



MATERIAL SAFETY DATA SHEET

NAPHTALENE MARBLES

Date Issued: June 2014 and is valid for 3 years from this date.

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Revision No.: 4

Print Date: 3/10/14

1. PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: NAPHTALENE MARBLES

SUPPLIER: EFEKTO

PO BOX 652147

BENMORE

2010

TEL No. 011 287 5700

EMERGENCY TELEPHONE NUMBERS:

SPILLAGES: 083 1233 911

Fax: 086 685 3129

POISONINGS:

National Poison Centre 021-9386084 (office hours).

021-9316129 (after hours).

082 446 8946

Use: A fumigant for repelling of fish-and clothes moths.

2. HAZARDS IDENTIFICATION

- Irritant.
- Very toxic to aquatic organisms.

Likely routes of exposure:

Eye contact, skin contact, ingestion, and inhalation.

General:

No adverse health effects are expected when the product is used in accordance with label directions.

Inhalation:

Inhalation of vapors can cause headache, nausea, vomiting, extensive sweating, and disorientation. The predominant reaction is delayed intravascular hemolysis with symptoms of anemia, fever, jaundice, and kidney or liver damage.

Ingestion:

Can cause headache, profuse perspiration, listlessness, dark urine, nausea, vomiting and disorientation.

Intravascular hemolysis may produce coma with or without convulsions. Death may result from renal failure.

Skin Contact:

Can irritate the skin and, on prolonged contact, may cause rashes and allergy. "Sensitized" individuals may suffer a severe dermatitis.

Eye Contact:

Vapors and solid causes irritation, redness and pain. Very high exposures can damage the nerves of the eye.



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Chronic Exposure:

Has led to cataract formation in eyes. May cause skin allergy.

Aggravation of Pre-existing Conditions:

Persons with pre-existing skin, blood or vascular disorders or impaired respiratory function may be more susceptible to the effects of the substance. Particularly susceptible individuals are found in the general population, most commonly in dark skinned races.

Symbol: Xn ; N

Indication of Hazard: Harmful; Dangerous for the environment.

Risk Phrases: R22, R36/37, R40, R50/53

UN No: 1334

3. COMPOSITION/INFORMATION ON INGREDIENTS**Active ingredients:**

Active ingredients.	CAS No.:	EC No.:
Naphthalene 1000 g/kg	091-20-3	202-049-5

Chemical Name: Naphthalene

Chemical Family: Naphthalene

Chemical Formula: C₁₀H₈

NIOSH/RTECS No.: QJ0525000

4. FIRST-AID MEASURES**Inhalation:**

If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

Skin contact:

Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.

Eye contact:

Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

Ingestion:

If vomiting occurs, keep head lower than hips to help prevent aspiration. If person is unconscious, turn head to side. Get medical attention immediately.

Note to physician:



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For ingestion, consider gastric lavage. Consider oxygen.

5. FIRE-FIGHTING MEASURES

Fire and explosion hazards:

Moderate fire hazard. Dust/air mixtures may ignite or explode.

Extinguishing media:

Regular dry chemical, dry sand, earth, regular foam, water

Large fires:

Use regular foam or flood with fine water spray.

Fire fighting:

Move container from fire area if it can be done without risk. Closed containers can explode when exposed to heat.

Cool containers with water spray until well after the fire is out. Stay away from the ends of tanks.

For fires in cargo or storage area: Cool containers with water from unmanned hose holder or monitor nozzles until well after fire is out. If this is impossible then take the following precautions: Keep unnecessary people away, isolate hazard area and deny entry. Let the fire burn.

Personal protective equipment:

Fire may produce irritating vapours, or other products of combustion. Fire fighters and others that may be exposed should wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Avoid heat, flames, sparks and other sources of ignition. Do not touch spilled material.

Small spills: Collect spilled material in appropriate container for disposal. Move containers away from spill to a safe area. **Large spills:** Wet down area with water. Dike for later disposal. Remove sources of ignition. Keep unnecessary people away, isolate hazard area and deny entry.

Take care to avoid the contamination of watercourses and drains and inform the appropriate authority in case of accidental contamination of watercourses.

7. HANDLING AND STORAGE

Handling:

Avoid contact with eyes. Wash hands before eating, drinking, chewing gum, smoking, or using the toilet

Storage:

Keep away from heat, sparks, and flame. Keep in tightly closed container. Closed containers exposed to heat may explode. Contact with strong oxidizers may cause fire or explosion.

Keep containers tightly closed, in a cool, well-ventilated place. Store away from food, drink and animal feeding stuffs. Keep away from children and unauthorized adults. Adhere to local regulations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION



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Occupational exposure limits

Exposure limits:

Naphthalene:

OSHA, TWA: 10 ppm (50 mg/m³)

OSHA STEL: 15 ppm (79 mg/m³) (vacated by 58 FR 35338, June 30, 1993)

ACGIH TWA: 10 ppm (skin)

ACGIH STEL: 15 ppm (skin)

NIOSH : 10 ppm (50 mg/m³) recommended TWA 10 hour(s)

NIOSH : 15 ppm (75 mg/m³) recommended STEL

Ventilation:

Provide local exhaust ventilation system. Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Ensure compliance with applicable exposure limits.

Eye protection:

Wear splash resistant safety goggles with a face-shield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Clothing:

Protective clothing is not required.

Gloves:

Wear appropriate chemical resistant gloves.

Respirator:

NIOSH and/or OSHA approved respirators (chemical cartridge respirator with organic vapor cartridge).

Above these levels, a self-contained breathing apparatus is recommended

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White crystalline volatile solid.

Odour: Odor of coal tar.

Flash point (open cup): 87,8 °C

Flammability: Product is combustible.

Explosive properties: No data.

Density: 1.14 g/ml

Vapor pressure(mm hg): 0.05

pH: Not applicable.

Water Solubility at 20°C (g/L): Negligible (less than 0.1 %).

Solvent solubility:

Soluble in: Alcohol, benzene, carbon tetrachloride, fixed and volatile oils

10. STABILITY AND REACTIVITY

Storage stability: Stable at room temperature in sealed containers. Sublimes appreciably at temperatures above melting point.

Conditions to avoid:

Avoid heat, flames, sparks and other sources of ignition.

Incompatibilities: oxidizing materials, combustible materials

Polymerization: Will not polymerize.



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Incompatibility: Melted naphthalene will attack some forms of plastics, rubber, and coatings

Hazardous decomposition products: Thermal decomposition products: oxides of carbon

11. TOXICOLOGICAL INFORMATION

Acute oral LD₅₀ : 490 mg/ (Rat).

Acute dermal LD₅₀: >20 gm/kg skin-rabbit.

Acute inhalation LC₅₀ : >340 mg/m³/1 hour(s) inhalation-rat Irritating to respiratory system.

Acute skin irritation: Mild irritating to skin.

Acute eye irritation: Mild irritating to eyes.

Dermal sensitisation: May cause sensitization by skin contact.

Carcinogenicity/ Teratogenicity/ Mutagenicity: ACGIH: A4 -Not Classifiable as a Human Carcinogen

12. ECOLOGICAL INFORMATION

No ecological problems are expected when the product is handled and used with due care.

Fish toxicity:

2600 µg/L 96 hour(s) LC₅₀ (Mortality) Rainbow trout, donaldson trout (Oncorhynchus mykiss)

Daphnia magna:

2194 µg/L 48 hour(s) EC₅₀ (Immobilization).

Algal toxicity:

<695 µg/L 11-14 hour(s) MATC (Growth) Red algae (Champia parvula)

Bioconcentration:

10844 µg/L 24 hour(s) BCF (Residue).

Environmental Fate:

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 bio-accumulate to some extent. When released into the air, this material is expected to be readily degraded by reaction with photo chemically 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

Disposal:

Dispose in accordance with all applicable federal, state, and local environmental regulations.

Package product wastes:

Emptied containers retain vapour and product residues. Observe all labeled safeguards until container is destroyed. Combustible containers should be disposed of in pesticide incinerators.



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14. TRANSPORT INFORMATION

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ADR

Proper Shipping Name: Naphthalene, refined
Classification Code: F1
Class: 4.1
Label: 4.1
Packaging group: III
Hazard ID No.:

IMDG:

Proper Shipping Name: Naphthalene, refined
Class: 4.1
Label: 4.1
Packing Group: III

IATA (I.C.A.O.):

Proper Shipping Name: Naphthalene, refined
Hazard Class: 4.1
Label: Flammable solid.
Packing Group: III
Y419 (10kg); 419 (25 kg)
420 (100 kg)

Tremcard No: 41GF1-III

15. REGULATORY INFORMATION

Symbol: Xn; N

Indication of Danger: Harmful; Dangerous for the environment.

Risk phrases:

- R 22** Harmful if swallowed.
- R 36/37** Irritating to eyes and respiratory system.
- R40** Limited evidence of a carcinogenic effect.
- R50/53** Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

- S 2** Keep out of reach of children.
- S 13** Keep away from food, drink and animal feeding stuffs.
- S20/21** When using do not eat, drink or smoke.
- S 25** Avoid contact with eyes.
- S 26** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.



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- S 36/37** Wear suitable protective clothing and gloves.
S 46 If swallowed, seek medical advice immediately and show this container or label.
S60 This material and its container must be disposed of as hazardous waste.
S61 **Avoid release to the environment. Refer to special instructions/Safety data sheet.**

National legislation: In accordance with the South African National Road Traffic Act, 1996 (Act 93 of 1996), the Fire Brigade Act, 1987 (Act 99 of 1987) and the Occupational Health and Safety Act, 1993 (Act. No. 85 of 1993)

16. OTHER INFORMATION

Compiled by: Danie Fourie

All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct. This information applies to the PRODUCT AS SUCH. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear.

It is the responsibility of persons in receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produces formulations(s) containing this product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.

REFERENCES

- Protea Chemicals, Naphtalene MSDS, 2005.
- EINECS
- ADR 2011, Part 3.
- IMDG Code, 2005 Edition, Vol. 2.
- IATA Dangerous goods regulations, Effective 1 January 2011

END OF MSDS.