

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 13/01/2011 Revision date: 02/01/2018 Supersedes: 23/02/2012 Version: 4.0

DLM-1607

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Substance

Substance name : 1-METHYLNAPHTHALENE (D10, 98%)

EC No : 201-966-8 (Unlabeled)

 CAS No
 : 38072-94-5

 Product code
 : DLM-1607

 Formula
 : C10D7CD3

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : Professional use

Industrial/Professional use spec : For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.

50 Frontage Road Andover, MA 01810

USA

USA: 1-800-322-1174 Int: 1-978-749-8000 <u>cilsales@isotope.com</u> www.isotope.com

Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours) International: 1-703-741-5970 (24 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Tox. 4 (Oral) H302 Aguatic Chronic 2 H411

Full text of hazard classes and H-statements : see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Xn; R22 N; R51/53

Full text of R-phrases: see section 16

GHS-US classification

Flam. Liq. 4 H227 Acute Tox. 4 (Oral) H302 Aquatic Acute 2 H401 Aquatic Chronic 2 H411

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

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2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)





Signal word (CLP) : Warning

Hazard statements (CLP) : H302 - Harmful if swallowed

H411 - Toxic to aquatic life with long lasting effects

Precautionary statements (CLP) : P264 - Wash hands, forearms and face thoroughly after handling

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

P273 - Avoid release to the environment

P301+P312 - IF SWALLOWED: Call a doctor, a POISON CENTER if you feel unwell

P330 - Rinse mouth P391 - Collect spillage

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation

GHS-US labelling

Hazard pictograms (GHS-US)





IS07

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H227 - Combustible liquid

H302 - Harmful if swallowed

H411 - Toxic to aquatic life with long lasting effects

Precautionary statements (GHS-US) : P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking

P264 - Wash hands, forearms and face thoroughly after handling

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

P273 - Avoid release to the environment

P280 - Wear eye protection, face protection, protective clothing, protective gloves P301+P312 - If swallowed: Call a doctor, a POISON CENTER if you feel unwell

P330 - Rinse mouth

P370+P378 - In case of fire: Use alcohol resistant foam, carbon dioxide (CO2), dry

extinguishing powder to extinguish

P391 - Collect spillage

P403+P235 - Store in a well-ventilated place. Keep cool

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%	Classification according to Directive 67/548/EEC
1-METHYLNAPHTHALENE (D10, 98%)	(CAS No) 38072-94-5 (EC No) 201-966-8 (Unlabeled)	100	Xn; R22 N; R51/53
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1-METHYLNAPHTHALENE (D10, 98%)	(CAS No) 38072-94-5 (EC No) 201-966-8 (Unlabeled)	100	Acute Tox. 4 (Oral), H302 Aquatic Chronic 2, H411

Full text of R- and H-statements: see section 16

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Name	Product identifier	%	GHS-US classification
1-METHYLNAPHTHALENE (D10, 98%) (Main constituent)	(CAS No) 38072-94-5	100	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Aquatic Acute 2, H401 Aquatic Chronic 2, H411

Full text of H-statements: see section 16

Mixtures

Not applicable

SECTION 4: First aid measures

Description of first aid measures

First-aid measures general

First-aid measures after inhalation When symptoms occur: go into open air and ventilate suspected area. If not breathing, give

artificial respiration. Get medical advice/attention.

First-aid measures after skin contact Wash with plenty of soap and water. Get immediate medical advice/attention.

First-aid measures after eye contact Rinse cautiously with water for several minutes.

Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get First-aid measures after ingestion

medical advice/attention. Rinse mouth. Call a POISON CENTER or doctor/physician if you feel

: If you feel unwell, seek medical advice (show the label where possible). Evacuate danger area.

Most important symptoms and effects, both acute and delayed

: May be harmful if inhaled. May cause respiratory irritation. Symptoms/injuries after inhalation

Symptoms/injuries after skin contact : May be harmful in contact with skin. May cause moderate irritation.

Symptoms/injuries after eye contact May cause eve irritation.

Symptoms/injuries after ingestion Swallowing a small quantity of this material will result in serious health hazard. Harmful if

swallowed.

Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Fire-fighting measures

Extinguishing media

: Water spray. dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2). Suitable extinguishing media

Special hazards arising from the substance or mixture

No additional information available

Advice for firefighters

Firefighting instructions : Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing

apparatus. Do not enter fire area without proper protective equipment, including respiratory

protection.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Wear recommended personal protective equipment.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

: Use personal protective equipment as required. Avoid breathing dust, mist or spray. Do not **Emergency procedures**

breathe vapours. Ensure adequate air ventilation, Eliminate all ignition sources if safe to do so. Evacuate unnecessary personnel. Evacuate danger area. Special attention should be given to

low areas/pits where flammable vapours can accumulate.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

Environmental precautions

Prevent entry to sewers and public waters. Do not allow to enter drains or water courses. Avoid release to the environment.

Methods and material for containment and cleaning up

For containment : Dike and contain spill. Clean up any spills as soon as possible, using an absorbent material to collect it. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. For large spills, confine the spill in a dike and charge it with

wet sand or earth for subsequent safe disposal.

Methods for cleaning up This material and its container must be disposed of in a safe way, and as per local legislation.

Other information : Dispose of materials or solid residues at an authorized site.

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Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

Precautions for safe handling

Additional hazards when processed

: Avoid all eye and skin contact and do not breathe vapour and mist. Keep away from sources of ignition - No smoking. Take precautionary measures to prevent the formation of static

electricity.

Precautions for safe handling : Provide adequate ventilation to minimize dust and/or vapour concentrations.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or

smoke when using this product. Wash hands, forearms and face thoroughly after handling.

Conditions for safe storage, including any incompatibilities

: Store in a well-ventilated place. Keep container tightly closed. Technical measures Storage conditions : Store at room temperature away from light and moisture.

Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

Control parameters

1-METHYLNAPHTHALENE (D10, 98%) (38072-94-5)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	0.50000000 ppm
Italy - Portugal - USA ACGIH	Remark (ACGIH)	USA. ACGIH Threshold Limit Values (TLV). Lower respiratory tract irritation. Lung damage. Not classifiable as a human carcinogen. Danger of cutaneous absorption.

Exposure controls

Appropriate engineering controls : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work.

: Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus. Personal protective equipment







Materials for protective clothing : Wear suitable protective clothing and gloves Hand protection Wear suitable protective clothing and gloves.

Eye protection : Wear eye protection. Chemical goggles or face shield with safety glasses.

Skin and body protection Wear suitable protective clothing, gloves and eye/face protection.

Respiratory protection : In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator.

Environmental exposure controls : Avoid release to the environment

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state : Liquid Appearance : Liquid.

Molecular mass : 152.3 g/mol (Labeled)

Colour : Light yellow. Odour : No data available Odour threshold No data available No data available Relative evaporation rate (butylacetate=1) : No data available Melting point : -22 °C (- 8 °F) - lit Freezing point : No data available

Boiling point : 240 - 243 °C (464 - 469 °F) - lit Flash point : 82 °C (180 °F) - closed cup

Auto-ignition temperature : No data available Decomposition temperature : No data available Flammability (solid, gas) : No data available Vapour pressure : No data available

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Relative vapour density at 20 °C : No data available : No data available Relative density

Density : 1.001 g/mL at 25 °C (77 °F)

Solubility : No data available

Log Pow : 3.87

Log Kow : No data available : No data available Viscosity, kinematic Viscosity, dynamic : No data available No data available Explosive properties : No data available Oxidising properties Explosive limits : No data available

Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

Chemical stability

Stable if stored under recommended conditions.

Possibility of hazardous reactions

No additional information available

Conditions to avoid

Heat. Open flame. Sparks.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

Carbon oxides (CO, CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

: Oral: Harmful if swallowed. Acute toxicity

1-METHYLNAPHTHALENE (D10, 98%) (38072-94-5)	
LD50 oral rat	1840 mg/kg
ATE CLP (oral)	1840.000 mg/kg bodyweight

: Not classified Skin corrosion/irritation

> Skin rabbit

mild skin irritation (OECD 404 method)

Serious eye damage/irritation : Not classified

> Eves rabbit

No eye irritation

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Genotoxicity. Human lymphocytes. sister chromatid exchange

Carcinogenicity : Not classified : Not classified Reproductive toxicity STOT-single exposure : Not classified : Not classified STOT-repeated exposure Aspiration hazard : Not classified

Potential adverse human health effects and

Symptoms/injuries after inhalation

symptoms

: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

: May be harmful if inhaled. May cause respiratory irritation.

Symptoms/injuries after skin contact : May be harmful in contact with skin. May cause moderate irritation.

Symptoms/injuries after eye contact : May cause eye irritation.

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Symptoms/injuries after ingestion

: Swallowing a small quantity of this material will result in serious health hazard. Harmful if swallowed.

SECTION 12: Ecological information

Ecology - water : Toxic to aquatic life with long lasting effects.

1-METHYLNAPHTHALENE (D10, 98%) (38072-94-5)	
LC50 fish 1	9 mg/l Pimephales promelas (fathead minnow) - 48 h
EC50 Daphnia 1	1.42 mg/l Daphnia magna (Water flea) - 48 h

12.2. Persistence and degradability

1-METHYLNAPHTHALENE (D10, 98%) (38072-94-5)	
Persistence and degradability	May cause long-term adverse effects in the environment.
Biodegradation	Result: Not readily biodegradable.

12.3. **Bioaccumulative potential**

1-METHYLNAPHTHALENE (D10, 98%) (38072-94-5)	
Log Pow	3.87

Mobility in soil

No additional information available

Results of PBT and vPvB assessment

No additional information available

Other adverse effects

Other adverse effects

: Toxic to aquatic life with long lasting effects. Disposal must be done according to official

regulations. Avoid release to the environment.

SECTION 13: Disposal considerations

Waste treatment methods

Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and Local

environmental control regulations.

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed Product/Packaging disposal recommendations:

professional waste disposal service to dispose of this material.

Ecology - waste materials : Dispose of as unused product.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

UN number 14.1.

UN-No.(DOT) : 1993 DOT NA no. NA1993

UN proper shipping name

Proper Shipping Name (DOT) : Combustible liquid, n.o.s.

Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

DOT Symbols : D - Proper shipping name for domestic use only, or to and from Canada, G - Identifies PSN

requiring a technical name

Packing group (DOT) : III - Minor Danger

DOT Special Provisions (49 CFR 172.102) : IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite

(31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table

2 for UN2672)

T1 - 1.5 178.274(d)(2) Normal...... 178.275(d)(2) T4 - 2.65 178.274(d)(2) Normal...... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / (1 + a (tr - tf)) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during

filling

DOT Packaging Exceptions (49 CFR 173.xxx) : 150 DOT Packaging Non Bulk (49 CFR 173.xxx) : 203 DOT Packaging Bulk (49 CFR 173.xxx) : 241

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14.3. Additional information

Emergency Response Guide (ERG) Number : 128

Other information : No supplementary information available.

Overland transport

Packing group (ADR) : III

Class (ADR) : 9 - Miscellaneous dangerous substances and articles

Hazard identification number (Kemler No.) : 90
Classification code (ADR) : M6

Danger labels (ADR) : 9 - Miscellaneous dangerous substances and articles



Orange plates

90

Tunnel restriction code (ADR) : E
Limited quantities (ADR) 51
Excepted quantities (ADR) : E1

Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel.

MFAG-No : 171

Air transport

DOT Quantity Limitations Passenger aircraft/rail : 60 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 220 L

CFR 175.75)

Civil Aeronautics Law : Miscellaneous dangerous substances & articles(Hazardous materials notice Appended Table 1

Article 194 of the Enforcement Regulations)

14.4. Environmental hazards

Dangerous for the environment



Other information : No supplementary information available.

14.5. Special precautions for user

14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

1-METHYLNAPHTHALENE (D10, 98%) (38072-94-5)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.

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15.2. International regulations

CANADA

1-METHYLNAPHTHALENE (D10, 98%) (38072-94-5)

Listed on the Canadian DSL (Domestic Substances List)

15.2.1. National regulations

No additional information available

15.3. US State regulations

1-METHYLNAPHTHALENE (D10, 98%)(38072-94-5)	
U.S California - Proposition 65 - Carcinogens List	No
U.S California - Proposition 65 - Developmental Toxicity	No
U.S California - Proposition 65 - Reproductive Toxicity - Female	No
U.S California - Proposition 65 - Reproductive Toxicity - Male	No
State or local regulations	U.S Massachusetts - Right To Know List U.S Pennsylvania - RTK (Right to Know) List U.S New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Other information

: This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

Full text of R-, H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
H302	Harmful if swallowed
H411	Toxic to aquatic life with long lasting effects
R22	Harmful if swallowed
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
N	Dangerous for the environment
Xn	Harmful

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause

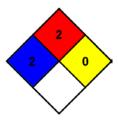
temporary incapacitation or residual injury.

NFPA fire hazard : 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can

occur.

NFPA reactivity : 0 - Material that in themselves are normally stable, even

under fire conditions.



HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 2 Moderate Hazard Physical : 0 Minimal Hazard

CIL Multi-Solvent Mixture SDS

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