



SIGMA-ALDRICH

### Material Safety Data Sheet

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Version 1.40

#### Section 1 - Product and Company Information

Product Name: ASTM D5134 QUALITATIVE REFERENCE NAPHTHA STD.,6X1ML,  
 Product Number: 48265-U  
 Brand: Supelco Chemical

Company: Sigma-Aldrich  
 Street Address: 3050 Spruce Street  
 City, State, Zip, Country: SAINT LOUIS, MO 63103 US  
 Technical Phone: 314 771 5765  
 Fax: 800 325 5052

Emergency Phone: 414 273 3850 Ext. 5996

#### Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	OSHA	SARA 313
ASTM D5134 QUALITATIVE REFERENCE NAPHTHA STANDARD	None	Yes	Yes

  

Ingredient Name	CAS #	Percent	OSHA	SARA 313
PARAFFINS	None	>= 40.000 % <= 60.000 %	No	No
CYCLOPARAFFINS	None	>= 10.000 % <= 30.000 %	No	
AROMATICS	None	>= 10.000 % <= 25.000 %	No	
BENZENE	71-43-2	0.100 % 0.500 %	Yes	Yes
OLEFINS	None	>= 0.010 % <= 0.200 %	No	

Formula  
Synonyms

#### Section 3 - Hazards Identification

**Emergency Overview**  
 Flammable (USA) Highly Flammable (EU), Toxic.  
 Highly flammable. May cause cancer. Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. Irritating to respiratory system and skin. Risk of serious damage to eyes.  
 Danger: contains benzene, cancer hazard. Confirmed Carcinogen (US). Calif. Prop. 65 reproductive hazard. Target organ(s): Blood, Bone marrow.

HMIS Rating  
Health: 2\* Flammability: 3 Reactivity: 0

NFPA Rating  
Health: 2 Flammability: 3 Reactivity: 0

\*additional chronic hazards present.

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For additional information on toxicity, please refer to Section 11.

#### Section 4 - First Aid Measures

**Oral Exposure**  
If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately.

**Inhalation Exposure**  
If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

**Dermal Exposure**  
In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

**Eye Exposure**  
In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

#### Section 5 - Fire Fighting Measures

**Flammable Hazards:** Yes

**Explosion Hazards**  
Vapor may travel considerable distance to source of ignition and flash back. Container explosion may occur under fire conditions.

**Autoignition Temp:** N/A **Flammability:** Yes

**Extinguishing Media Suitable**  
Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

**Firefighting Protective Equipment**  
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.  
**Specific Hazard(s)**  
Flammable liquid. Vapor may travel considerable distance to source of ignition and flash back. Emits toxic fumes under fire conditions.

#### Section 6 - Accidental Release Measures

**Procedure to be Followed in Case of Leak or Spill**  
Evacuate area. Shut off all sources of ignition.

**Procedure(s) of Personal Precaution(s)**  
Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

**Methods for Cleaning Up**  
Cover with dry-lime, sand, or soda ash. Place in covered containers using non-sparking tools and transport outdoors. Ventilate area and wash spill site after material pickup is complete.

#### Section 7 - Handling and Storage

**Handling User Exposure**  
Do not breathe vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

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Safety and Environmental  
Health

**Storage**  
**Suitable**

Keep container closed. Keep away from heat, sparks, and open flame. Store in a cool dry place.

**Section 8 - Exposure Controls / PPE**

**Engineering Controls**

Safety shower and eye bath. Use nonsparking tools. Use only in a chemical fume hood.

**Personal Protective Equipment**

**Respiratory**

Government approved respirator.

**Hand**

Compatible chemical-resistant gloves.

**Eye**

Chemical safety goggles.

**General Hygiene Measures**

Wash contaminated clothing before reuse. Wash thoroughly after handling.

**Section 9 - Physical/Chemical Properties**

**Appearance**

**Physical State**

Liquid

**Molecular Weight:** N/A

**pH** N/A

**BP/BP Range** N/A

**MP/MP Range** N/A

**Freezing Point** N/A

**Vapor Pressure** N/A

**Vapor Density** N/A

**Saturated Vapor Conc.** N/A

**SG/Density** N/A

**Bulk Density** N/A

**Odor Threshold** N/A

**Volatile%** N/A

**VOC Content** N/A

**Water Content** N/A

**Solvent Content** N/A

**Evaporation Rate** N/A

**Viscosity** N/A

**Partition Coefficient** N/A

**Decomposition Temp.** N/A

**Flash Point °F** N/A

**Flash Point °C** N/A

**Explosion Limits** N/A

**Flammability** N/A

**Autoignition Temp** N/A

**Solubility** N/A

N/A = not available

**Section 10 - Stability and Reactivity**

**Stability**

Stable

Stable

**Materials to Avoid**

Acids, Bases, Halogens, Strong oxidizing agents, Avoid contact with metal salts.

**Hazardous Decomposition Products**

**Hazardous Decomposition Products**

Carbon monoxide, Carbon dioxide.

**Hazardous Polymerization**

**Hazardous Polymerization**

Will not occur.

**Section 11 - Toxicological Information**

**Route of Exposure**

**Skin Contact**

Causes skin irritation.

**Skin Absorption**

Toxic if absorbed through skin.

**Eye Contact**

Causes severe eye irritation.

**Inhalation**

Toxic if inhaled. Vapor or mist is irritating to the mucous membranes and upper respiratory tract.

**Ingestion**

Toxic if swallowed.

**Target Organ(s) or System(s)**

Blood, Bone marrow, Eyes, Female reproductive system.

**Signs and Symptoms of Exposure**

Exposure can cause: Narcotic effect. Inhalation of high concentrations of benzene may have an initial stimulatory effect on the central nervous system characterized by exhilaration, nervous excitation and/or giddiness, depression, drowsiness, or fatigue. The victim may experience lightness in the chest, breathlessness, and loss of consciousness. Tremors, convulsions, and death due to respiratory paralysis or circulatory collapse can occur in a few minutes to several hours following severe exposures. Aspiration of small amounts of liquid immediately causes pulmonary edema and hemorrhage of pulmonary tissue. Direct skin contact may cause erythema. Repeated or prolonged skin contact may result in drying, scaling dermatitis, or development of secondary skin infections. The chief target organ is the hematopoietic system. Bleeding from the nose, gums, or mucous membranes and the development of purpuric spots, pancytopenia, leukopenia, thrombocytopenia, aplastic anemia, and leukemia may occur as the condition progresses. The bone marrow may appear normal, aplastic or hyperplastic, and may not correlate with peripheral blood-forming tissues. The onset of effects of prolonged benzene exposure may be delayed for many months or years after the actual exposure has ceased.

**RTECS Number:** N/A

**Chronic Exposure Carcinogen**

Result: This is or contains a component that has been reported to be carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification.

**Chronic Exposure - Mutagen**

Result: Laboratory experiments have shown mutagenic effects.

**Section 12 - Ecological Information**

No data available.

### Section 13 - Disposal Considerations

#### Appropriate Method of Disposal of Substance or Preparation

Contact a licensed professional waste disposal service to dispose of this material.  
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable.  
Observe all federal, state, and local environmental regulations.

### Section 14 - Transport Information

#### DOT

Proper Shipping Name: Benzene  
UN#: 1114  
Class: 3  
Packing Group: Packing Group II  
Hazard Label: Flammable liquid  
PIH: Not PIH

#### IATA

Proper Shipping Name: Benzene  
IATA UN Number: 1114  
Hazard Class: 3  
Packing Group: II

### Section 15 - Regulatory Information

#### EU Additional Classification

Symbol of Danger: F T

Indication of Danger

Highly Flammable, Toxic.

**Risk Statements** R: 45 48/23/24/25 37/38 41 11

May cause cancer. Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. Irritating to respiratory system and skin. Risk of serious damage to eyes. Highly flammable.

**Safety Statements** S: 53 45

Restricted to professional users. Attention - Avoid exposure - obtain special instructions before use. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

#### US Classification and Label Text

Indication of Danger

Flammable (USA) Highly Flammable (EU), Toxic.

**Risk Statements**

Highly flammable. May cause cancer. Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. Irritating to respiratory system and skin. Risk of serious damage to eyes.

**Safety Statements**

Restricted to professional users. Attention - Avoid exposure - obtain special instructions before use. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**US Statements**

Danger: contains benzene, cancer hazard. Confirmed Carcinogen (US). Calif. Prop. 65 reproductive hazard. Target organ(s): Blood, Bone marrow.

#### United States Regulatory Information

SARA Listed: Yes

Notes: This product is or contains a component that is subject to SARA313 reporting requirements.

#### OSHA Remarks

OSHA-regulated carcinogen. See CFR title 29 part 1910.1028

#### United States - State Regulatory Information

##### California Prop - 65

This product is or contains chemical(s) known to the state of California to cause cancer. This product is or contains chemical(s) known to the state of California to cause developmental toxicity. This product is or contains chemical(s) known to the state of California to cause male reproductive toxicity.

#### Canada Regulatory Information

##### WHMIS Classification

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: No

NDSL: No

### Section 16 - Other Information

#### Disclaimer

For R&D use only. Not for drug, household or other uses.

#### Warranty

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

