

Tetrahydronaphthalene (THN)

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)
Issue date: 12/16/2025 Revision date: 12/16/2025 Supersedes: 9/3/2020 Version: 2.0

SECTION 1 Identification

1.1. Product identifier

Product form : Substance
Trade name : Tetrahydronaphthalene (THN)
CAS-No. : 119-64-2
Product code : NS-THN
Formula : C₁₀H₁₂

1.2. Other means of identification

Synonyms : Naphthalene 1,2,3,4-tetrahydride / Naphthalene, 1,2,3,4-tetrahydro- / 1,2,3,4-Tetrahydronaphthalene / Tetralin / Naphthalene 1,2,3,4-tetrahydride / Naphthalene, 1,2,3,4-tetrahydro- / 1,2,3,4-Tetrahydronaphthalene / Tetralin
EC-No. : 204-340-2

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Solvent

1.4. Supplier's details

Monument Chemical
16717 Jacintoport Blvd.
Houston, TX, 77015
USA
T 832-376-2000
sds@monumentchemical.com - www.monumentchemical.com

1.5. Emergency phone number

Emergency number : 24 HR CHEMTREC: 1-800-424-9300 (International +1 703-741-5970); 24 HR Emergency Assistance: 1-832-376-2026

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

| | | |
|---|------|--|
| Flammable liquid, Category 4 | H227 | Combustible liquid. |
| Acute toxicity (oral), Category 4 | H302 | Harmful if swallowed. |
| Skin corrosion/irritation, Category 2 | H315 | Causes skin irritation. |
| Serious eye damage/eye irritation, Category 2 | H319 | Causes serious eye irritation. |
| Carcinogenicity, Category 2 | H351 | Suspected of causing cancer. |
| Specific target organ toxicity — Repeated exposure, Category 2 | H373 | May cause damage to organs through prolonged or repeated exposure. |
| Aspiration hazard, Category 1 | H304 | May be fatal if swallowed and enters airways. |
| Hazardous to the aquatic environment — Acute Hazard, Category 2 | H401 | Toxic to aquatic life. |
| Hazardous to the aquatic environment — Chronic Hazard, Category 2 | H411 | Toxic to aquatic life with long lasting effects. |

Full text of H statements : see section 16

Tetrahydronaphthalene (THN)

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US)

: Danger

Hazard statements (GHS US)

: H227 - Combustible liquid
H302 - Harmful if swallowed
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H351 - Suspected of causing cancer.
H373 - May cause damage to organs through prolonged or repeated exposure
H401 - Toxic to aquatic life
H411 - Toxic to aquatic life with long lasting effects

Precautionary statements (GHS US)

: P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 - Do not breathe dust, fume, gas, mist, vapors, spray.
P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P273 - Avoid release to the environment.
P280 - Wear protective gloves.
P301+P310 - If swallowed: Immediately call a doctor, a POISON CENTER.
P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.
P302+P352 - If on skin: Wash with plenty of water.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P314 - Get medical advice or attention if you feel unwell.
P321 - Specific treatment (see a doctor on this label).
P330 - Rinse mouth.
P331 - Do NOT induce vomiting.
P332+P313 - If skin irritation occurs: Get medical advice or attention.
P337+P313 - If eye irritation persists: Get medical advice or attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P370+P378 - In case of fire: Use alcohol resistant foam, carbon dioxide (CO2), dry extinguishing powder, Water spray to extinguish.
P391 - Collect spillage.
P403 - Store in a well-ventilated place.
P405 - Store locked up.
P501 - Dispose of hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

Other hazards which do not result in classification : May form explosive peroxides.

2.5. Unknown acute toxicity

No additional information available

Tetrahydronaphthalene (THN)

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 3 Composition/information on ingredients

3.1. Substances

Name : Tetrahydronaphthalene
CAS-No. : 119-64-2

| Name | Product identifier | % |
|-------------------------------|--------------------|----------|
| 1,2,3,4-tetrahydronaphthalene | CAS-No.: 119-64-2 | 96 – 100 |
| naphthalene | CAS-No.: 91-20-3 | 0 – 2 |

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

3.2. Mixtures

Not applicable

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Consult a doctor/medical service. Get medical advice/attention. Specific treatment (see supplemental first aid instruction on this label).

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion : Do not induce vomiting. Call a physician immediately. Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell. Immediately call a poison center or doctor/physician.

4.2. Most important symptoms/effects, acute and delayed

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met. Harmful if swallowed.

Symptoms/effects after skin contact : Irritation. Burns. Causes skin irritation.

Symptoms/effects after eye contact : Serious damage to eyes.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : Combustible liquid.

Explosion hazard : May form flammable/explosive vapor-air mixture.

Hazardous decomposition products in case of fire : Toxic fumes may be released.

Tetrahydronaphthalene (THN)

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

5.3. Special protective equipment and precautions for fire-fighters

- | | |
|--------------------------------|--|
| Firefighting instructions | : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment. |
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. Do not enter fire area without proper protective equipment, including respiratory protection. |

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- | | |
|------------------|---|
| General measures | : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking. |
|------------------|---|

For non-emergency personnel

- | | |
|----------------------|---|
| Emergency procedures | : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapors/spray. Evacuate unnecessary personnel. |
|----------------------|---|

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". Equip cleanup crew with proper protection. |
| Emergency procedures | : Ventilate area. |
| Environmental precautions | : Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment. |

6.2. Methods and materials for containment and cleaning up

- | | |
|-------------------------|--|
| For containment | : Collect spillage. |
| Methods for cleaning up | : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. |
| Other information | : Dispose of materials or solid residues at an authorized site. |

For further information refer to section 13. See Heading 8. Exposure controls and personal protection.

SECTION 7 Handling and storage

7.1. Precautions for safe handling

- | | |
|-----------------------------------|--|
| Precautions for safe handling | : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapors/spray. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No open flames. No smoking. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapors/spray. |
| Hygiene measures | : Wash contaminated clothing before reuse. Always wash hands after handling the product. Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling. |
| Additional hazards when processed | : Handle empty containers with care because residual vapors are flammable. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. |

7.2. Conditions for safe storage, including incompatibilities

- | | |
|--------------------|---|
| Technical measures | : Proper grounding procedures to avoid static electricity should be followed. |
|--------------------|---|

Tetrahydronaphthalene (THN)

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

| | |
|------------------------|--|
| Storage conditions | : Store in a well-ventilated place. Keep cool. Store locked up. Keep only in the original container in a cool, well ventilated place away from : Heat sources, Ignition sources, Incompatible materials. Keep container closed when not in use. Keep in fireproof place. |
| Incompatible products | : Strong bases. Strong acids. |
| Incompatible materials | : Sources of ignition. Direct sunlight. Heat sources. |

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

| naphthalene (91-20-3) | |
|--|--|
| USA - ACGIH - Occupational Exposure Limits | |
| Local name | Naphthalene |
| ACGIH® TLV® TWA | 52 mg/m³ |
| | 10 ppm |
| Remark (ACGIH®) | TLV® Basis: URT irr; Cataracts; Hemolytic anemia. Notations: Skin; A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); BEI |
| ACGIH® chemical category | Confirmed Animal Carcinogen with Unknown Relevance to Humans, Skin - potential significant contribution to overall exposure by the cutaneous route |
| Regulatory reference | ACGIH 2025 |
| USA - ACGIH - Biological Exposure Indices | |
| Local name | Naphthalene |
| BEI (BLV) | Parameter: 1-Naphthol + 2-Naphthol - Sampling time: End of shift - Notations: Nq, Ns |
| Regulatory reference | ACGIH 2025 |
| USA - OSHA - Occupational Exposure Limits | |
| Local name | Naphthalene |
| OSHA PEL TWA | 50 mg/m³ |
| | 10 ppm |
| Regulatory reference (US-OSHA) | OSHA Annotated Table Z-1 |
| USA - IDLH - Occupational Exposure Limits | |
| IDLH | 250 ppm |
| USA - NIOSH - Occupational Exposure Limits | |
| NIOSH REL (TWA) | 50 mg/m³ |
| | 10 ppm |
| NIOSH REL (STEL) | 75 mg/m³ |
| | 15 ppm |

8.2. Appropriate engineering controls

| | |
|----------------------------------|--|
| Appropriate engineering controls | : Ensure good ventilation of the work station. |
| Environmental exposure controls | : Avoid release to the environment. |

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Tetrahydronaphthalene (THN)

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

| |
|--|
| Hand protection: |
| Protective gloves. Wear protective gloves. |
| Eye protection: |
| Safety glasses. Chemical goggles or safety glasses |
| Skin and body protection: |
| Wear suitable protective clothing |
| Respiratory protection: |
| In case of insufficient ventilation, wear suitable respiratory equipment. [In case of inadequate ventilation] wear respiratory protection. |

Personal protective equipment symbol(s):



Other information:

Do not eat, drink or smoke during use.

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

| | |
|---|---|
| Physical state | : Liquid |
| Appearance | : Colorless to pale yellow liquid. |
| Color | : clear light yellow |
| Odor | : aromatic |
| Odor threshold | : No data available |
| pH | : No data available |
| Melting point | : -35.8 °C |
| Freezing point | : -33 °F |
| Boiling point | : 405 °F |
| Flash point | : > 150 °F |
| Relative evaporation rate (butyl acetate=1) | : < 1 |
| Flammability (solid, gas) | : Not applicable. |
| Vapor pressure | : 0.24 hPa (at 20 °C) |
| Relative vapor density at 20°C | : 4.55 |
| Relative density | : 0.972 at 68 °F |
| Density | : 0.967 – 0.971 g/cm ³ (at 20 °C) |
| Molecular mass | : 132.21 g/mol |
| Solubility | : Insoluble in water. Soluble in ethanol. Soluble in methanol. Soluble in ether. Soluble in acetone. Soluble in 1-butanol. Soluble in aniline. Soluble in petroleum spirit. Soluble in chloroform. Soluble in oils/fats. Soluble in chlorinated hydrocarbons. Soluble in turpentine. Soluble in gasoline. Water: 42.7 mg/l (at 20 °C) |
| Partition coefficient n-octanol/water (Log Pow) | : 3.78 (at 20 °C) |
| Auto-ignition temperature | : 385 °C |
| Decomposition temperature | : No data available |
| Viscosity, kinematic | : 2.266 – 2.275 mm ² /s |
| Viscosity, dynamic | : 2.2 mPa·s (20 °C) |
| Explosion limits | : 0.8 – 5 |
| Particle characteristics | : No data available |

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

Tetrahydronaphthalene (THN)

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 10 Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions. Combustible liquid. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Not established.

10.4. Conditions to avoid

Avoid contact with hot surfaces. No flames, no sparks. Eliminate all sources of ignition. Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

| Tetrahydronaphthalene (119-64-2) | |
|--|---|
| LD50 oral rat | 1620 µl/kg |
| LD50 dermal rabbit | 16710 mg/kg |
| ATE US (oral) | 1566.54 mg/kg body weight |
| ATE US (dermal) | 16710 mg/kg body weight |
| 1,2,3,4-tetrahydronaphthalene (119-64-2) | |
| LD50 oral rat | 2860 mg/kg |
| LD50 dermal rabbit | 16800 mg/kg |
| LC50 Inhalation - Rat | > 1.8 mg/l air (8 h, Rat, Male, Experimental value, Inhalation) |
| ATE US (oral) | 2860 mg/kg body weight |
| ATE US (dermal) | 16800 mg/kg body weight |
| naphthalene (91-20-3) | |
| LD50 oral rat | 1110 mg/kg |
| LD50 oral | 533 mg/kg body weight (Equivalent or similar to OECD 401, Mouse, Male, Experimental value, Oral, 14 day(s)) |

Tetrahydronaphthalene (THN)

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

| | |
|--|--|
| naphthalene (91-20-3) | |
| LD50 dermal rat | > 16000 mg/kg body weight (Equivalent or similar to OECD 402, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s)) |
| LD50 dermal rabbit | > 2000 mg/kg body weight |
| LC50 Inhalation - Rat | > 0.34 mg/l (Exposure time: 1 h) |
| ATE US (oral) | 533 mg/kg body weight |
| Skin corrosion/irritation | : Causes skin irritation. |
| 1,2,3,4-tetrahydronaphthalene (119-64-2) | |
| pH | 0.035 |
| naphthalene (91-20-3) | |
| pH | No data available in the literature |
| Serious eye damage/irritation | : Causes serious eye irritation. |
| 1,2,3,4-tetrahydronaphthalene (119-64-2) | |
| pH | 0.035 |
| naphthalene (91-20-3) | |
| pH | No data available in the literature |
| Respiratory or skin sensitization | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Suspected of causing cancer. |
| 1,2,3,4-tetrahydronaphthalene (119-64-2) | |
| National Toxicology Program (NTP) Status | Evidence of Carcinogenicity |
| naphthalene (91-20-3) | |
| IARC group | 2B - Possibly carcinogenic to humans |
| National Toxicology Program (NTP) Status | Reasonably anticipated to be Human Carcinogen, Evidence of Carcinogenicity |
| In OSHA Hazard Communication Carcinogen list | Yes |
| Reproductive toxicity | : Not classified |
| naphthalene (91-20-3) | |
| LOAEL (animal/female, F0/P) | 50 mg/kg body weight Animal: rat, Animal sex: female, Guideline: other:OECD Guideline 414 (Prenatal Developmental Toxicity Study) |
| LOAEL (animal/female, F1) | 450 mg/kg body weight Animal: rat, Animal sex: female, Guideline: other:OECD Guideline 414 (Prenatal Developmental Toxicity Study) |
| NOAEL (animal/female, F0/P) | 120 mg/kg body weight Animal: rabbit, Animal sex: female, Guideline: other:OECD Guideline 414 (Prenatal Developmental Toxicity Study) |
| STOT-single exposure | : Not classified |
| STOT-repeated exposure | : May cause damage to organs through prolonged or repeated exposure. |
| 1,2,3,4-tetrahydronaphthalene (119-64-2) | |
| LOAEL (oral,rat,90 days) | 150 mg/kg body weight Animal: rat, Guideline: EU Method B.7 (Repeated Dose (28 Days) Toxicity (Oral)), Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents) |
| LOAEC (inhalation, rat, dust/mist/fume, 90 days) | 0.0412 mg/l air Animal: rat, Animal sex: male |

Tetrahydronaphthalene (THN)

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

| 1,2,3,4-tetrahydronaphthalene (119-64-2) | |
|--|---|
| NOAEL (oral, rat, 90 days) | 50 mg/kg body weight Animal: rat, Guideline: EU Method B.7 (Repeated Dose (28 Days) Toxicity (Oral)), Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents) |
| STOT-repeated exposure | May cause damage to organs through prolonged or repeated exposure. |
| naphthalene (91-20-3) | |
| LOAEL (oral, rat, 90 days) | 400 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) |
| LOAEC (inhalation, rat, vapor, 90 days) | 0.011 mg/l air Animal: rat, Guideline: EPA OPP 82-4 (90-Day Inhalation Toxicity), Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study) |
| NOAEL (dermal, rat/rabbit, 90 days) | 1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study) |

Aspiration hazard : May be fatal if swallowed and enters airways.

| Tetrahydronaphthalene (119-64-2) | |
|--|---|
| Viscosity, kinematic | 2.266 – 2.275 mm²/s |
| 1,2,3,4-tetrahydronaphthalene (119-64-2) | |
| Viscosity, kinematic | 2.268 mm²/s |
| naphthalene (91-20-3) | |
| Viscosity, kinematic | 1 mm²/s (80 °C, OECD 114: Viscosity of Liquids) |

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met. Harmful if swallowed.
Symptoms/effects after skin contact : Irritation. Burns. Causes skin irritation.
Symptoms/effects after eye contact : Serious damage to eyes.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : Toxic to aquatic life with long lasting effects. Toxic to aquatic life.
Ecology - water : Toxic to aquatic life. Toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute) : Toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic) : Toxic to aquatic life with long lasting effects.

| Tetrahydronaphthalene (119-64-2) | |
|--|---|
| LC50 - Fish [1] | 3.2 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [semi-static]) |
| EC50 - Crustacea [1] | 9.5 mg/l (Exposure time: 48 h - Species: Daphnia magna) |
| 1,2,3,4-tetrahydronaphthalene (119-64-2) | |
| LC50 - Fish [1] | 3.2 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [semi-static]) |
| EC50 - Crustacea [1] | 9.5 mg/l (Exposure time: 48 h - Species: Daphnia magna) |
| LC50 - Fish [2] | 6.9 mg/l (48 h, Oryzias latipes) |
| EC50 72h - Algae [1] | 7 mg/l (Species: Desmodesmus subspicatus) |
| EC50 72h - Algae [2] | 7 mg/l (Algae) |

Tetrahydronaphthalene (THN)

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

| naphthalene (91-20-3) | |
|-----------------------|--|
| LC50 - Fish [1] | 5.74 – 6.44 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) |
| EC50 - Crustacea [1] | 2.16 mg/l (Exposure time: 48 h - Species: Daphnia magna) |
| LC50 - Fish [2] | 1.6 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through]) |
| EC50 - Crustacea [2] | 1.96 mg/l (Exposure time: 48 h - Species: Daphnia magna [Flow through]) |
| EC50 72h - Algae [1] | 0.4 mg/l (Skeletonema costatum, Literature study, Growth rate) |
| NOEC (chronic) | 0.59 mg/l Test organisms (species): Daphnia pulex Duration: '125 d' |
| NOEC chronic fish | ≈ 0.37 mg/l Test organisms (species): Oncorhynchus kisutch Duration: '40 d' |

12.2. Persistence and degradability

| Tetrahydronaphthalene (119-64-2) | |
|--|---|
| Persistence and degradability | May cause long-term adverse effects in the environment. |
| 1,2,3,4-tetrahydronaphthalene (119-64-2) | |
| Persistence and degradability | May cause long-term adverse effects in the environment. |
| Biochemical oxygen demand (BOD) | 0 g O ₂ /g substance |
| ThOD | 3.147 g O ₂ /g substance |
| BOD (% of ThOD) | 0 |
| naphthalene (91-20-3) | |
| Persistence and degradability | Not established. |
| Biochemical oxygen demand (BOD) | 0 g O ₂ /g substance |
| Chemical oxygen demand (COD) | 0.22 g O ₂ /g substance |
| ThOD | 2.99 g O ₂ /g substance |

12.3. Bioaccumulative potential

| Tetrahydronaphthalene (119-64-2) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | 3.78 (at 20 °C) |
| Bioaccumulative potential | Not established. |
| 1,2,3,4-tetrahydronaphthalene (119-64-2) | |
| BCF - Fish [1] | 118 – 536 (Cyprinus carpio, Test duration: 8 weeks) |
| BCF - Fish [2] | 162.4 – 1514 (Calculated value) |
| BCF - Other aquatic organisms [1] | 130 – 1300 (Mytilidae, QSAR) |
| Partition coefficient n-octanol/water (Log Pow) | 3.78 (at 20 °C) |
| Bioaccumulative potential | Not established. |
| naphthalene (91-20-3) | |
| BCF - Fish [1] | 30 – 430 |
| Partition coefficient n-octanol/water (Log Pow) | 3.6 |
| Bioaccumulative potential | Not established. |

Tetrahydronaphthalene (THN)

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

12.4. Mobility in soil

1,2,3,4-tetrahydronaphthalene (119-64-2)

| | |
|-----------------|---------------------------------------|
| Surface tension | 33.64 mN/m (20 °C, 100 %) |
| Ecology - soil | Low potential for adsorption in soil. |

naphthalene (91-20-3)

| | |
|--|--|
| Surface tension | No data available in the literature |
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 2.864 (log Koc, SRC PCKOCWIN v2.0, Calculated value) |
| Ecology - soil | Low potential for adsorption in soil. |

12.5. Other adverse effects

| | |
|------------------------------|-------------------------------------|
| Ozone | : Not classified |
| Fluorinated greenhouse gases | : No |
| Other information | : Avoid release to the environment. |

SECTION 13 Disposal considerations

| | |
|--|---|
| Waste treatment methods | : Dispose of contents/container in accordance with licensed collector's sorting instructions. |
| Product/Packaging disposal recommendations | : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. |
| Additional information | : Handle empty containers with care because residual vapors are flammable. |
| Ecological waste information | : Avoid release to the environment. Hazardous waste due to toxicity. |

SECTION 14 Transport information

In accordance with DOT / IMDG / IATA

14.1. UN number

| | |
|---------------|----------|
| UN-No. (DOT) | : NA1993 |
| UN-No. (IMDG) | : 3082 |
| UN-No. (IATA) | : 3082 |

14.2. UN Proper Shipping Name

| | |
|---------------------------------------|--|
| Proper Shipping Name (DOT) | : Combustible liquid, n.o.s. (tetralin and naphthalene) |
| Proper Shipping Name (IMDG) | : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (tetralin and naphthalene) |
| Proper Shipping Name (IATA) | : Environmentally hazardous substance, liquid, n.o.s. (tetralin and naphthalene) |
| Transport document description (DOT) | : NA1993 Combustible liquid, n.o.s. (tetralin and naphthalene), 3, III |
| Transport document description (IMDG) | : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (tetralin and naphthalene), 9, III, MARINE POLLUTANT |
| Transport document description (IATA) | : UN 3082 Environmentally hazardous substance, liquid, n.o.s. (tetralin and naphthalene), 9, III |

14.3. Transport hazard class(es)

| | |
|----------------------------------|-----|
| DOT | |
| Transport hazard class(es) (DOT) | : 3 |

Tetrahydronaphthalene (THN)

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)



IMDG

Transport hazard class(es) (IMDG)

: 9

Hazard labels (IMDG)

: 9



IATA

Transport hazard class(es) (IATA)

: 9

Hazard labels (IATA)

: 9



14.4. Packing group

Packing group (DOT)

: III

Packing group (IMDG)

: III

Packing group (IATA)

: III

14.5. Environmental hazards

Dangerous for the environment

: Yes

Marine pollutant

: Yes



Other information

: No supplementary information available.

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

UN-No. (DOT)

: NA1993

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

Tetrahydronaphthalene (THN)

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

DOT Quantity Limitations Passenger aircraft/rail (49 : 60 L
CFR 173.27)
DOT Quantity Limitations Cargo aircraft only (49 : 220 L
CFR 175.75)
DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

IMDG

Special provision (IMDG) : 274, 335
Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : P001, LP01
Packing provisions (IMDG) : PP1
IBC packing instructions (IMDG) : IBC03
Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP2, TP29
EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage) : S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS
Stowage category (IMDG) : A

IATA

Special provision (IATA) : A97, A158, A197
PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y964
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 964
PCA max net quantity (IATA) : 450L
CAO packing instructions (IATA) : 964
CAO max net quantity (IATA) : 450L
ERG code (IATA) : 9L

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

| | | |
|-------------|-----------------|--------|
| Naphthalene | CAS-No. 91-20-3 | 0 – 2% |
|-------------|-----------------|--------|

naphthalene (91-20-3)

Listed on EPA Hazardous Air Pollutant (HAPS)

| | |
|-----------|--------|
| CERCLA RQ | 100 lb |
|-----------|--------|

15.2. International regulations

CANADA

Tetrahydronaphthalene (119-64-2)

Listed on the Canadian DSL (Domestic Substances List)

Tetrahydronaphthalene (THN)

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

1,2,3,4-tetrahydronaphthalene (119-64-2)

Listed on the Canadian DSL (Domestic Substances List)

naphthalene (91-20-3)

Listed on the Canadian DSL (Domestic Substances List)

Toxic Substance (CEPA – Schedule I)

Yes

EU-Regulations

Tetrahydronaphthalene (119-64-2)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

1,2,3,4-tetrahydronaphthalene (119-64-2)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

naphthalene (91-20-3)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Tetrahydronaphthalene (119-64-2)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on CICR (Turkish Inventory and Control of Chemicals)

1,2,3,4-tetrahydronaphthalene (119-64-2)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on the NCI (Vietnam - National Chemical Inventory)

Tetrahydronaphthalene (THN)


Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

naphthalene (91-20-3)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Japanese Pollutant Release and Transfer Register Law (PRTR Law)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on the NCI (Vietnam - National Chemical Inventory)

15.3. State regulations

 **WARNING:** This product can expose you to Naphthalene, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

| Component | State or local regulations |
|---|--|
| 1,2,3,4-tetrahydronaphthalene(119-64-2) | U.S. - Pennsylvania - RTK (Right to Know) List |
| naphthalene(91-20-3) | U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List; U.S. - Massachusetts - Right To Know List; U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs); U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations; U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List |

SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date : 12/16/2025
Issue date : 9/22/2020
Other information : None.

Full text of hazard classes and H-statements

| | |
|------|---|
| H227 | Combustible liquid |
| H302 | Harmful if swallowed |
| H304 | May be fatal if swallowed and enters airways |
| H315 | Causes skin irritation |
| H319 | Causes serious eye irritation |
| H351 | Suspected of causing cancer. |
| H373 | May cause damage to organs through prolonged or repeated exposure |
| H401 | Toxic to aquatic life |
| H411 | Toxic to aquatic life with long lasting effects |

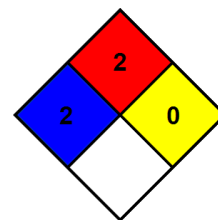
NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

Tetrahydronaphthalene (THN)

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

| | |
|------------------|--|
| 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. |



Safety Data Sheet (SDS), USA

DISCLAIMER: Monument Chemical believes that the information expressly set forth in this Safety Data Sheet (SDS) is accurate as of the date of publication. MONUMENT CHEMICAL EXPRESSLY DISCLAIMS ALL WARRANTIES OF EVERY KIND AND NATURE, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Monument Chemical assumes no responsibility for any use of or reliance upon the data provided in this SDS. Given the variety of factors that can affect the use of the material, some of which are uniquely within the user's knowledge and control, the user should independently evaluate (i) the completeness and accuracy of the information provided herein and (ii) the material to determine whether it is suitable and safe for the user's intended use.

Monument Chemical provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, Monument Chemical makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the SDS available directly from Monument Chemical.