

Section 1: Company and Product Identification

Product Name: Naphthalene

Product Code: 184500

Company: Colonial Metals, Inc.

Building 20

505 Blue Ball Road

Elkton, MD 21921 United States

Company Contact: EHS Director

Telephone Number: 410-398-7200

FAX Number: 410-398-2918

E-Mail : info@colonialmetals.com

Web Site: www.colonialmetals.com

Emergency Response: Supplier Emergency Contacts & Phone Number

Chemtrec: 800-424-9300

World Wide - Call COLLECT to U.S: 703-527-3887

Scios
Dual Beam
gas for carbon
deposition
Cartridge interior
to machine

Section 2: Hazards Identification

Hazard Pictograms:



Signal Word:

Danger

Hazard Category:

Acute Tox, Inhalation Cat 1

Acute Tox, Oral Cat 4

Carcinogenicity Cat 2

Flammable Solids Cat 1

Hazard to aquatic environment, acute Cat 1

Hazard to aquatic environment, chronic Cat 1

Hazard Statements:

H228: FLAMMABLE SOLID

H302: HARMFUL IF SWALLOWED

H351: SUSPECTED OF CAUSING CANCER

H410: VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.

Precautionary Statements:

P201: Obtain special instructions before use

P202: Do not handle until all safety precautions have been read and understood

P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking

P240: Ground/bond container and receiving equipment

P241: Use explosion-proof electrical/ventilating/lighting/equipment

P264: Wash skin thoroughly after handling

P270: Do not eat, drink or smoke when using this product

P273: Avoid release to the environment

P280: Wear protective gloves/protective clothing/eye protection/face protection

P301+312+P330: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse Mouth.

P308+313: IF exposed or concerned: Get medical advice/attention

P370+378: In case of fire: Use dry sand, dry chemical, or alcohol resistant foam for extinction

P391: Collect spillage

P405: Store locked up

P501: Dispose of contents/container to an approved waste disposal plant

**Hazards not
otherwise classified:**

None

Section 3: Composition / Information on Ingredients

Substances

Formula: C₁₀H₈
Molecular Weight: 128.17 g/mol
CAS-No.: 91-20-3
EC-No.: 202-049-5
Index-No.: 601-052-00-2

Hazardous substance (name)	Hazard Category	Concentration
Naphthalene	Flam. Sol. 1; Acute Tox. Oral 4; Acute Tox. Inhalation 1; Carc. 2; Aquatic Acute 1; Aquatic Chronic 1; H228, H302, H351, H410	90 - 100%

Section 4: First Aid Measures

General Info: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If ingested: If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Rinse mouth with water.

If inhaled: Move person to fresh air. If not breathing, give artificial respiration. Consult a physician.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. Get medical attention immediately.

Skin contact: Take off immediately all contaminated clothing. Rinse with soap and water thoroughly. Wash before reuse, destroy contaminated shoes. Get medical advice if irritation develops or persists.

Additional Info: None

Section 5: 5. Fire Fighting Measures

Extinguishing Use water spray, alcohol resistant foam, dry chemical, or carbon dioxide.
Method / Equipment:

Special Hazards: No data available

Advice for firefighters: Wear self-contained breathing apparatus for firefighting if necessary. Use water spray to cool unopened containers.

Further Information: Use water spray to cool unopened containers.

Section 6: 6. Accidental Release Measures

Personal precautions, Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist, or protective equipment gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe and procedures: areas. Avoid breathing dust.

Environmental Prevent further leakage or spillage if safe to do so. Avoid release to the environment. Keep out of Precautions: water supplies and sewers. Discharge into the environment must be avoided.

Containment Sweep up and shovel. Contain spillage, then collect with an electrically protected vacuum
Equipment and cleaner or wet-brushing and place in container for disposal according to local regulations. Keep
Cleanup Procedures: in suitable, closed containers for disposal.

Section 7: Handling and Storage

Safe Handling Avoid contact with eyes and skin. Avoid dust formation and aerosols. Further processing of
Precautions: solid materials may result in the formation of combustible dust. The potential for combustible
dust should be taken into consideration before additional processing occurs. Provide appropriate
exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No
Smoking. Take measures to prevent build up of electrostatic charge.

Recommendations for Keep container tightly closed in a dry and well-ventilated area.

Storage:

Incompatibilities: No data available

Section 8: Exposure Control / Personal Protection

Control Parameters:	Component	CAS-No.	Value	Control Parameters	Basis
	Naphthalene	91-20-3	TWA	10.000000 ppm	USA.ACGIH Threshold Limit Values
		Remarks:	Hematologic effects Upper Respiratory Tract irritation Cataract Confirmed animal carcinogen with unknown relevance to humans Danger of cutaneous absorption		
			TWA	10 ppm 50 mg/m3	USA. NIOSH Recommended Exposure Limits
			ST	15 ppm 75 mg/m3	USA. NIOSH Recommended Exposure Limits
			TWA	10 ppm 50 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
			The value in mg/m3 is approximate		
			PEL	0.1 ppm 0.5 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
			Skin		

Work Clothing: Complete suite protecting against chemicals, flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of dangerous substance at the specific workplace.

Eye/face protection: Wear safety glasses with side shields or goggles or face shield.

Skin Protection: Complete suite protecting against chemicals, flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of dangerous substance at the specific workplace.

Respiratory Where risk assessment shows air-purifying respirators are appropriate use a full-face particle
Protection: respirator.

**Additional
Information:**

Section 9: Physical and Chemical Properties

Appearance: Form: flakes, granules
Color: white

Odor: aromatic

Odor Threshold: No data available

pH: No data available

Melting Point / Freezing Point: 176 - 180 °F (80 -82 °C) - lit.

Initial boiling point and boiling range: 424 °F 218 °C - lit.

Flash Point: 176 °F 80°C - closed cup

Evaporation rate: No data available

Flammability: No data available

Upper / lower flammability or explosive limits: Upper explosion limit: 5.9 %(V)
Lower explosion limit: 0.9 %(V)

Vapour pressure: 1.3 hPa (1.0 mmHg) at 53 °C (127.4 °F)
0.04 hPa (0.03 mmHg) at 25.0°C (77.0 °F)

Vapour density: No data available

Relative density: 1.085 g/cm³ at 24.7°C (76.5 °F)

Water solubility: 0.0308 g/l at 25°C (77 °F) - OECD Test Guideline 105 - slightly soluble

Partition coefficient: n- log Pow: 3.4 at 25°C (77 °F)
octanol/water:

Auto-ignition temperature: 526°C (978.8 °F)

Decomposition temperature: No data available
Viscosity: 1.05 mm²/s at 81.5°C (178.7 °F)

Explosive properties: No data available

Oxidizing properties: No data available

Other safety information

Surface tension: 31.8 mN/m at 100.0°C (212.0 °F)

Section 10: Stability and Reactivity

Reactivity: No data available

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: No data available

Conditions to avoid: Heat, flames, and sparks

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products: Hazardous decomposition products formed under fire conditions - Carbon oxides

Section 11: Toxicological Information

Acute Toxicity: LD50 Oral - Rat - 490.0 mg/kg

LC50 Inhalation - Rat male and female - 4 h - > 0.4 mg/l
(OECD Test Guideline 403)

LD50 Dermal - Rabbit - 20,000 mg/kg
No data available

Skin corrosion / irritation

Skin - Rabbit
Result: no skin irritation - 24 h

Serious Eye damage / eye irritation

Eyes - Rabbit
Result: Mild Eye irritation

Respiratory or skin sensitisation

Maximisation Test - Guinea pig
Result: Does not cause skin sensitisation
(OECD Test Guideline 406)

Germ cell mutagenicity

Ames test
S. typhimurium
Result: negative
Rat - male
Result: negative

Carcinogenicity

Carcinogenicity - Rat - male and female - inhalation (vapour)
Tumorigenic: Tumors at site or application
IARC: 2B - Group 2B: Possibly carcinogenic to humans (Naphthalene)
NTP: RAHC - Reasonable anticipated to be a human carcinogen (Naphthalene)
OSHA: No component of this product present at levels greater than or equal to 0.1% is on
OSHA's listed of regulated carcinogens.

Reproductive toxicity: No data available

Specific target organ toxicity - single exposure: No data available

Specific target organ toxicity - repeated exposure: No data available

Aspiration hazard: No data available

Additional information: Repeated dose toxicity: rat - male and female - Oral - NOAEL: 100
mg/kg - OECD Test Guideline 408

Absorption into the body leads to the formation of methemoglobin which in sufficient
concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer. Naphthalene is
retinotoxic and systemic absorption of its vapors above 15ppm may result in cataracts, optic
neuritis, corneal injury, eye irritation. Ingestion may provoke the following symptoms:
hemolytic anemia, hemoglobinuria, nausea, headache, vomiting, gastrointestinal disturbance,
convulsions, anemia, kidney injury, seizures, coma.

Section 12: Ecological Information

Aquatic toxicity: Fish

flow-through test - LC50 - Fathead Minnow - 7.9 mg/l - 96.0 h
NOEC - Other fish - 1.8 mg/l - 3.0 d
LOEC - Other fish - 3.2 mg/l - 3.0 d
Daphnia and other aquatic invertebrates
EC50 - Water Flea - 2.16mg/l - 48 h

Persistence and degradability: Biodegradability - aerobic - exposure time 28 d
Result: 2& - not readily biodegradable.

Bioaccumulative potential: Fish 427 - 1,158

Mobility in soil: No data available

Results of PBT and vPvB PBT/vPvB assessment not available as chemical safety assessment not required/not conducted assessment:

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

Section 13: Disposal Information

Product disposal: Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Section 14: Transport Information

DOT: Proper Shipping Name

Naphthalene, crude

Hazard Class

4.1

UN Number

1334

Packing Group: III

IMO/IMDG: Proper Shipping Name

Naphthalene, crude

Hazard Class 4.1

UN Number: 1334

Packing Group: III

Reportable Quantity (RQ): 100 lbs Marine Pollutant: yes

Poison Inhalation Hazard: No

IATA: Proper Shipping Name

Naphthalene, crude

Hazard Class 4.1

UN Number: 1334

Packing Group: III

Section 15: Regulatory Information

SARA 302: No chemical in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313: The following components are subject to reporting levels established by SARA Title III, Section 313.
Naphthalene CAS-No. 91-20-3 Revision Date 2007-03-01

SARA 311/312: Fire hazard, acute health hazard, chronic health hazard.

Massachusetts Right To Know Naphthalene CAS-No. 91-20-3 Revision Date 2007-03-01
Components:

Pennsylvania Right To Know Naphthalene CAS-No. 91-20-3 Revision Date 2007-03-01
Components:

New Jersey Right To Know Naphthalene CAS-No. 91-20-3 Revision Date 2007-03-01
Components:

California Prop. 65: WARNING! This product contains a chemical known to the State of California to cause cancer.
Naphthalene CAS-No. 91-20-3 Revision Date 2007-03-01

Section 16: Other Information

Full text of H-statements referred to under sections 2 and 3.

Acute Tox. Acute toxicity

Aquatic Acute Acute aquatic toxicity

Aquatic Chronic Chronic aquatic toxicity

Carc. Carcinogenicity

Flam. Sol. Flammable solids

H228 Flammable solids
H302 Harmful if swallowed
H351 Suspected of causing cancer
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects

NFPA Rating

Health: 2
Chronic Health
Hazard: *
Fire: 2
Reactivity: 2

HMIS Rating

Health: 2
Fire: 2
Reactivity: 2

Disclaimer: In compliance with the OSHA Hazard communication Standard, 29 C.F.R 1910.1200, we are providing you with a Materials Safety Data Sheet (MSDS) for the hazardous material you are purchasing.

It is your responsibility to educate your employees on the safe use of the hazardous material. With this in mind, a copy should be forwarded to the supervisor of the user or to the user themselves, and copy should be retained in your files for future reference.

Colonial Metals, Inc. makes no presentation as to the accuracy of the information in the MSDS. The information is believe to be correct; however, you (the customer), should preform your own investigation and independent verification. If you resell the product, you are responsible to forward the information in the MSDS to your customer.

Colonial Metals, Inc.

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