

SECTION 1: Identification

1.1. Identification

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

1.2. Recommended use and restrictions on use

| | |
|------------------------------|-----------|
| Use of the substance/mixture | : Solvent |
|------------------------------|-----------|

1.3. Supplier

Monument Chemical
 5501 West Baker Road
 Baytown, TX 77520 - USA
 T (281) 424-1255
sds@monumentchemical.com - www.monumentchemical.com

1.4. Emergency telephone number

| | |
|------------------|---|
| Emergency number | : 24 HR CHEMTREC: 1-800-424-9300 (International +1 703-741-5970); 24HR Emergency Assistance: 1-281-424-1255 |
|------------------|---|

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture


GHS US classification

| | | |
|--|------|---|
| Flammable liquids 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

2.2. GHS Label elements, including precautionary statements

GHS US labeling

| | | |
|----------------------------|---|--|
| Hazard pictograms (GHS US) | : |  |
| Signal word (GHS US) | : | Danger |
| Hazard statements (GHS US) | : | H227 - Combustible liquid H302 - Harmful if swallowed |

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| | |
|-----------------------------------|--|
| Precautionary statements (GHS US) | : 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 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 eye protection, protective clothing, 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/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/attention. P337+P313 - If eye irritation persists: Get medical advice/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+P235 - Store in a well-ventilated place. Keep cool. P405 - Store locked up. 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 which do not result in classification

Other hazards not contributing to the classification : May form explosive peroxides.

2.4. Unknown acute toxicity (GHS US)

Not applicable

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 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: Get medical advice/attention. Get medical advice/attention. Specific treatment (see supplemental first aid instruction on this label).

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|--------------------------------------|--|
| 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 and 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. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

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

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

6.1.1. 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. |
|----------------------|---|

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". Equip cleanup crew with proper protection. |
| Emergency procedures | : Ventilate area. |

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material 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. |

6.4. Reference to other sections

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

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SECTION 7: Handling and storage

7.1. Precautions for safe 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.
- 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. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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. Avoid breathing dust/fume/gas/mist/vapors/spray.
- Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

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

| | |
|---|---|
| Tetrahydronaphthalene (119-64-2) | |
| No additional information available | |
| 1,2,3,4-tetrahydronaphthalene (119-64-2) | |
| No additional information available | |
| naphthalene (91-20-3) | |
| USA - ACGIH - Occupational Exposure Limits | |
| Local name | Naphthalene |
| ACGIH TWA (ppm) | 10 ppm |
| Remark (ACGIH) | Hematologic eff; URT & eye irr; Skin; A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans: The agent is carcinogenic in experimental animals at a relatively high dose, by route(s) of administration, at site(s), of histologic type(s), or by mechanism(s) that may not be relevant to worker exposure. Available epidemiologic studies do not confirm an increased risk of cancer in exposed humans. Available evidence does not suggest that the agent is likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure) |
| ACGIH chemical category | Skin - potential significant contribution to overall exposure by the cutaneous route, Confirmed Animal Carcinogen with Unknown Relevance to Humans |
| Regulatory reference | ACGIH 2020 |
| USA - ACGIH - Biological Exposure Indices | |
| Local name | NAPHTHALENE |
| Biological Exposure Indices (BEI) | Parameter: 1-Naphthol with hydrolysis plus 2-Naphthol with hydrolysis - Sampling time: end of shift (nonquantitative, nonspecific) |
| Regulatory reference | ACGIH 2020 |
| USA - OSHA - Occupational Exposure Limits | |
| Local name | Naphthalene |
| OSHA PEL (TWA) (mg/m ³) | 50 mg/m ³ |
| OSHA PEL (TWA) (ppm) | 10 ppm |
| Regulatory reference (US-OSHA) | OSHA Annotated Table Z-1 |
| USA - IDLH - Occupational Exposure Limits | |
| US IDLH (ppm) | 250 ppm |
| USA - NIOSH - Occupational Exposure Limits | |
| NIOSH REL (TWA) (mg/m ³) | 50 mg/m ³ |

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| | |
|---------------------------------------|----------------------|
| NIOSH REL (TWA) [ppm] | 10 ppm |
| NIOSH REL (STEL) (mg/m ³) | 75 mg/m ³ |
| NIOSH REL (STEL) [ppm] | 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/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

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. 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. Information on 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 |
| Specific gravity / density | : 0.967 – 0.971 g/cm ³ (at 20 °C) |
| Molecular mass | : 132.21 g/mol |

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| | |
|---|--|
| 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 | : No data available |
| Viscosity, dynamic | : 2.2 mPa·s (20 °C) |
| Explosion limits | : 0.8 – 5 |
| Explosive properties | : No data available |
| Oxidizing properties | : No data available |

9.2. Other information

No additional information available

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. Heat. No flames, no sparks. Eliminate all sources of ignition. Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. 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) | 1620 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 dermal rat | > 2500 mg/kg (Rat, Dermal) |
| LD50 dermal rabbit | > 2000 mg/kg body weight |
| LC50 Inhalation - Rat | > 0.34 mg/l (Exposure time: 1 h) |

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| naphthalene (91-20-3) | |
|------------------------------|-----------------------|
| ATE US (oral) | 533 mg/kg body weight |

| | |
|-----------------------------------|----------------------------------|
| Skin corrosion/irritation | : Causes skin irritation. |
| Serious eye damage/irritation | : Causes serious eye irritation. |
| 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 | Evidence of Carcinogenicity, Reasonably anticipated to be Human Carcinogen |
| 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 |
| 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.

Viscosity, kinematic : No data available

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. Toxicity

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.

| Tetrahydronaphthalene (119-64-2) | |
|---|---|
| LC50 fish 1 | 3.2 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [semi-static]) |

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| Tetrahydronaphthalene (119-64-2) | |
|---|--|
| EC50 Daphnia 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 Daphnia 1 | 9.5 mg/l (Exposure time: 48 h - Species: Daphnia magna) |
| LC50 fish 2 | 6.9 mg/l (48 h, Oryzias latipes) |
| naphthalene (91-20-3) | |
| LC50 fish 1 | 5.74 – 6.44 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) |
| EC50 Daphnia 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 Daphnia 2 | 1.96 mg/l (Exposure time: 48 h - Species: Daphnia magna [Flow through]) |
| 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. |

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 | 0.03 N/m (100 °C) |
| Ecology - soil | Adsorbs into the soil. |

12.5. Other adverse effects

Other information : Avoid release to the environment.

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SECTION 13: Disposal considerations

13.1. Disposal methods

- 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.
- Ecology - waste materials : Avoid release to the environment. Hazardous waste due to toxicity.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

- Transport document description : NA1993 Combustible liquid, n.o.s. (tetralin and naphthalene), 3, III
- UN-No.(DOT) : NA1993
- Proper Shipping Name (DOT) : Combustible liquid, n.o.s.
tetralin and naphthalene
- Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
- Packing group (DOT) : III - Minor Danger
- Dangerous for the environment : Yes
- Marine pollutant : Yes (IMDG only)



- DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
- DOT Packaging Bulk (49 CFR 173.xxx) : 241
- DOT Symbols : D - Proper shipping name for domestic use only, or to and from Canada, G - Identifies PSN requiring a technical name
- 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 Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 60 L
- DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 220 L
- DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
- Other information : No supplementary information available.

Transport by sea

- Transport document description (IMDG) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (tetralin and naphthalene), 9, III
- UN-No. (IMDG) : 3082
- Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
- Class (IMDG) : 9 - Miscellaneous dangerous substances and articles
- Packing group (IMDG) : III - substances presenting low danger
- Limited quantities (IMDG) : 5 L
- EmS-No. (1) : F-A

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EmS-No. (2) : S-F
Marine pollutant : Yes



Air transport

Transport document description (IATA) : UN 3082 Environmentally hazardous substance, liquid, n.o.s. (tetralin and naphthalene), 9, III
UN-No. (IATA) : 3082
Proper Shipping Name (IATA) : Environmentally hazardous substance, liquid, n.o.s.
Class (IATA) : 9 - Miscellaneous Dangerous Goods
Packing group (IATA) : III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

Tetrahydronaphthalene (119-64-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

All components of this product are listed, or excluded from listing, 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)

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 on the AICS (Australian Inventory of Chemical Substances)
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)

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

Listed on the AICS (Australian Inventory of Chemical Substances)
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 the Japanese ISHL (Industrial Safety and Health Law)
Listed on KECL/KECI (Korean Existing Chemicals 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 the TCSI (Taiwan Chemical Substance Inventory)

naphthalene (91-20-3)

Listed on the AICS (Australian Inventory of Chemical Substances)
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 the Japanese ISHL (Industrial Safety and Health Law)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Japanese Pollutant Release and Transfer Register Law (PRTR Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

15.3. US 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. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List; U.S. - Pennsylvania - RTK (Right to Know) List |

SECTION 16: Other information

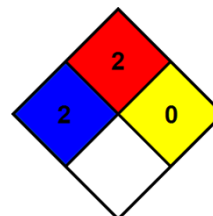
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Revision date : 09/03/2020
Other information : None.

Full text of H-phrases:

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



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