 kg final RQ	No	No

California Prop 65:

WARNING: This product contains a chemical known to the state of California to cause cancer, birth defects or other reproductive harm.

Section 16**Additional Information****Revised: 09/09/2015****Replaces: 09/03/2014****Printed: 10-29-2015**

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