









Material Safety Data Sheet

WHMIS (Pictograms)	WHMIS (Classification)	Personal protective equipment
 	Class B-4: Flammable solid. Class D-2B: Material causing other toxic effects (Toxic).	   

Section 1. Product and Company Identification

Product name / Trade name	Naphthalene B	Associated Product's Item Code	Naphthalene B
Synonym	Refined naphthalene	CAS #	91-20-3
Chemical family	Aromatic.	Validation date	2012-11-20.
Chemical formula	C ₁₀ H ₈	Print date	2013-03-06.
Manufacturer/Supplier	Recochem Inc. 850 Montee de Liesse Montreal, Quebec H4T 1P4 (514) 341-3550 www.recochem.com	In case of emergency	Recochem Inc. Communications and Regulatory Affairs Department (905) 878-5544
Material uses	Consumer products: Insecticide. Moth preventative. Other non-specified industry: INTERMEDIATE (PHTHALIC ANHYDRIDE, NAPHTHOL, "TERTRALIN," "DECALINE," CHLORINATED NAPHTHALENES, NAPHTHYL AND ANPHTOL DERIVATIVES, DYES); MOTH REPELLENT; FUNGICIDE; SMOKELESS POWDER; CUTTING FLUID; LUBRICANT; SYNTHETIC RESINS; SYNTHETIC TANNING; PRESERVATIVE; TEXTILE CHEMICALS; EMULSION BREAKERS; SCINTILLATION COUNTERS; ANTISEPTIC.		

Section 2. Hazards identification

Emergency Overview	WARNING! HARMFUL IF SWALLOWED. MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. SUSPECT CANCER HAZARD - MAY CAUSE CANCER. Harmful if swallowed. Avoid exposure - obtain special instructions before use. Do not ingest. Avoid contact with eyes, skin and clothing. May cause target organ damage, based on animal data. May cause cancer, based on animal data. Risk of cancer depends on duration and level of exposure. Wash thoroughly after handling.
Potential Acute Health Effects	See section 11 for more detailed information on health effects and symptoms. Slightly hazardous by the following route of exposure: of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.
Note to Physician	Not available.

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**Section 3. Composition, information on ingredients****Canada**

Name	CAS number	Conc. (% w/w)
Naphthalene	91-20-3	100

There are no other ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Section 4. First aid measures

Eye contact	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 30 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
Skin contact	In case of contact, immediately flush skin with plenty of water for at least 30 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
Inhalation	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
Ingestion	Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Notes to physician	No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Section 5. Fire-fighting measures

Products of combustion	Decomposition products may include the following materials: carbon dioxide carbon monoxide
Fire-fighting media and instructions	Use an extinguishing agent suitable for the surrounding fire.
Fire Hazards	Yields flammable vapors on heating above melting point.
Explosion Hazards	Vapour forms explosive mixture with air. Material in powder form, capable of creating a dust explosion.

Section 6. Accidental release measures

Small spill and leak	Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
Large spill and leak	Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

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**Section 7. Handling and Storage**

Handling	Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Storage	Do not store above the following temperature: 38°C (100.4°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Engineering controls	If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Personal protection	<p>Eyes Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. Recommended: face shield safety glasses with side-shields</p> <p>Body Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: overall</p> <p>Respiratory Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.</p> <p>Hands Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. >8 hours (breakthrough time): nitrile rubber</p>

United States**Product name**

Naphthalene

Exposure limits**ACGIH TLV (United States, 1/2008).**

TWA: 10 ppm 8 hour(s).

TWA: 52 mg/m³ 8 hour(s).

STEL: 15 ppm 15 minute(s).

STEL: 79 mg/m³ 15 minute(s).**OSHA PEL 1989 (United States, 3/1989).**

TWA: 10 ppm 8 hour(s).

TWA: 50 mg/m³ 8 hour(s).

STEL: 15 ppm 15 minute(s).

STEL: 75 mg/m³ 15 minute(s).**NIOSH REL (United States, 6/2008).**

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TWA: 10 ppm 10 hour(s).
 TWA: 50 mg/m³ 10 hour(s).
 STEL: 15 ppm 15 minute(s).
 STEL: 75 mg/m³ 15 minute(s).
OSHA PEL (United States, 11/2006).
 TWA: 10 ppm 8 hour(s).
 TWA: 50 mg/m³ 8 hour(s).

Canada Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			
Ingredient	List name	ppm	mg/m³	Other	ppm	mg/m³	Other	ppm	mg/m³	Other	Notations
Naphthalene	US ACGIH 1/2008	10	52	-	15	79	-	-	-	-	
	AB 6/2008	10	52	-	15	79	-	-	-	-	[1]
	BC 6/2008	10	-	-	15	-	-	-	-	-	[1]
	ON 6/2008	10	52	-	15	78	-	-	-	-	
	QC 6/2008	10	52	-	15	79	-	-	-	-	

[1] Absorbed through skin.

Section 9. Physical and chemical properties

Physical State and Appearance	Solid. [Crystalline solid. (Flakes, chips and balls.)]	Odour	Characteristic.
Molecular weight	128.18 g/mole	Taste	Not available.
pH	Not applicable.	Colour	White.
Boiling/condensation point	215 to 220°C (419 to 428°F)	Volatility	Not available.
Melting/freezing point	78 to 80°C (172.4 to 176°F)	Evaporation rate	<1 (Butyl acetate. = 1)
Relative density	1.02	Odour Threshold	0.3 ppm
Vapor pressure	0.0067 kPa (0.05 mm Hg)	Viscosity	Not available.
Vapour Density	4.42 [Air = 1]	Solubility	Insoluble in the following materials: cold water.
VOC content	0 % (w/w)	Other Properties	Not available.
The product is:	Flammable.		
Auto-ignition temperature	526°C (978.8°F)		
Flash point	Closed cup: 79°C (174.2°F)		
Flammable limits	Lower: 0.9% Upper: 5.9%		
Fire hazards in the presence of various substances	Slightly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge. Non-flammable in the presence of the following materials or conditions: shocks and mechanical impacts. Yields flammable vapors on heating above melting point.		

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**Section 10. Stability and reactivity**

Stability	The product is stable.
Conditions of instability	Not available.
Incompatibility with various substances	Slightly reactive or incompatible with the following materials: oxidizing materials and acids. Avoid contamination with reactive substances.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological Information**Canada****Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Naphthalene	LD50 Dermal	Rabbit	>20 g/kg	-
	LD50 Dermal	Rat	>2500 mg/kg	-
	LD50 Oral	Rat	490 mg/kg	-
Conclusion/Summary	Not available.			

Chronic toxicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Naphthalene	A4	2B	-	-	Possible	-

Mutagenicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Reproductive Toxicity

Conclusion/Summary : Not available.

IDLH :
250 ppm

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**Section 12. Ecological information**

For accidental discharges into the environment, see Section 6: "Accidental Release Measures" for suggested instructions.

Ecotoxicity : This product shows a high bioaccumulation potential.

Canada**Aquatic ecotoxicity**

Product/ingredient name	Result	Species	Exposure
Naphthalene	Acute EC50 1.96 mg/L Fresh water	Daphnia - Daphnia magna - <24 hours	48 hours
	Acute LC50 2350 ug/L Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 213 ug/L Fresh water	Fish - Melanotaenia fluviatilis - LARVAE - 1 days	96 hours

Conclusion/Summary : Not available.

Biodegradability

Conclusion/Summary : Not available.

Section 13. Disposal considerations

Waste information The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14. Transport information**Canada TDG Classification**

Class	Class 4.1: Flammable solid.
Subsidiary class	-
Proper Shipping Name (Canada) TDG	Naphthalene, crude or Naphthalene, refined
UN number	UN 1334
Packing Group	III
Special provisions	Not available.



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**IMDG Classification**

Class	Class 4.1: Flammable solid.
Subsidiary class	-
Proper Shipping Name IMDG	Naphthalene, crude or Naphthalene, refined. Marine pollutant
UN number	UN 1334
Packing Group	III
Marine pollutant	Not a pollutant.
Special provisions	<u>Emergency schedules (EmS)</u> 4.1-05

**United States DOT (Classification)**

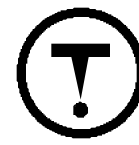
Class	Class 4.1: Flammable solid.
Subsidiary class	-
Proper Shipping Name (United States) DOT	Naphthalene, crude or Naphthalene, refined
UN number	UN 1334
Packing Group	III
Special provisions	Reportable quantity 100 lbs. (45.4 kg)



International Air Transport Association (IATA) For air shipment classification and associated regulations, please refer to the latest edition of IATA Dangerous Goods Regulations.

Section 15. Regulatory information

WHMIS Classification (Canada)	Class B-4: Flammable solid. Class D-2B: Material causing other toxic effects (Toxic).
Canada Domestic Substances List (DSL) Status	This material is listed or exempted.



HCS Classification (U.S.A.)
Toxic material
Carcinogen
Target organ effects

U.S.A. Regulatory Lists
TSCA 4(a) final test rules Naphthalene
TSCA 8(a) PAIR: Naphthalene
United States inventory (TSCA 8b): This material is listed or exempted.
TSCA 12(b) one-time export: Naphthalene

Hazardous Material Information System (U.S.A.)

Health	2
Flammability	2
Reactivity	0
Personal protection	E

National Fire Protection Association (U.S.A.)

Health	2	Flammability	2	Reactivity	0
Specific hazard					

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**Section 16. Other information**

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Notice to reader

*To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.*

MSDS are available at www.recochem.com