Section 1. Identification

Product name: SOLVENT NAPHTHA H
Product description: Aromatic Hydrocarbon

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

Identified uses: Solvent
Uses advised against: This product is not recommended for any industrial, professional or consumer use other than the identified uses above.

Supplier: ExxonMobil Product Solutions Company (a division of Exxon Mobil Corporation)
SDS – LOC. 106
22777 Springwoods Village Parkway
Spring, TX 77389-1425 USA

24-Hour emergency telephone number: 1-800-424-9300 / +1 703-741-5970 / +1-703-527-3887 (CHEMTREC)
Supplier General Contact: (832) 624-8500

SDS Internet Address: www.sds.exxonmobil.com

Section 2. Hazards identification

OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture:
CARCINOGENICITY - Category 2
ASPIRATION HAZARD - Category 1

GHS label elements
Hazard pictograms:

Signal word: Danger
Hazard statements:
H304 - May be fatal if swallowed and enters airways.
H351 - Suspected of causing cancer.

Precautionary statements
Prevention:
P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P280 - Wear protective gloves, protective clothing and eye or face protection.

Response:
P301 + P310, P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.
Do NOT induce vomiting.
P308 + P313 - IF exposed or concerned: Get medical advice or attention.

Storage:
P405 - Store locked up.

Disposal:
P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Contains:
solvent naphtha (petroleum), heavy aromatic

Hazards not otherwise classified:
None known.

Note:
This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.
Section 3. Composition/information on ingredients

**Substance/mixture**: Substance

**Chemical name**: solvent naphtha (petroleum), heavy aromatic

**CAS number/other identifiers**

**CAS number**: 64742-94-5

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>% by weight</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>solvent naphtha (petroleum), heavy arom.</td>
<td>100</td>
<td>64742-94-5</td>
</tr>
<tr>
<td>2-methylnaphthalene</td>
<td>&lt;26</td>
<td>91-57-6</td>
</tr>
<tr>
<td>naphthalene</td>
<td>&lt;14</td>
<td>91-20-3</td>
</tr>
<tr>
<td>1-methylnaphthalene</td>
<td>&lt;12.5</td>
<td>90-12-0</td>
</tr>
</tbody>
</table>

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

**Description of necessary first aid measures**

**Eye contact**: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

**Inhalation**: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin contact**: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Continue to rinse for at least 10 minutes. Get medical attention.

**Ingestion**: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Most important symptoms/effects, acute and delayed**

**Potential acute health effects**

**Eye contact**: No known significant effects or critical hazards.

**Inhalation**: No known significant effects or critical hazards.

**Skin contact**: No known significant effects or critical hazards.

**Ingestion**: May be fatal if swallowed and enters airways.

**Over-exposure signs/symptoms**

**Eye contact**: No specific data.

**Inhalation**: No specific data.

**Skin contact**: No specific data.

**Ingestion**: Adverse symptoms may include the following: nausea or vomiting.
**Section 4. First aid measures**

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

**Notes to physician**
- If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

**Specific treatments**
- No specific treatment.

**Protection of first-aiders**
- No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

**Section 5. Fire-fighting measures**

**Extinguishing media**
- **Suitable extinguishing media**
  - Use dry chemical, CO₂, water spray (fog) or foam.
- **Unsuitable extinguishing media**
  - Do not use water jet.

**Specific hazards arising from the chemical**
- In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

**Hazardous combustion products**
- Incomplete combustion products, Oxides of carbon, Smoke, Fume

**Special protective actions for fire-fighters**
- Use standard firefighting procedures and consider the hazards of other involved materials. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Assure an extended cooling down period to prevent re-ignition. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters**
- Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

**Section 6. Accidental release measures**

**NOTIFICATION PROCEDURES**
In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

**Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel**
- No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

**For emergency responders**
- If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions**
- Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

**Methods and materials for containment and cleaning up**

**Date of issue/Date of revision**
- 5 December 2023

**Date of previous issue**
- No previous edition

**Version**
- 1
Section 6. Accidental release measures

**Small spill**: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill**: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Confine the spill immediately with booms. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants. Warn other shipping. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

Section 7. Handling and storage

**Precautions for safe handling**

**Protective measures**: Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not swallow. Avoid breathing vapor or mist. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Advice on general occupational hygiene**: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Static Accumulator**: This material is a static accumulator. A liquid is typically considered a nonconductive, static accumulator if its conductivity is below 100 pS/m (100x10E-12 Siemens per meter) and is considered a semiconductive, static accumulator if its conductivity is below 10,000 pS/m. Whether a liquid is nonconductive or semiconductive, the precautions are the same. A number of factors, for example liquid temperature, presence of contaminants, anti-static additives and filtration can greatly influence the conductivity of a liquid.

**Loading/Unloading Temperature**: Ambient

**Transport Temperature**: Ambient

**Transport Pressure**: Ambient

**Conditions for safe storage, including any incompatibilities**: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

**Storage Temperature**: Ambient

**Storage Pressure**: Ambient

**Suitable Containers/Packing**: Tankers, Tank Cars, Tank Trucks, Barges, Drums
Section 7. Handling and storage

### Suitable Materials and Coatings
- Carbon Steel
- Polyamide Epoxy
- Viton
- Stainless Steel
- Copper Bronze
- Polyester
- Inorganic Zinc Coatings
- Epoxy Phenolic
- Amine Epoxy

### Unsuitable Materials and Coatings
- Vinyl Coatings
- butyl rubber
- polyethylene
- polypropylene
- PVC
- Natural Rubber

Section 8. Exposure controls/personal protection

#### Control parameters

##### Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
</table>
| solvent naphtha (petroleum), heavy aromatic | **ExxonMobil (Company).**  
RCP_TWA: 8 ppm, (Total Hydrocarbons) Form: Vapor.  
RCP_TWA: 50 mg/m³, (Total Hydrocarbons) Form: Vapor.  
ACGIH TLV (United States, 1/2022). Absorbed through skin.  
TWA: 0.5 ppm 8 hours.  
ExxonMobil (Company). Absorbed through skin.  
STEL: 28 mg/m³ 15 minutes. |
| solvent naphtha (petroleum), heavy arom. 2-methylnaphthalene | **ExxonMobil (Company).**  
ACGIH TLV (United States, 1/2022). Absorbed through skin.  
TWA: 0.5 ppm 8 hours.  
ExxonMobil (Company). Absorbed through skin.  
STEL: 28 mg/m³ 15 minutes. |
| naphthalene                              | **ACGIH TLV (United States, 1/2022). Absorbed through skin.**  
TWA: 10 ppm 8 hours.  
TWA: 50 mg/m³ 10 hours.  
STEL: 15 ppm 15 minutes.  
STEL: 75 mg/m³ 15 minutes.  
NIOSH REL (United States, 10/2020).  
TWA: 10 ppm 10 hours.  
TWA: 50 mg/m³ 10 hours.  
STEL: 15 ppm 15 minutes.  
STEL: 75 mg/m³ 15 minutes.  
CAL OSHA PEL (United States, 5/2018). Absorbed through skin.  
TWA: 0.5 mg/m³ 8 hours.  
TWA: 0.1 ppm 8 hours.  
OSHA PEL (United States, 5/2018).  
TWA: 10 ppm 8 hours.  
TWA: 50 mg/m³ 8 hours.  
TWA: 10 ppm 8 hours.  
TWA: 50 mg/m³ 8 hours.  
STEL: 15 ppm 15 minutes.  
STEL: 75 mg/m³ 15 minutes.  
ACGIH TLV (United States, 1/2022). Absorbed through skin.  
TWA: 10 ppm 8 hours.  
TWA: 52 mg/m³ 8 hours.  
ACGIH TLV (United States, 1/2022). Absorbed through skin.  
TWA: 0.5 ppm 8 hours.  
ExxonMobil (Company). Absorbed through skin.  
STEL: 28 mg/m³ 15 minutes. |
| 1-methylnaphthalene                      | **ACGIH TLV (United States, 1/2022). Absorbed through skin.**  
TWA: 10 ppm 8 hours.  
TWA: 52 mg/m³ 8 hours.  
ACGIH TLV (United States, 1/2022). Absorbed through skin.  
TWA: 0.5 ppm 8 hours.  
ExxonMobil (Company). Absorbed through skin.  
STEL: 28 mg/m³ 15 minutes. |

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

#### Biological exposure indices

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure indices</th>
</tr>
</thead>
</table>
| 2-methylnaphthalene | **ACGIH BEI (United States, 1/2022) [POLYCYCLIC AROMATIC HYDROCARBONS]**  
BEI: 2.5 μg/l, 1-hydroxypyrene [in urine]. Sampling time: end of shift at end of workweek.  
BEI: Nonquantitative: Biological monitoring should be considered for this compound based on the review; however, a specific BEI® could not be determined due to insufficient data., 3-hydroxybenzo(a)pyrene [in urine]. Sampling time: end of shift at end of workweek.  
ACGIH BEI (United States, 1/2022)  
BEI: Nonquantitative: Biological monitoring should be considered for this compound based on the review; however, a specific BEI® could not be determined due to insufficient data., 1-naphthol + 2-naphthol [sample not specified]. Sampling time: end of shift.  |
| naphthalene     | **ACGIH BEI (United States, 1/2022)**  
BEI: Nonquantitative: Biological monitoring should be considered for this compound based on the review; however, a specific BEI® could not be determined due to insufficient data., 1-naphthol + 2-naphthol [sample not specified]. Sampling time: end of shift.  |

**Date of issue/Date of revision**: 5 December 2023  
**Date of previous issue**: No previous edition  
**Version**: 1
### Section 8. Exposure controls/personal protection

<table>
<thead>
<tr>
<th>Chemical</th>
<th>ACGIH BEI (United States, 1/2022) [POLYCYCLIC AROMATIC HYDROCARBONS]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-methylnaphthalene</td>
<td>BEI: 2.5 μg/l, 1-hydroxypyrene [in urine]. Sampling time: end of shift at end of workweek.</td>
</tr>
<tr>
<td></td>
<td>BEI: Nonquantitative: Biological monitoring should be considered for this compound based on the review; however, a specific BEI® could not be determined due to insufficient data., 3-hydroxybenzo(a)pyrene [in urine]. Sampling time: end of shift at end of workweek.</td>
</tr>
</tbody>
</table>

#### Appropriate engineering controls
If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

#### Environmental exposure controls
Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

#### Individual protection measures

##### Hygiene measures
Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

##### Eye/face protection
Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

##### Skin protection

#### Hand protection
Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. < 1 hour (breakthrough time): Viton, minimum 0.71 mm thickness or comparable protective barrier material

#### Body protection
Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

#### Other skin protection
Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

#### Respiratory protection
Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

### Section 9. Physical and chemical properties and safety characteristics

#### Note:
Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

#### Appearance

##### Physical state
Liquid. [Clear]

##### Color
Pale yellow

##### Odor
Aromatic
## Section 9. Physical and chemical properties and safety characteristics

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>-12°C (10.4°F) [ASTM D2386]</td>
</tr>
<tr>
<td>Boiling point, initial boiling point, and boiling range</td>
<td>230 to 282°C (446 to 539.6°F) [ASTM D86]</td>
</tr>
<tr>
<td>Flash point</td>
<td>Closed cup: 101°C (213.8°F) [ASTM D-93]</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>&lt;0.01 (butyl acetate = 1) [In-house method]</td>
</tr>
<tr>
<td>Flammability</td>
<td>Ignitable</td>
</tr>
<tr>
<td>Lower and upper explosion limit/flammability limit</td>
<td>Lower: 0.6% Upper: 6%</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>0.04 mm Hg [20 °C] [Calculated]</td>
</tr>
<tr>
<td>Relative vapor density</td>
<td>5.3 [Air = 1] [In-house method]</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.99 [Calculated]</td>
</tr>
<tr>
<td>Density</td>
<td>0.99 g/cm³ [15.6°C (60.1°F)] [ASTM D4052]</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Negligible</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>&gt;4 [Estimated]</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>481°C (897.8°F) [ASTM E659]</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>2.2 cSt [40 °C] [Calculated]</td>
</tr>
<tr>
<td></td>
<td>3.3 cSt [20 °C] [Calculated]</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>154</td>
</tr>
<tr>
<td>Particle characteristics</td>
<td></td>
</tr>
<tr>
<td>Median particle size</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Pour point</td>
<td>-30°C [ASTM D5950]</td>
</tr>
<tr>
<td>Hygroscopic</td>
<td>No</td>
</tr>
<tr>
<td>Coefficient of Thermal Expansion</td>
<td>0.0008 per Deg C</td>
</tr>
</tbody>
</table>

## Section 10. Stability and reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivity</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td>Chemical stability</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>Excessive heat.</td>
</tr>
<tr>
<td>Incompatible materials</td>
<td>nitric acid, sulfuric acid, Strong oxidizers</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
</tr>
</tbody>
</table>
Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Test</th>
<th>Species</th>
<th>Result</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>solvent naphtha (petroleum), heavy aromatic</td>
<td>LC50 Inhalation Dusts and mists</td>
<td>Rat</td>
<td>&gt;4778 mg/m³</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>&gt;2000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>&gt;5000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>naphthalene</td>
<td>LC50 Inhalation Vapor</td>
<td>Rat</td>
<td>&gt;0.4 mg/l</td>
<td>4 hours</td>
</tr>
<tr>
<td>1-methylnaphthalene</td>
<td>LD50 Oral</td>
<td>Mouse</td>
<td>533 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>1840 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Conclusion/Summary

Inhalation: Minimally Toxic. Data available. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 403

Dermal: Minimally Toxic. Data available. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 402

Oral: Minimally Toxic. Data available. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 401

Irritation/Corrosion

Skin: May dry the skin leading to discomfort and dermatitis. Data available. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 404

Eyes: May cause mild, short-lasting discomfort to eyes. Data available. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 405

Respiratory: Negligible hazard at ambient/normal handling temperatures. No end point data for material. Elevated temperatures or mechanical action may form vapors, mist, or fumes which may be irritating to the eyes, nose, throat, or lungs.

Sensitization

Skin: Not expected to be a skin sensitizer. Data available. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 406

Respiratory: Not expected to be a respiratory sensitizer. No end point data for material.

Mutagenicity

Conclusion/Summary: Not expected to be a germ cell mutagen. Data available. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 471, 473, 474, 475, 476, 479

Carcinogenicity

Conclusion/Summary: May cause cancer. No end point data for material. Based on assessment of the components.

Classification

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>OSHA</th>
<th>IARC</th>
<th>NTP</th>
</tr>
</thead>
</table>
| naphthalene             | -    | 2B   | Reasonably anticipated to be a human carcinogen.

Reproductive toxicity

Conclusion/Summary: Not expected to be a reproductive toxicant. Data available. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 414, 416

Specific target organ toxicity (single exposure)

Conclusion/Summary: Not expected to cause organ damage from a single exposure. No end point data for material.

Specific target organ toxicity (repeated exposure)

Conclusion/Summary: Not expected to cause organ damage from prolonged or repeated exposure. Data available. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 408, 413, 452
Section 11. Toxicological information

Aspiration hazard
Conclusion/Summary: May be fatal if swallowed and enters airways. Based on physico-chemical properties of the material. Data available.

Other information
Contains: NAPHTHALENE: Exposure to high concentrations of naphthalene may cause destruction of red blood cells, anemia, and cataracts. Naphthalene caused cancer in laboratory animal studies, but the relevance of these findings to humans is uncertain.

Product: Vapor/aerosol concentrations above recommended exposure levels are irritating to the eyes and respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness and other central nervous system effects including death. Prolonged and/or repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.

Section 12. Ecological information

The information given is based on data for the material, components of the material, or for similar materials, through the application of bridging principals.

Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Duration</th>
<th>Species</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>solvent naphtha (petroleum), heavy aromatic</td>
<td>72 hours</td>
<td>Algae - Pseudokirchneriella subcapitata</td>
<td>Acute EL50 7.9 mg/l Data for the material</td>
</tr>
<tr>
<td></td>
<td>48 hours</td>
<td>daphnia - Daphnia magna</td>
<td>Acute EL50 1.1 mg/l Data for the material</td>
</tr>
<tr>
<td></td>
<td>96 hours</td>
<td>Fish - Oncorhynchus mykiss</td>
<td>Acute LL50 3 mg/l Data for the material</td>
</tr>
<tr>
<td></td>
<td>72 hours</td>
<td>Algae - Pseudokirchneriella subcapitata</td>
<td>Acute NOEL 0.22 mg/l Data for the material</td>
</tr>
</tbody>
</table>

Conclusion/Summary:
Acute toxicity: Toxic to aquatic life.
Chronic toxicity: Toxic to aquatic life with long lasting effects.

Persistence and degradability

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Test</th>
<th>Result</th>
<th>Qualifier</th>
<th>Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>solvent naphtha (petroleum), heavy aromatic</td>
<td>Ready Biodegradability</td>
<td>60.74 % - 28 days</td>
<td>-</td>
<td>water</td>
</tr>
</tbody>
</table>

Biodegradability: Material -- Expected to be readily biodegradable.
Hydrolysis: Material -- Transformation due to hydrolysis not expected to be significant.
Photolysis: Material -- Transformation due to photolysis not expected to be significant.
Atmospheric Oxidation: Material -- Expected to degrade rapidly in air
Bioaccumulative potential: Not determined.

Mobility in soil: Material -- Expected to partition to sediment and wastewater solids. Moderately volatile.

Other ecological information
VOC (EPA Method 24): 8.262 lbs/gal
Other adverse effects: No known significant effects or critical hazards.
Section 13. Disposal considerations

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional/local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

United States - RCRA Toxic hazardous waste "U" List

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS #</th>
<th>Status</th>
<th>Reference number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene</td>
<td>91-20-3</td>
<td>Listed</td>
<td>U165</td>
</tr>
</tbody>
</table>

Section 14. Transport information

<table>
<thead>
<tr>
<th></th>
<th>DOT Classification</th>
<th>TDG Classification</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
<td>UN3082</td>
<td>UN3082</td>
<td>UN3082</td>
<td>UN3082</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>Environmentally hazardous substance, liquid, n.o.s. (1-methylnaphthalene, 2-methylnaphthalene)</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-methylnaphthalene, 2-methylnaphthalene)</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-methylnaphthalene, 2-methylnaphthalene)</td>
<td>Environmentally hazardous substance, liquid, n.o.s. (1-methylnaphthalene, 2-methylnaphthalene)</td>
</tr>
</tbody>
</table>

| Transport hazard class(es) | 9 | 9 | 9 | 9 |

<table>
<thead>
<tr>
<th>Label(s) / Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Label" /></td>
</tr>
</tbody>
</table>

| Packing group | 3 | 3 | 3 | 3 |

| Environmental hazards | Yes. | Yes. | Yes. | Yes. |

Additional information

DOT Classification: Non-bulk packages of this product are not regulated as hazardous materials in package sizes less than the product reportable quantity, unless transported by inland waterway. The marine pollutant mark is not required when transported on inland waterways in sizes of ≤5 L or ≤5 kg. The reportable quantity is 714.29 lbs / 324.29 kg [86.533 gal / 327.56 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements. Limited quantity: Yes.


Special provisions: 8, 146, 173, 335, 441, IB3, T4, TP1, TP29
Section 14. Transport information

**TDG Classification**
Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.43-2.45 (Class 9), 2.7 (Marine pollutant mark). Non-bulk packages of this product are not regulated as dangerous goods when transported by road or rail.

**IMDG**
This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

**Special provisions** 16, 99

**IATA**
This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

**Quantity limitation**
- Passenger and Cargo Aircraft: 450 L. Packaging instructions: 964.
- Cargo Aircraft Only: 450 L. Packaging instructions: 964.

**Special provisions** A97, A158, A197, A215

**Special precautions for user**
Transport within user’s premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to IMO instruments**
Not applicable.

Section 15. Regulatory information

**U.S. Federal regulations**
- TSCA 8(a) PAIR: naphthalene
- TSCA 8(a) CDR Exempt/Partial exemption: Not determined
- Clean Water Act (CWA) 307: 2-methylnaphthalene; naphthalene; 1-methylnaphthalene
- Clean Water Act (CWA) 311: naphthalene

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)**
- Listed

**Clean Air Act Section 602 Class I Substances**
- Not listed

**Clean Air Act Section 602 Class II Substances**
- Not listed

**DEA List I Chemicals (Precursor Chemicals)**
- Not listed

**DEA List II Chemicals (Essential Chemicals)**
- Not listed

**SARA 302/304**
Composition/information on ingredients
No products were found.

**SARA 304 RQ**
Not applicable.

**SARA 311/312**
Classifications
- CARCINOGENICITY - Category 2
- ASPIRATION HAZARD - Category 1

**SARA 313**

Date of issue/Date of revision: 5 December 2023
Date of previous issue: No previous edition
Version: 1
Section 15. Regulatory information

<table>
<thead>
<tr>
<th>Form R - Reporting requirements</th>
<th>Product name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>naphthalene</td>
<td>91-20-3</td>
<td>&lt;14</td>
<td></td>
</tr>
</tbody>
</table>

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts: The following components are listed: NAPHTHALENE; 1-METHYLNAPHTHALENE

New York: The following components are listed: Naphthalene

New Jersey: The following components are listed: 2-METHYL NAPHTHALENE; NAPHTHALENE; 1-METHYL NAPHTHALENE

Pennsylvania: The following components are listed: NAPHTHALENE; NAPHTHALENE, 1-METHYL-

Illinois: None of the components are listed.

California Prop. 65

**WARNING**: Cancer - www.P65Warnings.ca.gov.

Inventory list

Australia inventory (AIIC): All components are listed or exempted.

Canada inventory (DSL-NDSEL): All components are listed or exempted.

China inventory (IECSC): All components are listed or exempted.

Japan inventory (CSCL): All components are listed or exempted.

New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.

Philippines inventory (PICCS): All components are listed or exempted.

Korea inventory (KECI): All components are listed or exempted.

Taiwan Chemical Substances Inventory (TCSI): All components are listed or exempted.

United States inventory (TSCA 8b): All components are active or exempted.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Physical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)
Section 16. Other information

Flammability
Health 1 0
Instability
Special hazards

Procedure used to derive the classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARCINOGENICITY - Category 2</td>
<td>Calculation method</td>
</tr>
<tr>
<td>ASPIRATION HAZARD - Category 1</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>

History

Date of issue/Date of revision: 5 December 2023
Date of previous issue: No previous edition
Version: 1

Key to abbreviations:
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
N/A = Not available
SGG = Segregation Group
UN = United Nations

References: Not available.

Product code: 1161385_13512173

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