# Coal Tar

Safety Data Sheet

According To Federal Register / Vol. 89, No. 98 / Monday, May 20, 2024 / Rules and Regulations and the OSHA Hazard Communication Standard 29 CFR 1910.1200

**Date of Issue:** 05/18/2026 **Version:** 2.0

## SECTION 1: IDENTIFICATION

### 1.1. Product Identifier

**Product Form:** Substance

**Product Name:** Coal Tar

**CAS-No.:** 8007-45-2

**Synonyms:** Crude Coal Tar, High Temperature Coal Tar, Coke Oven Tar, Crude Coke Oven Tar, Tar, Coal

### 1.2. Intended Use of the Product

**Use of the Substance/Mixture:** Creosote, Refined Coal Tar

### 1.3. Name, Address, and Telephone of the Responsible Party

Lone Star Specialty Products, LLC
6412 U.S. Highway 259 South
Lone Star, Texas USA 75668
**Phone:** (903)656-2536
**Fax:** (903)656-2151

### 1.4. Emergency Telephone Number

**Emergency Number:** For Chemical Emergency Call CHEMTREC day or night
Within USA and Canada: 1.800.424.9300
Mexico: 1.800.681.9531
Outside USA and Canada: 1.703.527.3887 (collect calls accepted)

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the Substance or Mixture

| | |
|---|---|
| Acute Tox. 4 (Oral) | H302 |
| Skin Irrit. 2 | H315 |
| Eye Dam. 1 | H318 |
| Skin Sens. 1B | H317 |
| Muta. 1B | H340 |
| Carc. 1A | H350 |
| Repr. 1B | H360 |
| STOT SE 3 | H336 |
| STOT SE 3 | H335 |
| STOT RE 1 | H372 |
| Aquatic Acute 1 | H400 |
| Aquatic Chronic 1 | H410 |

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

### 2.2. Label Elements GHS-US

**Labeling**

GHS05 GHS07 GHS08 GHS09

**Signal Word (GHS-US):** Danger

**Hazard Statements (GHS-US):**
H302 - Harmful if swallowed.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H335 - May cause respiratory irritation.
H336 - May cause drowsiness or dizziness.
H340 - May cause genetic :defects.
H350 - May cause cancer.
H360 - May damage fertility or the unborn child.
H372 - Causes damage to organs (Haematopoietic system) through prolonged or repeated exposure (Oral, Inhalation).
H400 - Very toxic to aquatic life.
H410 - Very toxic to aquatic life with long lasting effects.

**Precautionary Statements (GHS-US):**
P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P260 - Do not breathe vapors, mist, or spray.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, and eye protection.
P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.
P302+P352 - If on skin: Wash with plenty of water.
P304+P340 - If inhaled: Remove person to fresh air and keep at rest in a position comfortable for breathing.
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.
P310 - Immediately call a poison center or doctor.
P314 - Get medical advice/attention if you feel unwell.
P321 - Specific treatment (see section 4 on this SDS).
P330 - Rinse mouth.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P391 - Collect spillage.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

### 2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

### 2.4. Unknown Acute Toxicity (GHS-US)

No data available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substance

**Name:** Coal Tar

**CAS-No.:** 8007-45-2

| Name | Synonyms | Product Identifier | % | GHS US classification |
|---|---|---|---|---|
| Coal tar | Coal tar creosote / Coal tar extracts / Oils, coal tar light / Tar / Tar, coal / Creosote | (CAS-No.) 8007-45-2 | 100 | Acute Tox. 4 (Oral), H302<br>Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>Skin Sens. 1B, H317<br>Carc. 1A, H350<br>STOT SE 3, H336<br>STOT SE 3, H335 |

| Contains | Synonyms | Product Identifier | % | GHS US classification |
|---|---|---|---|---|
| Naphthalene | Naphthalene, molten / Naphthalene, crude / Naphthalenes / Moth balls | (CAS-No.) 91-20-3 | < 20 | Flam. Sol. 2, H228<br>Acute Tox. 4 (Oral), H302<br>Carc. 2, H351<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410<br>Comb. Dust |
| Anthracene | Paranaphthalene / Green oil | (CAS-No.) 120-12-7 | < 2.5 | Acute Tox. 4 (Dermal), H312<br>Skin Irrit. 2, H315<br>Eye Irrit. 2A, H319<br>STOT SE 3, H335<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410<br>Comb. Dust |
| Benzene | Cyclohexatriene / Benzol | (CAS-No.) 71-43-2 | < 2 | Flam. Liq. 2, H225<br>Acute Tox. 4 (Oral), H302<br>Skin Irrit. 2, H315<br>Eye Irrit. 2A, H319<br>Muta. 1B, H340<br>Carc. 1A, H350<br>STOT SE 3, H336<br>STOT SE 3, H335<br>STOT RE 1, H372<br>Asp. Tox. 1, H304<br>Aquatic Acute 2, H401<br>Aquatic Chronic 3, H412 |
| Benzo(a)pyrene | Benzo[a]pyrene / 3,4-Benz(a)pyrene / Benz(a)pyrene / Benzo[def]chrysene / 3,4-Benzopyrene / 6,7-Benzopyrene / Benzopyrene / BaP / Benz[a]pyrene / 3,4-Benzo(a)pyrene / 3,4-Benzpyrene | (CAS-No.) 50-32-8 | < 2 | Skin Sens. 1B, H317<br>Muta. 1B, H340<br>Carc. 1B, H350<br>Repr. 1B, H360<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 |

**Full text of H-phrases:** see section 16

### 3.2. Mixture

Not applicable

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of First-aid Measures

**First-aid Measures General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**First-aid Measures After Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

**First-aid Measures After Skin Contact:** Immediately remove contaminated clothing. Immediately drench affected area with water for at least 15 minutes. If exposed or concerned: Get medical advice/attention. In molten form: Cool skin rapidly with cold water after contact with molten product. Removal of solidified molten material from skin requires medical assistance.

**First-aid Measures After Eye Contact:** Immediately rinse with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention. In molten form: Protect skin and eyes from contact with molten material. Removal of solidified molten material from the eyes requires medical assistance.

**First-aid Measures After Ingestion:** Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

### 4.2. Most Important Symptoms and Effects Both Acute and Delayed

**Symptoms/Injuries:** May cause respiratory irritation. May cause drowsiness and dizziness. May cause cancer. Skin sensitization. Causes skin irritation. Harmful if swallowed. Causes serious eye damage. May cause genetic defects. May damage fertility. May damage the unborn child. Causes damage to organs (Haematopoietic system) through prolonged or repeated exposure (Oral, Inhalation). Risk of thermal burns on contact with molten product.

**Symptoms/Injuries After Inhalation:** Irritation of the respiratory tract and the other mucous membranes. High concentrations may cause central nervous system depression such as dizziness, vomiting, numbness, drowsiness, headache, and similar narcotic symptoms.

**Symptoms/Injuries After Skin Contact:** May cause an allergic skin reaction. Redness, pain, swelling, itching, burning, dryness, and dermatitis. Risk of thermal burns on contact with molten product.

**Symptoms/Injuries After Eye Contact:** Causes permanent damage to the cornea, iris, or conjunctiva. Risk of thermal burns on contact with molten product.

**Symptoms/Injuries After Ingestion:** This material is harmful orally and can cause adverse health effects or death in significant amounts.

**Chronic Symptoms:** May cause cancer. Causes damage to organs (Haematopoietic system) through prolonged or repeated exposure (Oral, Inhalation). May cause genetic defects. May damage fertility or the unborn child.

### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

## SECTION 5: FIRE-FIGHTING MEASURES

### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Water spray, fog, carbon dioxide ($CO_2$), alcohol-resistant foam, or dry chemical.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** COMBUSTIBLE LIQUID. Flash point 96 $^{o}$C (204.8 $^{o}$F) PMCC. This material is not classified as a GHS Flammable Liquid (flash point exceeds the GHS threshold of 93°C). However, it WILL burn when heated above its flash point or in fire conditions. Keep away from heat sources and ignition sources during heated processing operations. Treat as COMBUSTIBLE LIQUID in emergency response scenarios.

**Released for Shipment Considerations:** For material released for shipment, if new hazard information becomes available, updated labels must be provided with future shipments per 29 CFR 1910.1200(f)(11).

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Hazardous reactions will not occur under normal conditions.

### 5.3. Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Hazardous Combustion Products:** Polycyclic-aromatic hydrocarbons (PAH): Benzo[a]pyrene (BaP). Carbon oxides (CO, $CO_2$). Nitrous fumes. Nitrogen oxides. Sulfur oxides.

**Other Information:** Do not allow run-off from fire fighting to enter drains or water courses.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Do not breathe vapor, mist or spray. Do not get in eyes, on skin, or on clothing. Do not handle until all safety precautions have been read and understood.

#### 6.1.1. For Non-Emergency Personnel

**Protective Equipment:** Use appropriate personal protective equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Personnel

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

### 6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment. Collect spillage.

### 6.3. Methods and Materials for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Where possible allow molten material to solidify naturally.

**Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill. Spills should be cleaned up immediately and placed in approved containers. For small molten spills, allow product to cool and remove as a solid. Use cautious judgement when cleaning up large molten spills. Wear personal protective equipment as appropriate, shut off source of leak if safe to do so, dike and contain molten material, and collect in approved containers for disposal in accordance with federal, state, and local regulations.

### 6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

**Precautions for Safe Handling:** Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist, vapors, or spray. Handle empty containers with care because they may still present a hazard. Do not get in eyes, on skin, or on clothing.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations.

**Storage Conditions:** Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area.

**Incompatible Materials:** Oxidizers.

### 7.3. Specific End Use(s)

Creosote, Refined Coal Tar

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

| **Naphthalene (91-20-3)** | | |
|---|---|---|
| **USA ACGIH** | ACGIH TWA (ppm) | 10 ppm |
| **USA ACGIH** | ACGIH chemical category | Skin - potential significant contribution to overall exposure by the cutaneous route,Confirmed Animal Carcinogen with Unknown Relevance to Humans |
| **USA ACGIH** | Biological Exposure Indices (BEI) | Parameter: 1-Naphthol with hydrolysis plus 2-Naphthol with hydrolysis - Sampling time: end of shift (nonquantitative, nonspecific) |
| **USA NIOSH** | NIOSH REL (TWA) (mg/m³) | 50 mg/m³ |
| **USA NIOSH** | NIOSH REL (TWA) (ppm) | 10 ppm |
| **USA NIOSH** | NIOSH REL (STEL) (mg/m³) | 75 mg/m³ |
| **USA NIOSH** | NIOSH REL (STEL) (ppm) | 15 ppm |
| **USA IDLH** | US IDLH (ppm) | 250 ppm |
| **USA OSHA** | OSHA PEL (TWA) (mg/m³) | 50 mg/m³ |
| **USA OSHA** | OSHA PEL (TWA) (ppm) | 10 ppm |

| **Anthracene (120-12-7)** | | |
|---|---|---|
| **USA OSHA** | OSHA PEL (TWA) (mg/m³) | 0.2 mg/m³ (Coal tar pitch volatiles) |

| **Benzo(a)pyrene (50-32-8)** | | |
|---|---|---|
| **USA ACGIH** | ACGIH chemical category | Suspected Human Carcinogen |
| **USA ACGIH** | Biological Exposure Indices (BEI) | 2.5 µg/l Parameter: 1-Hydroxypyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (background)<br>Parameter: 3-Hydroxybenzo(a)pyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (nonquantitative) |
| **USA OSHA** | OSHA PEL (TWA) (mg/m³) | 0.2 mg/m³ (Coal tar pitch volatiles) |

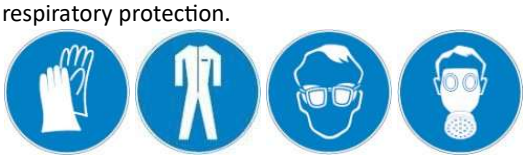
| **Benzene (71-43-2)** | | |
|---|---|---|
| **USA ACGIH** | ACGIH TWA (ppm) | 0.2 ppm |
| **USA ACGIH** | ACGIH STEL (ppm) | STEL eliminated as of 2024 |
| **USA ACGIH** | ACGIH chemical category | A1 – Confirmed Human Carcinogen<br>Skin – potential significant contribution to overall exposure by cutaneous route |

| | | |
|---|---|---|
| **USA ACGIH** | Biological Exposure Indices (BEI) | 25 µg/g Kreatinin Parameter: S-Phenylmercapturic acid - Medium: urine - Sampling time: end of shift (background)<br>500 µg/g Kreatinin Parameter: t,t-Muconic acid - Medium: urine - Sampling time: end of shift (background) |
| **USA NIOSH** | NIOSH REL (TWA) (ppm) | 0.1 ppm |
| **USA NIOSH** | NIOSH REL (STEL) (ppm) | 1 ppm |
| **USA IDLH** | US IDLH (ppm) | 500 ppm |
| **USA OSHA** | OSHA PEL (TWA) (ppm) | 10 ppm<br>1 ppm |
| **USA OSHA** | OSHA PEL (STEL) (ppm) | 5 ppm (see 29 CFR 1910.1028) |
| **USA OSHA** | OSHA PEL (Ceiling) (ppm) | 25 ppm |
| **USA OSHA** | Acceptable Maximum Peak Above The Acceptable Ceiling Concentration For An 8Hr Shift | 50 ppm Peak (10 minutes) |

### 8.2. Exposure Controls

**Appropriate Engineering Controls:** Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

**Personal Protective Equipment:** Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.



**Materials for Protective Clothing:** Chemically resistant materials and fabrics.

**Hand Protection:** Wear protective gloves.

**Eye and Face Protection:** Chemical safety goggles.

**Skin and Body Protection:** Wear suitable protective clothing.

**Respiratory Protection:** If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

**Other Information:** When using, do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** Dark brown to black

**Odor:** Sharp, aromatic, wood-like

**Odor Threshold:** No data available

**pH:** 7.0 – 8.0

**Evaporation Rate:** No data available

| | |
|---|---|
| **Melting Point:** | No data available |
| **Freezing Point:** | No data available |
| **Boiling Point:** | >200 °C (>392 °F) |
| **Flash Point:** | 96 °C (204.8 °F) PMCC |
| **Auto-ignition Temperature:** | No data available |
| **Decomposition Temperature:** | No data available |
| **Flammability (solid, gas):** | Not applicable |
| **Vapor Pressure:** | No data available |
| **Relative Vapor Density at 20°C:** | No data available |
| **Relative Density:** | No data available |
| **Solubility:** | No data available |
| **Partition Coefficient: N-Octanol/Water:** | No data available |
| **Viscosity:** | No data available |
| **Particulate Characteristics:** | Not applicable — product is a liquid at processing temperatures; semi-solid to solid at ambient temperature depending on grade. |

**9.2. Other Information** No additional information available

## SECTION 10: STABILITY AND REACTIVITY

**10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.

**10.2. Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).

**10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**10.4. Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, and incompatible materials.

**10.5. Incompatible Materials:** Oxidizers.

**10.6. Hazardous Decomposition Products:** Not expected to decompose under ambient conditions.

## 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

| **Coal Tar (8007-45-2)** | |
|---|---|
| **ATE (Oral)** | 1,011.98 mg/kg body weight |

| **Coal tar (8007-45-2)** | |
|---|---|
| **LD50 Oral Rat** | 1700 mg/kg |
| **LD50 Dermal Rabbit** | 15800 mg/kg |

| **Naphthalene (91-20-3)** | |
|---|---|
| **LD50 Oral Rat** | 533 – 710 mg/kg |
| **LC50 Inhalation Rat** | > 340 mg/m³ (Exposure time: 1 h) |

| **Anthracene (120-12-7)** | |
|---|---|
| **LD50 Oral Rat** | > 16 g/kg |
| **LD50 Dermal Rat** | > 1320 mg/kg |
| **ATE (Dermal)** | 1,100.00 mg/kg body weight |

| **Benzene (71-43-2)** | |
|---|---|
| **LD50 Oral Rat** | 810 mg/kg |
| **LD50 Dermal Rabbit** | > 8200 mg/kg |
| **LC50 Inhalation Rat** | 44.66 mg/l/4h |

**Skin Corrosion/Irritation:** Causes skin irritation. **pH:**
7.0 – 8.0

**Serious Eye Damage/Irritation:** Causes serious eye damage. **pH:**
7.0 – 8.0

**Respiratory or Skin Sensitization:** May cause an allergic skin reaction.
**Germ Cell Mutagenicity:** May cause genetic defects. **Carcinogenicity:**
May cause cancer.

| **Coal tar (8007-45-2)** | |
|---|---|
| **IARC group** | 1 |
| **National Toxicology Program (NTP) Status** | Known Human Carcinogens. |

| | |
|---|---|
| **OSHA Hazard Communication Carcinogen List** | In OSHA Hazard Communication Carcinogen list. |

| **Naphthalene (91-20-3)** | |
|---|---|
| **IARC group** | 2B |
| **National Toxicology Program (NTP) Status** | Reasonably anticipated to be Human Carcinogen. |
| **OSHA Hazard Communication Carcinogen List** | In OSHA Hazard Communication Carcinogen list. |

| **Anthracene (120-12-7)** | |
|---|---|
| **IARC group** | 3 |

| **Benzo(a)pyrene (50-32-8)** | |
|---|---|
| **IARC group** | 1 |
| **National Toxicology Program (NTP) Status** | Reasonably anticipated to be Human Carcinogen. |
| **OSHA Hazard Communication Carcinogen List** | In OSHA Hazard Communication Carcinogen list. |

| **Benzene (71-43-2)** | |
|---|---|
| **IARC group** | 1 |
| **National Toxicology Program (NTP) Status** | Evidence of Carcinogenicity, Known Human Carcinogens. |
| **OSHA Hazard Communication Carcinogen List** | In OSHA Hazard Communication Carcinogen list. |
| **OSHA Specifically Regulated Carcinogen List** | In OSHA Specifically Regulated Carcinogen list. |

**Reproductive Toxicity:** May damage fertility or the unborn child.
**Specific Target Organ Toxicity (Single Exposure):** May cause drowsiness or dizziness. May cause respiratory irritation.
**Specific Target Organ Toxicity (Repeated Exposure):** Causes damage to organs through prolonged or repeated exposure.
**Aspiration Hazard:** Not classified
**Symptoms/Injuries After Inhalation:** Irritation of the respiratory tract and the other mucous membranes. High concentrations may cause central nervous system depression such as dizziness, vomiting, numbness, drowsiness, headache, and similar narcotic symptoms.
**Symptoms/Injuries After Skin Contact:** May cause an allergic skin reaction. Redness, pain, swelling, itching, burning, dryness, and dermatitis. Risk of thermal burns on contact with molten product.
**Symptoms/Injuries After Eye Contact:** Causes permanent damage to the cornea, iris, or conjunctiva. Risk of thermal burns on contact with molten product.
**Symptoms/Injuries After Ingestion:** This material is harmful orally and can cause adverse health effects or death in significant amounts.
**Chronic Symptoms:** May cause cancer. Causes damage to organs (Haematopoietic system) through prolonged or repeated exposure (Oral, Inhalation). May cause genetic defects. May damage fertility or the unborn child.
**Interactive Effects:** Coal Tar (CAS 8007-45-2) is a complex UVCB substance containing thousands of chemical constituents including PAHs, phenols, and aromatic solvents that exhibit additive and synergistic toxicity:
**PAH Carcinogenic Synergy:** Coal tar is classified by IARC as Group 1 (carcinogenic to humans) based on occupational epidemiology. Benzo(a)pyrene (<2%), naphthalene (<20%), and anthracene (<2.5%) share CYP1A1/1B1 metabolic activation pathways. Combined PAH exposure produces greater carcinogenicburden than any single component. Benzo(a)pyrene is independently classified IARC Group 1.

**Benzene Hematotoxicity:** Benzene (<2%) causes bone marrow suppression and leukemia (IARC Group 1, Carc. 1A). Co-exposure with other aromatic solvents may enhance benzene hematotoxicity. ACGIH TLV revised to 0.02 ppm in 2024.

**Phototoxicity:** PAH components are phototoxic. Skin contact followed by UV or sunlight exposure causes photoactivated burns, blistering, and chronic melanosis. Workers must decontaminate and avoid sun exposure for 24-48 hours after skin contact.

**Eye Corrosion Enhancement:** Phenolic components act as dermal and ocular penetration enhancers, increasing absorption of co-present carcinogens. Serious eye damage (H318) may be worsened by phenol content.

**Organ Toxicity** — Haematopoietic System: STOT RE 1 (H372) driven by benzene. Concurrent exposure to other STOT SE 3 components (H335, H336) creates additive central nervous system depression and respiratory irritation risk.

**Alternative Information Sources:** Coal Tar (CAS 8007-45-2) is a UVCB substance. Hazard classifications are based on:
- **IARC Monograph Vol. 92 (2010):** Coal Tars and Coal-Tar Pitches — Group 1, sufficient evidence of human carcinogenicity.
- **IARC Monograph Vol. 100F (2012):** Benzene and Benzo(a)pyrene — both Group 1, confirmed human carcinogens.
- **NTP 15th Report on Carcinogens:** Coal Tar listed as Known Human Carcinogen.
- ATSDR Toxicological Profile for Polycyclic Aromatic Hydrocarbons (PAHs).
- EPA IRIS Assessment for Benzene (CASRN 71-43-2).
- Component-based classification using GHS mixture rules and additive concentration thresholds for identified components (naphthalene <20%, benzene <2%, anthracene <2.5%, benzo(a)pyrene <2%).
- Measured ATE (oral): 1,011.98 mg/kg bw (coal tar, 8007-45-2).
- Mixture classification consistent with REACH dossier for coal tar.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

**Ecology - General:** Very toxic to aquatic life with long lasting effects.

| **Naphthalene (91-20-3)** | |
|---|---|
| **LC50 Fish 1** | 5.74 – 6.44 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flowthrough]) |
| **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]) |

| **Anthracene (120-12-7)** | |
|---|---|
| **LC50 Fish 1** | 0 – 0.00318 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flowthrough]) |
| **EC50 Daphnia 1** | 0.081 – 0.112 mg/l (Exposure time: 48 h - Species: Daphnia magna) |
| **LC50 Fish 2** | 0.00278 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static]) |

| **Benzo(a)pyrene (50-32-8)** | |
|---|---|
| **EC50 Daphnia 1** | 0.005 mg/l |
| **ErC50 (Algae)** | 0.005 mg/l |

| | |
|---|---|
| **NOEC Chronic Fish** | 0.0024 mg/l |

| **Benzene (71-43-2)** | |
|---|---|
| **LC50 Fish 1** | 10.7 – 14.7 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flowthrough]) |
| **EC50 Daphnia 1** | 8.76 – 15.6 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static]) |
| **LC50 Fish 2** | 5.3 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through]) |
| **EC50 Daphnia 2** | 10 mg/l (Exposure time: 48 h - Species: Daphnia magna) |
| **ErC50 (Algae)** | 29 mg/l |
| **NOEC Chronic Fish** | 0.8 mg/l |

### 12.2. Persistence and Degradability

| **Coal Tar (8007-45-2)** | |
|---|---|
| **Persistence and Degradability** | May cause long-term adverse effects in the environment. |

### 12.3. Bioaccumulative Potential

| **Coal Tar (8007-45-2)** | |
|---|---|
| **Bioaccumulative Potential** | Not established. |

| **Naphthalene (91-20-3)** | |
|---|---|
| **BCF Fish 1** | 30 – 430 |
| **Partition coefficient n-octanol/water (Log Pow)** | 3.6 |

| **Anthracene (120-12-7)** | |
|---|---|
| **BCF Fish 1** | 903 – 2820 |
| **Partition coefficient n-octanol/water (Log Pow)** | 4.54 |

| **Benzo(a)pyrene (50-32-8)** | |
|---|---|
| **Partition coefficient n-octanol/water (Log Pow)** | 6.06 |

| **Benzene (71-43-2)** | |
|---|---|
| **BCF Fish 1** | 3.5 – 4.4 |
| **Partition coefficient n-octanol/water (Log Pow)** | 2.1 |

**12.4. Mobility in Soil** No additional information available

### 12.5. Other Adverse Effects

**Other Information:** Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste Treatment Methods

**Waste Disposal Recommendations:** Dispose of contents/container in accordance with local, regional, national, and international regulations.

**Additional Information:** Container may remain hazardous when empty. Continue to observe all precautions.

**Ecology - Waste Materials:** Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

## SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

### 14.1. In Accordance with DOT

**Proper Shipping Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (Naphthalene; Anthracene)
**Hazard Class:** 9
**Identification Number:** UN3082
**Label Codes:** 9
**Packing Group:** III
**Marine Pollutant:** Marine pollutant
**ERG Number:** 171


### 14.2. In Accordance with IMDG

**Proper Shipping Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Naphthalene; Anthracene)
**Hazard Class:** 9
**Identification Number:** UN3082
**Packing Group:** III
**Label Codes:** 9
**EmS-No. (Fire):** F-A
**EmS-No. (Spillage):** S-F
**Marine Pollutant:** Marine pollutant


### 14.3. In Accordance with IATA

**Proper Shipping Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Naphthalene; Anthracene)
**Packing Group:** III
**Identification Number** UN3082
**Hazard Class** 9
**Label Codes** 9
**ERG Code (IATA):** 9L

## SECTION 15: REGULATORY INFORMATION

### 15.1. US Federal Regulations

| **Coal Tar (8007-45-2)** | |
|---|---|
| **SARA Section 311/312 Hazard Classes** | Health hazard - Specific target organ toxicity (single or repeated exposure)<br>Health hazard - Carcinogenicity<br>Health hazard - Respiratory or skin sensitization<br>Health hazard - Skin corrosion or Irritation<br>Health hazard - Acute toxicity (any route of exposure)<br>Health hazard - Serious eye damage or eye irritation<br>Health hazard - Germ cell mutagenicity<br>Health hazard - Reproductive toxicity |

| **Coal tar (8007-45-2)** | |
|---|---|
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| **EPA TSCA Regulatory Flag** | SP - SP - indicates a substance that is identified in a proposed Significant New Uses Rule. |

| **Naphthalene (91-20-3)** | |
|---|---|
| Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313 | |
| **CERCLA RQ** | 100 lb |
| **SARA Section 313 - Emission Reporting** | 0.1 % |

| **Anthracene (120-12-7)** | |
|---|---|
| Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313 | |
| **CERCLA RQ** | 5000 lb |
| **SARA Section 313 - Emission Reporting** | 1 % |

| **Benzo(a)pyrene (50-32-8)** | |
|---|---|
| Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313 | |
| **CERCLA RQ** | 1 lb |
| **SARA Section 313 - Emission Reporting** | 0.1 % |

| **Benzene (71-43-2)** | |
|---|---|
| Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313 | |
| **CERCLA RQ** | 10 lb |
| **SARA Section 313 - Emission Reporting** | 0.1 % |

### 15.2. US State Regulations

| **Coal tar (8007-45-2)** |
|---|

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) - Special Hazardous Substances 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

**Anthracene (120-12-7)**

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

**Benzo(a)pyrene (50-32-8)**

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) - Special Hazardous Substances U.S.
- Pennsylvania - RTK (Right to Know) List

**Benzene (71-43-2)**

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) - Special Hazardous Substances U.S.
- Pennsylvania - RTK (Right to Know) List

**California Proposition 65**

**WARNING:** This product can expose you to Benzene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

| Chemical Name (CAS No.) | Carcinogenicity | Developmental Toxicity | Female Reproductive Toxicity | Male Reproductive Toxicity |
|---|---|---|---|---|
| Naphthalene (91-20-3) | X | | | |
| Benzo(a)pyrene (50-32-8) | X | | | |
| Benzene (71-43-2) | X | X | | X |

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Date of Preparation or Latest Revision:** 05/18/2026

**Previous Revision Date:** 09/09/2020 (Version 1.0)

**Version:** 2.0

**Revision Summary:** Updated to comply with OSHA Hazard Communication Standard 29 CFR 1910.1200 as amended May 20, 2024 (GHS Revision 7). Updated header compliance citation from Federal Register Vol. 77, No. 58(March 26, 2012) to Federal Register Vol. 89, No. 98 (May 20, 2024).Removed incorrect Flam. Liq. 2 (H225) classification from Section 3 substance row (inconsistent with flash point of 96°C). Updated Section 5 fire hazard description to combustible liquid language. Updated Skin Sens. 1 to Skin Sens. 1B for benzo(a)pyrene in Section 3. Updated benzene ACGIH TLV from 0.5 ppm to 0.02 ppm (January 2024 revision); eliminated STEL. Corrected boiling point in Section 9. Added particle characteristics to Section 9. Added interactive effects and alternative information paragraphs to Section 11. Updated Section 16 compliance statement.

**Other Information:** This document has been prepared in accordance with the OSHA Hazard Communication Standard 29 CFR 1910.1200, as amended by final rule published May 20, 2024 (effective July 19, 2024), aligning with the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS), Revision 7, with selected elements from Revision 8.

**GHS Full Text Phrases:**

| | |
|---|---|
| Acute Tox. 4 (Dermal) | Acute toxicity (dermal) Category 4 |
| Acute Tox. 4 (Oral) | Acute toxicity (oral) Category 4 |
| Aquatic Acute 1 | Hazardous to the aquatic environment - Acute Hazard Category 1 |
| Aquatic Acute 2 | Hazardous to the aquatic environment - Acute Hazard Category 2 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment - Chronic Hazard Category 1 |
| Aquatic Chronic 3 | Hazardous to the aquatic environment - Chronic Hazard Category 3 |
| Asp. Tox. 1 | Aspiration hazard Category 1 |
| Carc. 1A | Carcinogenicity Category 1A |
| Carc. 1B | Carcinogenicity Category 1B |
| Carc. 2 | Carcinogenicity Category 2 |
| Comb. Dust | Combustible Dust |
| Eye Dam. 1 | Serious eye damage/eye irritation Category 1 |
| Eye Irrit. 2A | Serious eye damage/eye irritation Category 2A |
| Flam. Liq. 2 | Flammable liquids Category 2 |
| Flam. Sol. 2 | Flammable solids Category 2 |
| Muta. 1B | Germ cell mutagenicity Category 1B |
| Repr. 1B | Reproductive toxicity Category 1B |
| Skin Irrit. 2 | Skin corrosion/irritation Category 2 |
| Skin Sens. 1 | Skin sensitization, Category 1 |
| Skin Sens. 1B | Skin sensitization, category 1B |
| STOT RE 1 | Specific target organ toxicity (repeated exposure) Category 1 |
| STOT SE 3 | Specific target organ toxicity (single exposure) Category 3 |
| STOT SE 3 | Specific target organ toxicity (single exposure) Category 3 |
| H225 | Highly flammable liquid and vapor |
| H228 | Flammable solid |
| H302 | Harmful if swallowed |
| H304 | May be fatal if swallowed and enters airways |
| H312 | Harmful in contact with skin |
| H315 | Causes skin irritation |
| H317 | May cause an allergic skin reaction |
| H318 | Causes serious eye damage |
| H319 | Causes serious eye irritation |
| H335 | May cause respiratory irritation |
| H336 | May cause drowsiness or dizziness |
| H340 | May cause genetic defects |
| H350 | May cause cancer |
| H351 | Suspected of causing cancer |
| H360 | May damage fertility or the unborn child |
| H372 | Causes damage to organs through prolonged or repeated exposure |

| | |
|---|---|
| H400 | Very toxic to aquatic life |
| H401 | Toxic to aquatic life |
| H410 | Very toxic to aquatic life with long lasting effects |
| H412 | Harmful to aquatic life with long lasting effects |

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

SDS US (GHS HazCom)

**NFPA 704 Diamond Rating System:**

**NFPA Health Hazard:** **3** – Materials that, under emergency conditions, can cause serious or permanent injury. Justification: Confirmed IARC Group 1 human carcinogen (Carc. 1A, H350). Contains benzene (<2%), a known cause of leukemia (IARC Group 1), and benzo(a)pyrene (<2%, IARC Group 1). Causes organ damage to the haematopoietic system through prolonged or repeated exposure (STOT RE 1, H372). Causes permanent eye damage (Eye Dam. 1, H318). May damage fertility and the unborn child (Repr. 1B, H360). Germ cell mutagenicity (Muta. 1B, H340). Contact with molten material causes thermal burns. Rating 4 not warranted: acute oral LD50 1,700 mg/kg (Acute Tox. 4); short-term inhalation is not acutely lethal under ambient conditions.

**NFPA Fire Hazard:** **2** – Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur. Justification: Flash point 96°C (204.8°F) PMCC. Not classified as a GHS flammable liquid (flash point marginally exceeds the 93.3°C GHS threshold), but routinely processed and transported at temperatures above its flash point during normal operations, creating active ignition risk. Contains benzene (<2%, flash point -11°C) and naphthalene (<20%, flammable solid). When ignited, burns with a reddish, sooty flame releasing carcinogenic PAH combustion products including benzo(a)pyrene. Rated 2 (rather than 1) based on operational processing temperatures and consistency with product line.

**NFPA Reactivity Hazard:** **0** – Materials that in themselves are normally stable, even under fire conditions, and which do not react with water. Justification: Stable under normal conditions and in fire. No hazardous polymerization. Not explosive. Reaction with strong oxidizers is not unusual for organic materials and does not elevate the reactivity rating.

**NFPA Special Hazard:** None

**NFPA 704 Diamond:**