

# SAFETY DATA SHEET

**ExxonMobil**

AROMATIC TAR S-2

## Section 1. Identification

**Product name** : AROMATIC TAR S-2  
**Product description** : Aromatic Hydrocarbon

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

**Identified uses** : Fuel Blending Component, Fuel oil  
**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](http://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** : SKIN IRRITATION - Category 2  
GERM CELL MUTAGENICITY - Category 1  
CARCINOGENICITY - Category 1B

### GHS label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : H315 - Causes skin irritation.  
H340 - May cause genetic defects.  
H350 - May cause cancer.

### Precautionary statements

**Prevention** : P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P264 - Wash thoroughly after handling.  
P280 - Wear protective gloves, protective clothing and eye or face protection.

**Response** : P302 + P352 - IF ON SKIN: Wash with plenty of water.  
P308 + P313 - IF exposed or concerned: Get medical advice or attention.  
P332 + P313 - If skin irritation occurs: Get medical advice/attention.  
P362 + P364 - Take off contaminated clothing and wash it before reuse.

**Storage** : P405 - Store locked up.

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

**Contains** : steam cracked residuum (petroleum)

**Hazards not otherwise classified** : None known.

## Section 2. Hazards identification

**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** : steam cracked residuum (petroleum)

| Ingredient name                    | % by weight | Identifiers     |
|------------------------------------|-------------|-----------------|
| steam cracked residuum (petroleum) | 100         | CAS: 64742-90-1 |

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** : Remove contaminated clothing. Dry wipe exposed skin and cleanse with waterless hand cleaner and follow by washing thoroughly with soap and water. For those providing assistance, avoid further skin contact to yourself or others. Wear impervious gloves. Launder contaminated clothing separately before reuse. Discard contaminated articles that cannot be laundered. For hot product: Immediately immerse in or flush affected area with large amounts of cold water to dissipate heat. Cover with clean cotton sheeting or gauze and get prompt medical attention. If burned by contact with hot material, molten material adhering to skin should be cooled as quickly as possible with water, and see a physician for removal of adhering material and treatment of burn. Wash clothing before reuse. Clean shoes thoroughly before reuse. Continue to rinse for at least 10 minutes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Get medical attention.
- Ingestion** : 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. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. 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** : Causes skin irritation.
- Ingestion** : No known significant effects or critical hazards.

## Section 4. First aid measures

### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness
- Ingestion** : No specific data.

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, 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** : Aldehydes, hydrogen sulfide, Incomplete combustion products, Oxides of carbon, Smoke, Fume, sulfur oxides

- 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

## Section 6. Accidental release measures

- 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

- 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. Material will sink. Remove material, as much as possible, using mechanical equipment. 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** : Thermal burn hazard - contact with hot material may cause thermal burns. 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 ingest. 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

## Section 7. Handling and storage

**Transport Temperature** : 85 - 93 °C

**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** : 85 - 93 °C

**Storage Pressure** : Ambient

**Suitable Containers/Packing** : Pipelines, Tankers, Tank Cars, Barges

**Suitable Materials and Coatings** : steel

**Unsuitable Materials and Coatings** : Synthetic Rubber, Natural Rubber

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

| Ingredient name                    | Exposure limits                                                                                                                    |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| steam cracked residuum (petroleum) | <b>ExxonMobil (COMPANY)</b> Absorbed through skin.<br>TWA 8 hours: 0.1 mg/m <sup>3</sup> (benzene solubles). Form: Total oil mist. |

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

**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: chemical splash goggles. Face shield.

### 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. If product is hot, thermally protective, chemical resistant gloves are recommended. If contact with forearms is likely, wear gauntlet style gloves. 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

## Section 8. Exposure controls/personal protection

|                               |                                                                                                                                                                                                                                                                                                   |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                               | gloves cannot be accurately estimated.                                                                                                                                                                                                                                                            |
| <b>Body protection</b>        | : 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. If product is hot, thermally protective, chemical resistant apron and long sleeves are recommended. |
| <b>Other skin protection</b>  | : 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.                                                                               |
| <b>Respiratory protection</b> | : 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

|                                                                 |                                            |
|-----------------------------------------------------------------|--------------------------------------------|
| <b>Physical state</b>                                           | : Liquid. [Viscous]                        |
| <b>Color</b>                                                    | : Black                                    |
| <b>Odor</b>                                                     | : Aromatic                                 |
| <b>Odor threshold</b>                                           | : Not available.                           |
| <b>pH</b>                                                       | : Not applicable.                          |
| <b>Melting point/freezing point</b>                             | : Not available.                           |
| <b>Boiling point or initial boiling point and boiling range</b> | : 217.78 to 648.89°C (424 to 1200°F)       |
| <b>Flash point</b>                                              | : Closed cup: 101.67°C (215°F) [ASTM D-93] |
| <b>Evaporation rate</b>                                         | : Not available.                           |
| <b>Flammability</b>                                             | : Ignitable                                |
| <b>Lower and upper explosion limit/flammability limit</b>       | : Not available.                           |
| <b>Vapor pressure</b>                                           | : <0.02 mm Hg [100]                        |
| <b>Relative vapor density</b>                                   | : Not available.                           |
| <b>Relative density</b>                                         | : 1.06 to 1.101                            |
| <b>Solubility in water</b>                                      | : Negligible                               |
| <b>Partition coefficient: n-octanol/water</b>                   | : >3<br>Calculated value                   |
| <b>Auto-ignition temperature</b>                                | : 550°C (1022°F)                           |
| <b>Decomposition temperature</b>                                | : Not available.                           |
| <b>Viscosity</b>                                                | : 100 to 150 cSt [100 °C]                  |

### Particle characteristics

|                                         |                     |
|-----------------------------------------|---------------------|
| <b>Median particle size</b>             | : Not applicable.   |
| <b>Pour point</b>                       | : 2.78°C            |
| <b>Hygroscopic</b>                      | : No                |
| <b>Coefficient of Thermal Expansion</b> | : 0.00063 per Deg C |

## Section 10. Stability and reactivity

|                                           |                                                                                                        |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------|
| <b>Reactivity</b>                         | : No specific test data related to reactivity available for this product or its ingredients.           |
| <b>Chemical stability</b>                 | : The product is stable.                                                                               |
| <b>Possibility of hazardous reactions</b> | : Under normal conditions of storage and use, hazardous reactions will not occur.                      |
| <b>Conditions to avoid</b>                | : High energy sources of ignition. Excessive heat.                                                     |
| <b>Incompatible materials</b>             | : Strong oxidizers                                                                                     |
| <b>Hazardous decomposition products</b>   | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name            | Test                  | Species | Result      | Duration |
|------------------------------------|-----------------------|---------|-------------|----------|
| steam cracked residuum (petroleum) | LC50 Inhalation Vapor | Rat     | >1.6 mg/l   | 7 hours  |
|                                    | LD50 Dermal           | Rabbit  | >2000 mg/kg | -        |
|                                    | LD50 Oral             | Rat     | >2000 mg/kg | -        |

#### Conclusion/Summary

|                   |                                                                                                                                                |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b> | : Minimally Toxic. Data available. Based on test data for structurally similar materials. Test (s) equivalent or similar to OECD Guideline 403 |
| <b>Dermal</b>     | : Minimally Toxic. Data available. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 402                    |
| <b>Oral</b>       | : Minimally Toxic. Data available. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 401                    |

#### Irritation/Corrosion

#### Conclusion/Summary

|                    |                                                                                                                                                              |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Skin</b>        | : Irritating to the skin. Data available. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 404                           |
| <b>Eyes</b>        | : May cause mild, short-lasting discomfort to eyes. Data available. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 405 |
| <b>Respiratory</b> | : Negligible hazard at ambient/normal handling temperatures. No end point data for material.                                                                 |

#### Respiratory or skin sensitization

#### Conclusion/Summary

|                    |                                                                                                                                                                    |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Skin</b>        | : 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 |
| <b>Respiratory</b> | : Not expected to be a respiratory sensitizer. No end point data for material.                                                                                     |

#### Mutagenicity

|                           |                                                                                                                                                                 |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Conclusion/Summary</b> | : May cause genetic defects. Data available. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 471 474 475 |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### Carcinogenicity

|                           |                                                                                                                                                |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Conclusion/Summary</b> | : May cause cancer. Data available. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 453 |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|

#### Classification

## Section 11. Toxicological information

| Product/ingredient name            | OSHA | IARC | NTP |
|------------------------------------|------|------|-----|
| steam cracked residuum (petroleum) | -    | 2B   | -   |

### 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 414 422

### 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)

| Product/ingredient name            | Category        | Target organs |
|------------------------------------|-----------------|---------------|
| steam cracked residuum (petroleum) | Not applicable. | -             |

**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 408 413 453

### Aspiration hazard

**Conclusion/Summary** : Not expected to be an aspiration hazard. 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. Polycyclic Aromatic Compounds (PAC/PNA): Carcinogenic in animal studies. Caused mutations in vitro. Reproductive and developmental studies resulted in decreased fetal weights, survival and malformations, as well as reduced sperm count in males. Dermal studies resulted in increased mortality, skin irritation, liver, kidney, thymus, bone marrow, blood and lymphoid tissue toxic effects. Possible allergen and/or photoallergen.
- Product** : Elevated temperatures or mechanical action may form vapors, mists or fumes which may be irritating to the eyes and respiratory tract.

## 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

| Product/ingredient name            | Duration | Species                                        | Result                                          |
|------------------------------------|----------|------------------------------------------------|-------------------------------------------------|
| steam cracked residuum (petroleum) | 48 hours | daphnia - <i>Daphnia magna</i>                 | Acute EL50 4.58 to 9.83 mg/l                    |
|                                    | 96 hours | Algae - <i>Pseudokirchneriella subcapitata</i> | Acute ErL50 2.2 mg/l data for similar materials |
|                                    | 96 hours | Fish - <i>Brachydanio rerio</i>                | Acute LL50 48 mg/l                              |
|                                    | 96 hours | Algae - <i>Pseudokirchneriella subcapitata</i> | Acute NOEL 0.18 mg/l data for similar materials |

### Conclusion/Summary

**Acute toxicity** : Toxic to aquatic life.

**Chronic toxicity** : Toxic to aquatic life with long lasting effects.

### Persistence and degradability

| Product/ingredient name            | Test                   | Result         | Qualifier | Media |
|------------------------------------|------------------------|----------------|-----------|-------|
| steam cracked residuum (petroleum) | Ready Biodegradability | 20 % - 22 days | -         | water |

## Section 12. Ecological information

- Biodegradability** : Material -- Expected to be inherently 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 at a moderate rate in air
- Bioaccumulative potential**
- Conclusion/Summary** : Material -- Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.
- Mobility in soil**
- Mobility** : Material -- Low water solubility, expected to sink and migrate into the sediment. Expected to partition to sediment and wastewater solids.
- Other ecological information**
- 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.

## Section 14. Transport information

|                                   | DOT Classification                                                                                                                                                      | TDG Classification                                                                                                                                                      | IMDG                                                                                                                                                                       | IATA                                                                                                                                                                        |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>UN number</b>                  | UN3082                                                                                                                                                                  | UN3082                                                                                                                                                                  | UN3082                                                                                                                                                                     | UN3082                                                                                                                                                                      |
| <b>UN proper shipping name</b>    | Environmentally hazardous substance, liquid, n.o.s. (steam cracked residuum (petroleum))                                                                                | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (steam cracked residuum (petroleum))                                                                                | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (steam cracked residuum (petroleum))                                                                                   | Environmentally hazardous substance, liquid, n.o.s. (steam cracked residuum (petroleum))                                                                                    |
| <b>Transport hazard class(es)</b> | 9                                                                                                                                                                       | 9                                                                                                                                                                       | 9                                                                                                                                                                          | 9                                                                                                                                                                           |
| <b>Label(s) / Marks</b>           |   |   |   |   |
| <b>Packing group</b>              | III                                                                                                                                                                     | III                                                                                                                                                                     | III                                                                                                                                                                        | III                                                                                                                                                                         |
| <b>Environmental hazards</b>      | Yes.                                                                                                                                                                    | Yes.                                                                                                                                                                    | Yes.                                                                                                                                                                       | Yes.                                                                                                                                                                        |

### Additional information

## Section 14. Transport information

|                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>DOT Classification</b>                             | <p>: Non-bulk packages of this product are not regulated as hazardous materials unless transported by inland waterway. This product is not regulated as a hazardous material when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of §§ 173.24 and 173.24a.</p> <p><b>Limited quantity</b> Yes.</p> <p><b>Packaging instruction</b> Exceptions: 155. Non-bulk: 203. Bulk: 241.</p> <p><b>Special provisions</b> 8, 146, 173, 335, 441, IB3, T4, TP1, TP29</p> |
| <b>TDG Classification</b>                             | <p>: 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).</p> <p>Non-bulk packages of this product are not regulated as dangerous goods when transported by road or rail.</p> <p><b>Explosive Limit and Limited Quantity Index</b> 5</p> <p><b>Special provisions</b> 16, 99</p>                                                                                                                     |
| <b>IMDG</b>                                           | <p>: 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.</p> <p><b>Emergency schedules</b> F-A, S-F</p> <p><b>Special provisions</b> 274, 335, 969</p>                                                                                                                                                                                                         |
| <b>IATA</b>                                           | <p>: 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.</p> <p><b>Quantity limitation</b> Passenger and Cargo Aircraft: 450 L. Packaging instructions: 964. Cargo Aircraft Only: 450 L. Packaging instructions: 964. Limited Quantities - Passenger Aircraft: 30 kg. Packaging instructions: Y964.</p> <p><b>Special provisions</b> A97, A158, A197, A215</p>      |
| <b>Special precautions for user</b>                   | <p>: <b>Transport within user's premises:</b> 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.</p>                                                                                                                                                                                                                                                                               |
| <b>Transport in bulk according to IMO instruments</b> | <p>: Not applicable.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

## Section 15. Regulatory information

|                                 |                                                                                                                                                                                                                                                      |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>U.S. Federal regulations</b> | <p>: <b>TSCA 8(a) PAIR:</b> naphthalene</p> <p><b>TSCA 8(a) CDR Exempt/Partial exemption:</b> Not determined</p> <p><b>Clean Water Act (CWA) 307:</b> phenanthrene; anthracene; naphthalene</p> <p><b>Clean Water Act (CWA) 311:</b> naphthalene</p> |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### TSCA 12(b) - Chemical export notification

Not applicable.

|                                                                      |              |
|----------------------------------------------------------------------|--------------|
| <b>Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)</b> | : Listed     |
| <b>Clean Air Act Section 602 Class I Substances</b>                  | : Not listed |
| <b>Clean Air Act Section 602 Class II Substances</b>                 | : Not listed |
| <b>DEA List I Chemicals (Precursor Chemicals)</b>                    | : Not listed |
| <b>DEA List II Chemicals (Essential Chemicals)</b>                   | : Not listed |

### SARA 302/304

#### Composition/information on ingredients

## Section 15. Regulatory information

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : SKIN IRRITATION - Category 2  
GERM CELL MUTAGENICITY - Category 1  
CARCINOGENICITY - Category 1B

### SARA 313

|                                 | Product name | CAS number | %   |
|---------------------------------|--------------|------------|-----|
| Form R - Reporting requirements | phenanthrene | 85-01-8    | 5   |
|                                 | anthracene   | 120-12-7   | 5   |
|                                 | naphthalene  | 91-20-3    | 0.1 |
| Supplier notification           | phenanthrene | 85-01-8    | 5   |
|                                 | anthracene   | 120-12-7   | 5   |
|                                 | naphthalene  | 91-20-3    | 0.1 |

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: PHENANTHRENE; ANTHRACENE  
**New York** : The following components are listed: Phenanthrene; Anthracene  
**New Jersey** : The following components are listed: PHENANTHRENE; ANTHRACENE; NAPHTHALENE  
**Pennsylvania** : The following components are listed: PHENANTHRENE; ANTHRACENE  
**Illinois** : None of the components are listed.

### California Prop. 65

 **WARNING:** Cancer - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

### Inventory list

**Australia inventory (AIC)** : All components are listed or exempted.  
**Canada inventory (DSL-NDSL)** : All components are listed or exempted.  
**China inventory (IECSC)** : All components are listed or exempted.  
**Japan inventory (CSCL)** : All components are listed or exempted.  
**Japan inventory (Industrial Safety and Health Act)** : Not determined.  
**New Zealand Inventory of Chemicals (NZIoC)** : All components are listed or exempted.  
**Philippines inventory (PICCS)** : Not determined.  
**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.)

|                  |   |   |
|------------------|---|---|
| Health           | * | 2 |
| Flammability     |   | 1 |
| Physical hazards |   | 0 |
|                  |   |   |

## Section 16. Other information

**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.)



### Procedure used to derive the classification

| Classification                      | Justification      |
|-------------------------------------|--------------------|
| SKIN IRRITATION - Category 2        | Calculation method |
| GERM CELL MUTAGENICITY - Category 1 | Calculation method |
| CARCINOGENICITY - Category 1B       | Calculation method |

### History

**Date of issue/Date of revision** : 10 September 2024

**Date of previous issue** : 23 May 2023

**Version** : 1.01

**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
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- N/A = Not available
- SGG = Segregation Group
- UN = United Nations

**References** : Not available.

Indicates information that has changed from previously issued version.

**Product code** : 1150101\_13719978

### Notice to reader

The information and recommendations contained herein are, to the best of ExxonMobil's knowledge and belief, accurate and reliable as of the date issued. You can contact ExxonMobil to insure that this document is the most current available from ExxonMobil. The information and recommendations are offered for the user's consideration and examination. It is the user's responsibility to satisfy itself that the product is suitable for the intended use. If buyer repackages this product, it is the user's responsibility to insure proper health, safety and other necessary information is included with and/or on the container. Appropriate warnings and safe-handling procedures should be provided to handlers and users. Alteration of this document is strictly prohibited. Except to the extent required by law, re-publication or retransmission of this document, in whole or in part, is not permitted. The term, "ExxonMobil" is used for convenience, and may include any one or more of ExxonMobil Chemical Company, Exxon Mobil Corporation, or any affiliates in which they directly or indirectly hold any interest.

