

MATERIAL SAFETY DATA SHEET



Conforms to 93/112/EC and ISO 11014-1

1. Chemical Product and Company Identification

Product Name: Naphthalene -- Scintillation Grade

Product Number: SFC-40

Chemical Names/

Description:

Naphthene; mothballs; tar camphor; naphthalin; white-tar

Manufacturer

National Diagnostics
305 Patton Drive
Atlanta, GA 30338

Telephone Numbers

(800) 526-3867
(404) 699-2121

Emergency Number

Chemtrec
(800) 424-9300

2. Composition/Information on Ingredients

Component	% Comp.	CAS #	EINECS #	TLV (Units)
Naphthalene	>95	91-20-3	202-049-5	10ppm, 52mg/m3(TWA)

EEC LABEL SYMBOL AND CLASSIFICATION



HARMFUL



HIGHLY
FLAMMABLE

R: 11-22-36/37/38

Highly flammable. Harmful if swallowed. Irritating to eyes, respiratory system and skin

S: 7-16-26-36

Keep container tightly closed. Keep away from sources of ignition--no smoking. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

3. Hazards Identification

Appearance and Odor

White crystals with strong coal tar odor (moth balls).

EMERGENCY OVERVIEW - IMMEDIATE HAZARD

WARNING! HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. MAY CAUSE ALLERGIC SKIN REACTION.

EMERGENCY OVERVIEW - CHRONIC HAZARD WARNING:

CHRONIC EFFECTS INCLUDE DAMAGE TO THE LIVER, KIDNEY, BLOOD AND CENTRAL NERVOUS SYSTEM.

Potential Health Effects

Inhalation

Inhalation of dust or vapors can cause headache, nausea, vomiting, extensive sweating, and disorientation.

Ingestion

Toxic. Harmful if swallowed. May cause liver and kidney damage.

Skin

Can irritate the skin and, on prolonged contact.

Eyes

Vapors and solid causes irritation.

Signs and Symptoms of Overexposure

Inhalation

The predominant reaction is delayed intravascular hemolysis with symptoms of anemia, fever, jaundice, and kidney liver damage.

Ingestion

May cause methemoglobinemia, cyanosis, convulsions, and death. May cause severe digestive tract irritation with abdominal pain, nausea, vomiting and diarrhea. Ingestion of large quantities may cause severe hemolytic anemia and hemoglobinuria.

Skin

May cause rashes and allergy. Sensitized individuals may suffer a severe dermatitis.

Eyes

Redness and pain. Very high exposures can damage the nerves of the eye.

Carcinogenicity

Not classifiable as a human carcinogen.

Mutagenicity

Micronucleus test on human lymphocyte yielded 30 mg/L; Cytogenetic analysis on hamster ovary yielded 30 mg/L; Sister chromatid exchange on hamster ovary yielded 15 mg/L. Standard Draize tests: administration onto the skin of a rabbit yielded 495 mg, which is mild; and administration into a rabbit's eye yielded 100 mg, which is also mild.

Reproductive Toxicity

No information available.

Teratogenic Effects

Naphthalene and its metabolites have been reported to cross the human placenta in amounts sufficient to cause fetal toxicity.

Routes of Entry

Ingestion, inhalation, skin and eye contact.

Target Organ Statement

May affect liver, kidney, blood and central nervous system.

4. First Aid Measures

Inhalation

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion

DO NOT INDUCE VOMITING. If swallowed and the person is conscious, immediately give large

amounts of water. Get medical attention.

Skin

Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eyes

Immediately flush eyes with plenty of water for at least fifteen minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

5. Fire Fighting Measures

Flash Point	174F (78.8C)	Flammable Limits	LEL:0.9; UEL:5.9
Flash Point Method	N.D.	Autoignition temperature	979F (526C)

Extinguishing media

Use media appropriate to the primary cause of fire.

Protective Equipment

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

Hazardous Combustion Products

Fire may produce irritating or poisonous gases.

Unusual Fire and Explosion Hazards

Emits toxic fumes under fire conditions.

NFPA Codes: Health 2 Flammability 2 Reactivity 0

6. Accidental Release Measures

Steps to be taken in case material is released or spilled

Eliminate source of ignition. Ventilate area. Cover with absorbent material (soda ash) to confine spill and sweep or shovel into container. Close container tightly. Avoid breathing vapors.

Waste Disposal Method

Disposal must be made in accordance with applicable federal, state, and local regulations.

Personal Precautions

Wear appropriate protective equipment as specified in section 8.

7. Handling and Storage

Handling

Avoid contact and inhalation. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling. Transfer methods should avoid static sparks. Use explosion proof ventilation.

Storage

Keep in a tightly closed container, stored in a cooled, dry, ventilated area away from sources of heat or ignition. Protect from physical damage. Isolate from incompatible materials (section 10).

Storage Temperature

Room Temperature

Disposal

Observe all national, state, and local regulations regarding product disposal. Containers of this material

may be hazardous when empty since they retain product residues (dust, solids).

8. Exposure Controls/Personal Protection

Airborne Exposure Limits

Component: Napthalene

ACGIH Threshold Limit Value (TLV): 10ppm, 52mg/m³(TWA)

OSHA Permissible Exposure Limit (PEL): 10ppm, 50mg/m³

Engineering Controls

Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

Respiratory Protection

If TLV of the product or any component is exceeded, a NIOSH/MSMA jointly approved self-contained breathing apparatus with a full facepiece operated in pressure-demand or other positive pressure mode is advised.

Eye Protection

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

Skin Protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Other Control Measures

9. Physical Properties

Boiling point	424F (218C)	Evaporation Rate
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Napthalene -- Scintillation Grade	Oral Rat LD50 (mg/kg):	490
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Component Cancer List Status

	NTP Carcinogen		IARC Category
	Known	Anticipated	
Napthalene	No	No	None

12. Ecological Information

Napthalene

When released into the soil, this material may biodegrade to a moderate extent. When released into the soil, this material is expected to leach into groundwater. When released into the soil, this material is expected to quickly evaporate. When released to water, this material is expected to quickly evaporate. When released into water, this material may biodegrade to a moderate extent. When released into the water, this material is expected to have a half-life between 1 and 10 days. This material may bioaccumulate to some extent. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into the air this material is expected to have a half-life of less than 1 day.

13. Disposal Considerations

Observe all national, state, and local regulations regarding product disposal. Containers of this material may be hazardous when empty since they retain product residues (dust, solids).

14. Transport Information

D.O.T.

Proper Shipping Name: Naphthalene, Refined

Hazard Class: 4.1

UN Number: UN1334

Packing Group: III

I.A.T.A.

Proper Shipping Name: Naphthalene, Refined

Hazard Class: 4.1

UN Number: UN1334

Packing Group: III

I.M.O.

Proper Shipping Name: Naphthalene, Refined

Hazard Class: 4.1

UN Number: UN1334

Packing Group: III

15. Regulatory Information

United States

TSCA Regulatory Statement

All intentional ingredients are listed on the TSCA Inventory.

SARA 311/312 Hazard Categories

Component	Fire	Pressure	Reactivity	Acute	Chronic
Naphthalene	Yes	No	No	Yes	Yes

Europe

EEC Regulatory

All intentional ingredients are listed on the European EINECS Inventory.

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16. Other Information

NFPA Codes: Health 2 Flammability 2 Reactivity 0

MANUFACTURER DISCLAIMER: The information given herein is offered in good faith as accurate, but without guarantee. Conditions of the use and suitability of the product for particular uses are beyond our control. All

risks of use of the product are therefore assumed by the user. Nothing is intended as a recommendation for uses which infringe valid patents or as extending license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users.