

SAFETY DATA SHEET

Section 1. Identification

GHS product identifier :
Document product code :
Other means of identification : Not available.
Product type : Liquid.

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

| Identified uses |
|-----------------|
| |

Supplier/Manufacturer :

Emergency telephone number (with hours of operation) :

Section 2. Hazard(s) 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 1
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
 AQUATIC HAZARD (ACUTE) - Category 2
 AQUATIC HAZARD (LONG-TERM) - Category 2

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H350 - May cause cancer.
 H372 - Causes damage to organs through prolonged or repeated exposure. (respiratory tract)
 H411 - Toxic to aquatic life with long lasting effects.

Section 2. Hazard(s) identification

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.
P273 - Avoid release to the environment.
P260 - Do not breathe vapor.
P270 - Do not eat, drink or smoke when using this product.
P264 - Wash thoroughly after handling.
- Response** : P391 - Collect spillage.
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.
- Hazards not otherwise classified (US)** : None known.

Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Not available.

| Ingredient name | % (w/w) | CAS number |
|--|---------|------------|
| Tar, coal | 7 - 13 | 8007-45-2 |
| Kaolin | 5 - 10 | 1332-58-7 |
| Distillates (coal tar), upper | 3 - 7 | 65996-91-0 |
| Crystalline silica, respirable other than powder | 1 - 5 | 14808-60-7 |
| Titanium dioxide | 0.1 - 1 | 13463-67-7 |
| Benz[a]anthracene | 0.1 - 1 | 56-55-3 |
| Chrysene | 0.1 - 1 | 218-01-9 |
| Benzo[a]pyrene | <0.1 | 50-32-8 |
| Dibenz[a,h]anthracene | <0.1 | 53-70-3 |
| Fluoranthene | <0.1 | 206-44-0 |
| Pyrene | <0.1 | 129-00-0 |

United States: The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

Canada: The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with the amended HPR as of April 2018.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment 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 20 minutes. Get medical attention.

Section 4. First aid measures

- 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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- 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** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

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

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 an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

Specific hazards arising from the chemical : 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 thermal decomposition products : Decomposition products may include the following materials:
metal oxide/oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. 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

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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.



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 breathe vapor or mist. Do not ingest. 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. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Do not store below the following temperature: 4°C (39.2°F). 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.

Section 8. Exposure controls/personal protection

Control parameters

United States

Occupational exposure limits

| Ingredient name | Exposure limits |
|---|--|
| Tar, coal | <p>ACGIH TLV (United States, 3/2020). TWA: 0.2 mg/m³, (as benzene soluble aerosol) 8 hours.</p> <p>OSHA PEL (United States, 5/2018). TWA: 0.2 mg/m³ 8 hours. Form: Benzene soluble</p> <p>NIOSH REL (United States, 10/2016). TWA: 0.1 mg/m³ 10 hours.</p> |
| Kaolin | <p>ACGIH TLV (United States, 3/2020). TWA: 2 mg/m³ 8 hours. Form: Respirable fraction</p> <p>NIOSH REL (United States, 10/2016). TWA: 5 mg/m³ 10 hours. Form: Respirable fraction TWA: 10 mg/m³ 10 hours. Form: Total</p> <p>OSHA PEL (United States, 5/2018). TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 15 mg/m³ 8 hours. Form: Total dust</p> |
| Distillates (coal tar), upper Crystalline silica, respirable other than powder | <p>None.</p> <p>OSHA PEL Z3 (United States, 6/2016). TWA: 250 mppcf / (%SiO₂+5) 8 hours. Form: Respirable TWA: 10 mg/m³ / (%SiO₂+2) 8 hours. Form:</p> |



Section 8. Exposure controls/personal protection

| | |
|-----------------------|--|
| Titanium dioxide | Respirable OSHA PEL (United States, 5/2018). TWA: 50 µg/m ³ 8 hours. Form: Respirable dust ACGIH TLV (United States, 3/2019). TWA: 0.025 mg/m ³ 8 hours. Form: Respirable fraction NIOSH REL (United States, 10/2016). TWA: 0.05 mg/m ³ 10 hours. Form: respirable dust ACGIH TLV (United States, 3/2020). TWA: 10 mg/m ³ 8 hours. |
| Benz[a]anthracene | OSHA PEL (United States, 5/2018). TWA: 15 mg/m ³ 8 hours. Form: Total dust |
| Chrysene | None. |
| Benzo[a]pyrene | None. |
| Dibenz[a,h]anthracene | None. |
| Fluoranthene | None. |
| Pyrene | None. |

Canada

Occupational exposure limits

| Ingredient name | Exposure limits |
|--|---|
| Tar, coal | CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 0.2 mg/m ³ , (as benzene solubles) 8 hours. CA British Columbia Provincial (Canada, 1/2020). TWA: 0.2 mg/m ³ , (as benzene-soluble aerosol) 8 hours. CA Ontario Provincial (Canada, 6/2019). TWA: 0.2 mg/m ³ , (as benzene soluble aerosol) 8 hours. |
| Kaolin | CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 2 mg/m ³ 8 hours. Form: Respirable CA British Columbia Provincial (Canada, 1/2020). TWA: 2 mg/m ³ 8 hours. Form: Respirable CA Quebec Provincial (Canada, 7/2019). TWAEV: 5 mg/m ³ 8 hours. Form: Respirable dust. CA Ontario Provincial (Canada, 6/2019). TWA: 2 mg/m ³ 8 hours. Form: Respirable particulate matter. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 4 mg/m ³ 15 minutes. Form: respirable fraction TWA: 2 mg/m ³ 8 hours. Form: respirable fraction |
| Crystalline silica, respirable other than powder | CA British Columbia Provincial (Canada, 5/2019). |



Section 8. Exposure controls/personal protection

| | |
|-----------------------|--|
| Titanium dioxide | <p>TWA: 0.025 mg/m³ 8 hours. Form: Respirable CA Quebec Provincial (Canada, 1/2014). TWAEV: 0.1 mg/m³ 8 hours. Form: Respirable dust. CA Ontario Provincial (Canada, 1/2018). TWA: 0.1 mg/m³ 8 hours. Form: Respirable fraction. CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 0.025 mg/m³ 8 hours. Form: Respirable particulate CA Saskatchewan Provincial (Canada, 7/2013). TWA: 0.05 mg/m³ 8 hours. Form: respirable fraction CA British Columbia Provincial (Canada, 1/2020). TWA: 10 mg/m³ 8 hours. Form: Total dust TWA: 3 mg/m³ 8 hours. Form: respirable fraction CA Quebec Provincial (Canada, 7/2019). TWAEV: 10 mg/m³ 8 hours. Form: Total dust. CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 10 mg/m³ 8 hours. CA Ontario Provincial (Canada, 6/2019). TWA: 10 mg/m³ 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 20 mg/m³ 15 minutes. TWA: 10 mg/m³ 8 hours.</p> |
| Benz[a]anthracene | <p>CA Saskatchewan Provincial (Canada, 7/2013). STEL: 0.6 mg/m³, (measured as benzene solubles) 15 minutes. TWA: 0.2 mg/m³, (measured as benzene solubles) 8 hours.</p> |
| Chrysene | <p>CA Saskatchewan Provincial (Canada, 7/2013). STEL: 0.6 mg/m³, (measured as benzene solubles) 15 minutes. TWA: 0.2 mg/m³, (measured as benzene solubles) 8 hours.</p> |
| Benzo[a]pyrene | <p>CA Quebec Provincial (Canada, 7/2019). TWAEV: 0.005 mg/m³ 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 0.6 mg/m³, (measured as benzene solubles) 15 minutes. TWA: 0.2 mg/m³, (measured as benzene solubles) 8 hours.</p> |
| Dibenz[a,h]anthracene | <p>CA Saskatchewan Provincial (Canada, 7/2013). STEL: 0.6 mg/m³, (measured as benzene solubles) 15 minutes. TWA: 0.2 mg/m³, (measured as benzene solubles) 8 hours.</p> |



Section 8. Exposure controls/personal protection

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|--------------|---|
| Fluoranthene | solubles) 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 0.6 mg/m ³ , (measured as benzene solubles) 15 minutes. TWA: 0.2 mg/m ³ , (measured as benzene solubles) 8 hours. |
| Pyrene | CA Saskatchewan Provincial (Canada, 7/2013). STEL: 0.6 mg/m ³ , (measured as benzene solubles) 15 minutes. TWA: 0.2 mg/m ³ , (measured as benzene solubles) 8 hours. |

- 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.
- 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.
- 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

Appearance

| | |
|---|-----------------------------------|
| Physical state | : Liquid. |
| Color | : Dark gray. |
| Odor | : Slight petroleum. |
| Odor threshold | : Not available. |
| pH | : Neutral. |
| Melting/freezing point | : 0°C (32°F) |
| Initial boiling point and boiling range | : 100°C (212°F) |
| Flash point | : Not available. |
| Evaporation rate | : <1 (Butyl acetate = 1) |
| Flammability (solid, gas) | : Not available. |
| Lower and upper explosive (flammable) limits | : Not available. |
| Vapor pressure | : 2.34 kPa (17.551 mm Hg) |
| Vapor density | : <1 [Air = 1] |
| Relative density | : 1.01 |
| Solubility | : Not available. |
| Solubility in water | : Miscible with water. |
| Partition coefficient: n-octanol/water | : Not available. |
| Auto-ignition temperature | : Not available. |
| Decomposition temperature | : Not available. |
| Viscosity | : Dynamic: <2000 mPa·s (<2000 cP) |
| Flow time (ISO 2431) | : Not available. |
| VOC = Volatile Organic Compound | : |

Section 10. Stability and reactivity

| | |
|---|--|
| Reactivity | : No specific test data related to reactivity available for this product or its ingredients. |
| Chemical stability | : The product is stable. |
| Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur. |
| Conditions to avoid | : No specific data. |
| Incompatible materials | : Reactive or incompatible with the following materials: oxidizing materials. |
| Hazardous decomposition products | : 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 | Result | Species | Dose | Exposure |
|-------------------------|-------------|---------|-------------|----------|
| Tar, coal | LD50 Dermal | Rabbit | >7950 mg/kg | - |
| Fluoranthene | LD50 Dermal | Rabbit | 3180 mg/kg | - |
| | LD50 Oral | Rat | 2 g/kg | - |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|----------------------|---------|-------|-----------------------------|-------------|
| Tar, coal | Skin - Mild irritant | Human | - | 72 hours 15 µg Intermittent | - |
| Benzo[a]pyrene | Skin - Mild irritant | Rabbit | - | 3 hours 5 % | - |
| Pyrene | Skin - Mild irritant | Mouse | - | 14 µg | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 500 mg | - |

Sensitization

There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

Classification

| Product/ingredient name | OSHA | IARC | NTP |
|-------------------------|------|------|--|
| Tar, coal | - | 1 | Known to be a human carcinogen. |
| Titanium dioxide | - | 2B | - |
| Benz[a]anthracene | - | 2B | Reasonably anticipated to be a human carcinogen. |
| Chrysene | - | 2B | - |
| Benzo[a]pyrene | - | 1 | Reasonably anticipated to be a human carcinogen. |
| Dibenz[a,h]anthracene | - | 2A | Reasonably anticipated to be a human carcinogen. |
| Fluoranthene | - | 3 | - |
| Pyrene | - | 3 | - |

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

| Name | Category | Route of exposure | Target organs |
|--|------------|-------------------|-------------------|
| Crystalline silica, respirable other than powder | Category 1 | inhalation | respiratory tract |

Aspiration hazard

There is no data available.



Section 11. Toxicological information

Information on the likely routes of exposure : Routes of entry anticipated: Oral, Dermal, Inhalation.

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 : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

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 : No known significant effects or critical hazards.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : No known significant effects or critical hazards.
Potential delayed effects : No known significant effects or critical hazards.

Long term exposure

Potential immediate effects : No known significant effects or critical hazards.
Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

General : Causes damage to organs through prolonged or repeated exposure.
Carcinogenicity : May cause cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity : No known significant effects or critical hazards.
Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|-------------------------|--------------|----------------|--------------------------|----------------------------|-------------------------------------|
| Fluoranthene | 2000 | 3180 | N/A | N/A | N/A |



Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|-------------------------|---------------------------------------|--|----------|
| Titanium dioxide | Acute LC50 >1000000 µg/L Marine water | Fish - Fundulus heteroclitus | 96 hours |
| Benz[a]anthracene | Acute LC50 97.5 µg/L Fresh water | Daphnia - Daphnia magna - Neonate | 48 hours |
| Benzo[a]pyrene | Acute EC50 5 µg/L Fresh water | Algae - Scenedesmus acutus | 72 hours |
| | Acute LC50 11 mg/L Marine water | Crustaceans - Gammarus duebeni | 48 hours |
| | Acute LC50 0.25 mg/L Fresh water | Daphnia - Daphnia magna - Neonate | 48 hours |
| | Chronic NOEC 12 µg/L Fresh water | Crustaceans - Eurytemora affinis - Nauplii | 21 days |
| Fluoranthene | Acute EC50 0.103 ug/ml Marine water | Algae - Phaeodactylum tricornutum | 72 hours |
| | Acute EC50 45 ppm Marine water | Algae - Skeletonema costatum | 96 hours |
| | Acute LC50 5.32 µg/L Marine water | Crustaceans - Americamysis bahia | 48 hours |
| | Acute LC50 1.6 µg/L Fresh water | Daphnia - Daphnia magna | 48 hours |
| | Acute LC50 0.1 µg/L Marine water | Fish - Pleuronectes americanus | 96 hours |
| | Chronic NOEC 41.7 µg/L Fresh water | Algae - Pseudokirchneriella subcapitata | 96 hours |
| | Chronic NOEC 95 µg/L Marine water | Aquatic plants - Plantae | 72 hours |
| | Chronic NOEC 1.4 µg/L Fresh water | Daphnia - Daphnia magna | 21 days |
| | Chronic NOEC 1.4 µg/L Fresh water | Fish - Pimephales promelas | 32 days |
| Pyrene | Acute LC50 0.89 µg/L Marine water | Crustaceans - Americamysis bahia | 48 hours |
| | Acute LC50 135.8 µg/L Fresh water | Daphnia - Daphnia magna - Neonate | 48 hours |

Persistence and degradability

There is no data available.

Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|-------------------------|--------------------|---------|-----------|
| Benz[a]anthracene | >1 | - | low |
| Chrysene | 5.76 | 257.04 | low |
| Benzo[a]pyrene | 5.81 | - | high |
| Dibenz[a,h]anthracene | 6.13 | - | high |
| Fluoranthene | 6.75 | - | high |
| Pyrene | 5.16 | 3630.78 | high |
| | 5.43 | 1513.56 | high |

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.









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 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. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

| | DOT Classification | TDG Classification | IMDG | IATA |
|-----------------------------------|--|--|---|--|
| UN number | UN3082 | UN3082 | UN3082 | UN3082 |
| UN proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Benz[a]anthracene, Benzo[a]pyrene) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Benz[a]anthracene, Benzo[a]pyrene) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Benz[a]anthracene, Benzo[a]pyrene) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Benz[a]anthracene, Benzo[a]pyrene) |
| Transport hazard class(es) | 9   | 9   | 9   | 9   |
| Packing group | III | III | III | III |
| Environmental hazards | Yes. | Yes. | Yes. | Yes. |

AERG : 171

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.
Reportable quantity 1024.8 lbs / 465.26 kg [121.69 gal / 460.65 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.
- 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.
- 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.

Section 14. Transport information

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 available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) PAIR:** Distillates (coal tar), upper; Naphthalene
TSCA 8(a) CDR Exempt/Partial exemption: Not determined
TSCA 12(b) one-time export: Tar, coal; Distillates (coal tar), upper
Clean Water Act (CWA) 307: Benz[a]anthracene; Chrysene; Benz[e]acephenanthrylene; Indeno[1,2,3-cd]pyrene; Benzo[a]pyrene; Naphthalene; Benzo[ghi]perylene; Benzo[k]fluoranthene; Dibenz[a,h]anthracene; Acenaphthene; Anthracene; Fluorene; Phenanthrene; Fluoranthene; Pyrene
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

| Name | % | EHS | SARA 302 TPQ | | SARA 304 RQ | |
|--------|----------|------|--------------|-----------|-------------|-----------|
| | | | (lbs) | (gallons) | (lbs) | (gallons) |
| Pyrene | ≤0.00013 | Yes. | 1000 / 10000 | - | 5000 | - |

SARA 304 RQ : 3871467286.1 lbs / 1757646147.9 kg [459723752.1 gal / 1740243710.8 L]

SARA 311/312

Classification : CARCINOGENICITY - Category 1A
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1



Section 15. Regulatory information

Composition/information on ingredients

| Name | % | Classification |
|--|-----------|--|
| Tar, coal | ≥10 - ≤25 | CARCINOGENICITY - Category 1A |
| Distillates (coal tar), upper | ≥5 - ≤10 | FLAMMABLE LIQUIDS - Category 3 CARCINOGENICITY - Category 1B |
| Crystalline silica, respirable other than powder | ≥3 - ≤5 | SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 |
| Titanium dioxide | ≥0.3 - ≤1 | CARCINOGENICITY - Category 2 |
| Benz[a]anthracene | ≤0.12 | CARCINOGENICITY - Category 1B |
| Chrysene | ≤0.12 | GERM CELL MUTAGENICITY - Category 2 CARCINOGENICITY - Category 1B |
| Benzo[a]pyrene | ≤0.096 | SKIN SENSITIZATION - Category 1 GERM CELL MUTAGENICITY - Category 1B CARCINOGENICITY - Category 1B |
| Dibenz[a,h]anthracene | ≤0.017 | TOXIC TO REPRODUCTION - Category 1B CARCINOGENICITY - Category 1B |

State regulations

Massachusetts

: The following components are listed: Tar, coal; Kaolin; Distillates (coal tar), upper; Crystalline silica, respirable other than powder

New York

: The following components are listed: Tar, coal

New Jersey

: The following components are listed: Tar, coal; Kaolin; Crystalline silica, respirable other than powder; Benz[a]anthracene; Chrysene

Pennsylvania

: The following components are listed: Tar, coal; Kaolin; Distillates (coal tar), upper; Crystalline silica, respirable other than powder

California Prop. 65

⚠ WARNING: This product can expose you to chemicals including Crystalline silica, respirable other than powder, Titanium dioxide, Benz[a]anthracene, Chrysene, Benz[e]acephenanthrylene, Indeno[1,2,3-cd]pyrene, Benzo[a]pyrene, Naphthalene, Carbon-black extracts, Benzo[k]fluoranthene, Carbon black, non respirable, Dibenz[a,h]anthracene, Cumene, Anthracene, Phenanthrene, Fluoranthene and Pyrene, which are known to the State of California to cause cancer, and Methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

| Ingredient name | No significant risk level | Maximum acceptable dosage level |
|--|---------------------------|---------------------------------|
| Crystalline silica, respirable other than powder | - | - |
| Titanium dioxide | - | - |
| Benz[a]anthracene | Yes. | - |
| Chrysene | Yes. | - |
| Benz[e]acephenanthrylene | Yes. | - |
| Indeno[1,2,3-cd]pyrene | - | - |
| Benzo[a]pyrene | Yes. | - |
| Naphthalene | Yes. | - |
| Carbon-black extracts | - | - |
| Benzo[k]fluoranthene | - | - |
| Carbon black, non respirable | - | - |
| Dibenz[a,h]anthracene | Yes. | - |
| Methanol | - | Yes. |
| Cumene | - | - |
| Anthracene | - | - |
| Phenanthrene | - | - |
| Fluoranthene | - | - |
| Pyrene | - | - |

Section 15. Regulatory information

Canadian lists

- Canadian NPRI** : None of the components are listed.
CEPA Toxic substances : The following components are listed: Distillates (coal tar), upper

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

| Ingredient name | List name | Status |
|-------------------|----------------|--------|
| Benz[a]anthracene | POPs - Annex 3 | Listed |
| Chrysene | - | Listed |

Inventory list

- Canada** : Not determined.
United States (TSCA 8b) : Not determined.

Section 16. Other information

Procedure used to derive the classification

| Classification | Justification |
|---|--------------------|
| CARCINOGENICITY - Category 1 | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 | Calculation method |
| AQUATIC HAZARD (ACUTE) - Category 2 | Calculation method |
| AQUATIC HAZARD (LONG-TERM) - Category 2 | Calculation method |

History

- Date of issue/Date of revision** : 05/15/2021
Date of previous issue : Not applicable
Version : 1
Prepared by : KMK Regulatory Services Inc.

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

Section 16. Other information

UN = United Nations

Internal code

: 261-194

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