

Safety Data Sheet acc. to OSHA HCS

Page 1/5 Printing date 03/23/2018 Revision date 03/21/2018 Version 1

1 Identification

Product identifier

Product name: 1-Methylnaphthalene

Stock number: A15327 CAS Number: 90-12-0 **EC** number: 201-966-8

Relevant identified uses of the substance or mixture and uses advised against. No further relevant information available. Identified use: SU24 Scientific research and development

Details of the supplier of the safety data sheet Manufacturer/Supplier:

Alfa Aesar Thermo Fisher Scientific Chemicals, Inc.

30 Bond Street

30 Bond Street Ward Hill, MA 01835-8099 Tel: 800-343-0660 Fax: 800-322-4757 Email: tech@alfa.com

www.alfa.com

Information Department: Health, Safety and Environmental Department

Emergency telephone number: During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0789.

2 Hazard(s) identification

Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)



Acute Tox. 4 H302 Harmful if swallowed.

Flam. Lig. 4 H227 Combustible liquid.

Hazards not otherwise classified No information known.

Label elements

GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) Hazard pictograms





GHS07

Signal word Warning Hazard statements H227 Combustible liquid. H302 Harmful if swallowed.

H302 Harmful if swallowed.

Precautionary statements
P210 Keep away from flames and hot surfaces. No smoking.
P280 Wear protective gloves / eye protection / face protection.
P264 Wash thoroughly after handling.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

WHMIS classification
R3.- Combustible liquid

B3 - Combustible liquid



Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System)



ALTH I Health (acute effects) = 1
E 2 Flammability = 2
ACTIVITY I Physical Hazard = 1

Other hazards

Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Substances CAS# Description: 90-12-0 1-Methylnaphthalene Concentration: ≤100% Identification number(s): EC number: 201-966-8

4 First-aid measures

Description of first aid measures

After inhalation
Supply fresh air. If required, provide artificial respiration. Keep patient warm.
Seek immediate medical advice.

After skin contact

Immediately wash with water and soap and rinse thoroughly.

(Contd. on page 2)

(Contd. of page 1)

Product name: 1-Methylnaphthalene

Seek immediate medical advice.

After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing Seek medical treatment.

Information for doctor

Most important symptoms and effects, both acute and delayed Harmful if swallowed.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

Extinguishing media
Suitable extinguishing agents Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Special hazards arising from the substance or mixture
If this product is involved in a fire, the following can be released:

Carbon monoxide and carbon dioxide

Advice for firefighters
Protective equipment:
Wear self-contained respirator.

Wear fully protective impervious suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Ensure adequate ventilation
Environmental precautions: Do not allow material to be released to the environment without proper governmental permits.

Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to section 13.
Ensure adequate ventilation.
Prevention of secondary hazards: Keep away from ignition sources.
Reference to other sections
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
Protective Action Criteria for Chemicals
PAC-1: 20 mg/m3
PAC-2: 61 mg/m3
PAC-3: 360 mg/m3

7 Handling and storage

Handling Precautions for safe handling

Recautions for sale nandming
Keep container tightly sealed.
Store in cool, dry place in tightly closed containers.
Ensure good ventilation at the workplace.
Information about protection against explosions and fires: Keep ignition sources away.

Conditions for safe storage, including any incompatibilities

Storage
Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility:
Store away from air.
Store away from oxidizing agents.
Further information about storage conditions:

Store under dry inert gas. Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. Specific end uy ce(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems:
Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters

Components with limit values that require monitoring at the workplace:

90-12-0 1-Methylnaphthalene (100.0%)

Long-term value: 3 mg/m³, 0.5 ppm TLV (USA) Skiň

EL (Canada)

Long-term value: 0.5 ppm

EV (Canada)

Long-term value: 0.5 ppm Skin

Additional information: No data

Exposure controls
Personal protective equipment
General protective and hygienic measures
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Remove all soiled and contaminated clothing immediately.
Wash hands before breaks and at the end of work.
Do not inhale dust / smoke / mist.
Maintain an ergonomically appropriate working environment.
Breathing equipment: Use suitable respirator when high concentrations are present.
Recommended filter device for short term use:
Use a respirator with multi-purpose combination (US) or type ABEK (EN 14387) as a backup to engineering controls. Risk assessment should be performed to determine if air-purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards such as NIOSH (USA) or CEN (EU).
Protection of hands:
Impervious gloves

Impervious gloves
Check protective gloves prior to each use for their proper condition.
The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.

(Contd. on page 3)

Product name: 1-Methylnaphthalene

Material of gloves Fluorocarbon rubber (Viton) Penetration time of glove material (in minutes) 480

(Contd. of page 2)

Glove thickness: 0.7 mm

Eye protection: Safety glasses with side shields / NIOSH (US) or EN 166(EU)

Body protection: Protective work clothing.

9 Physical and chemical properties

Information on basic physical and chemical properties General Information

Appearance: Form: Odor: Odorless Odor threshold: Not determined.

Change in condition

pH-value:

Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: -22 °C (-8 °F) 240-243 °C (464-469 °F) Not determined

Flash point: Flammability (solid, gaseous) 82 °C (180 °F) Not determined Ignition temperature:
Decomposition temperature: 525 °C (977 °F) Not determined Auto igniting: Not determined.

Danger of explosion: Explosion limits:

Product does not present an explosion hazard.

Lower: Upper:

Not determined.

0.7 Vol % 6.5 Vol % 2 hPa (2 mm Hg) 1.024 g/cm³ (8.545 lbs/gal) Not determined. Not determined Vapor pressure at 25 °C (77 °F): Density at 20 °C (68 °F): Relative density Vapor density Vapor density
Evaporation rate
Solubility in / Miscibility with
Water at 25 °C (77 °F):
0.026 g/l
Partition coefficient (n-octanol/water): Not determined.

Viscosity: dynamic:

Not determined.

kinematic: Other information Not determined. No further relevant information available.

10 Stability and reactivity

Reactivity No information known.

Chemical stability Stable under recommended storage conditions.

Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications.

Possibility of hazardous reactions Reacts with strong oxidizing agents

Conditions to avoid No further relevant information available.

Incompatible materials:

Oxidizing agents

Hazardous decomposition products: Carbon monoxide and carbon dioxide

11 Toxicological information

Information on toxicological effects

Acute toxicity: Harmful if swallowed.

The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for this substance

LD/LC50 values that are relevant for classification:

Oral LD50 1840 mg/kg (rat)

Skin irritation or corrosion: May cause irritation
Eye irritation or corrosion: May cause irritation
Sensitization: No sensitizing effects known.
Germ cell mutagenicity: The Registry of Toxic Effects of Chemical Substances (RTECS) contains mutation data for this substance.
Consideration: Carcinogenicity:
ACGIH A4: Not classifiable as a human carcinogen: Inadequate data on which to classify the agent in terms of its carcinogenicity in humans and/or animals.

Reproductive toxicity: No effects known. Specific target organ system toxicity - repeated exposure: No effects known.

Specific target organ system toxicity - single exposure: No effects known.

Aspiration hazard: No effects known.

Subacute to chronic toxicity: The Registry of Toxic Effects of Chemical Substances (RTECS) contains multiple dose toxicity data for this substance. Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Ecotoxical effects: Remark: Toxic for aquatic organisms

Additional ecological information: General notes:

Do not allow product to reach ground water, water course or sewage system. Toxic for aquatic organisms

(Contd. on page 4)

(Contd. of page 3)

Product name: 1-Methylnaphthalene

Do not allow material to be released to the environment without proper governmental permits. Danger to drinking water if even small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Toxic to aquatic life.

May cause long lasting harmful effects to aquatic life.

Avoid transfer into the environment.

Results of PBT and vPvB assessment

PBT: Not applicable. vPvB: Not applicable

Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods

Recommendation Consult state, local or national regulations to ensure proper disposal. Uncleaned packagings: Recommendation: Disposal must be made according to official regulations.

14 Transport information	
UN-Number DOT, IMDG, IATA	UN3082
UN proper shipping name DOT ADR IMDG, IATA	Environmentally hazardous substances, liquid, n.o.s. (1-Methylnaphthalene) 3082 Environmentally hazardous substances, liquid, n.o.s. (1-Methylnaphthalene) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1- Methylnaphthalene)
Transport hazard class(es)	
DOT, IMDG	
	
Class Label ADR	9 Miscellaneous dangerous substances and articles 9
₩	
Class Label IATA	9 (M6) Miscellaneous dangerous substances and articles 9

Class Label	9 Miscellaneous dangerous substances and articles 9

Packing group DOT, ADR, IMDG, IATA

Environmental hazards: Special marking (ADR): Special marking (IATA): Symbol (fish and tree) Symbol (fish and tree)

Special precautions for user EMS Number: Stowage Category Warning: Miscellaneous dangerous substances and articles F-A,S-F

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

Transport/Additional information:

DOT Quantity limitations

On passenger aircraft/rail: No limit On cargo aircraft only: No limit Marine Pollutant (DOT):

Limited quantities (LQ) Excepted quantities (EQ)

Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml

UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (1-UN "Model Regulation":

METHYLNAPHTHALENE), 9, III

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) Hazard pictograms



GHS07

Signal word Warning Hazard statements
H227 Combustible liquid. H302 Harmful if swallowed.

(Contd. on page 5)

(Contd. of page 4)

Product name: 1-Methylnaphthalene

Precautionary statements
P210 Keep away from flames and hot surfaces. No smoking.
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P264 Wash thoroughly after handling.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P403+P235 Store in a well-ventilated place. Keep cool.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Dispose of contents/container in accordance with local/regional/national/international regulations.

National regulations
All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

All components of this product are listed on the Canadian Domestic Substances List (DSL).

SARA Section 313 (specific toxic chemical listings) Substance is not listed.

California Proposition 65

Prop 65 - Chemicals known to cause cancer Substance is not listed.

Prop 65 - Developmental toxicity, female Substance is not listed.

Prop 65 - Developmental toxicity, female Substance is not listed.

Prop 65 - Developmental toxicity, female Substance is not listed.

Information about limitation of use: For use only by technically qualified individuals.

Other regulations, limitations and prohibitive regulations

Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed.

The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.

Substance is not listed.

Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user. Department issuing SDS: Global Marketing Department
Date of preparation/Revision: Print date, revision date and version number are in the header of each page.

Abbreviations and acronyms:
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
CAO: International Civil Aviation Transport (IATA)
ADGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
CAO: International Civil Aviation Transport (ISTA)
ADGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
CAO: International Civil Aviation Transport (ISTA)
ADGR: Dangerous Goods Regulations by the "International Civil Aviation Organisation" (ICAO)
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods
DOT: US Department of Transport association
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
HMIS: Hazardous Materials Information System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
VPUS: very Persistent and very Bioaccumulative
ACGIH: American Conference of Governmental Industrial Hygienists (USA)
OSHA: Occupational Safety and Health Administration (USA)
IARC: International Agency for Research on Cancer
EPA: Environmental Protection Agency (USA)
Flam. Liq. 4: Flammable liquids — Category 4
Acute Tox. 4: Acute toxicity — Category 4