SAFETY DATA SHEET

SDS ID NO.: 0138MAR019 **Revision date** 12/28/2021

1. IDENTIFICATION

Product Name Marathon Petroleum Cationic Emulsified Asphalt

Synonym AE-TC, CMS Asphalts, CRS Asphalts, CRSP Asphalts, CSS Asphalts
Product code 0138MAR019
Chemical family Asphalt

Recommended use Road Building & Other Service.
Restrictions on use All others.

Manufacturer, Importer, or Responsible Party Name and Address

MARATHON PETROLEUM COMPANY LP
539 South Main Street
Findlay, OH 45840

SDS Information 1-419-421-3070 (M-F; 8-5 EST)

24 Hour Emergency Telephone CHEMTREC: 1-800-424-9300 (CCN# 13740)

2. HAZARD IDENTIFICATION

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Respiratory sensitization	Category 1A
Skin sensitization	Category 1
Carcinogenicity	Category 2
Chronic aquatic toxicity	Category 2

Hazards Not Otherwise Classified (HNOC)
Hot liquid may cause thermal burns
May release hydrogen sulfide gas

Label Elements

Danger

Contact with product at elevated temperatures can result in thermal burns
May release highly toxic hydrogen sulfide gas that quickly fatigues the sense of smell
Causes skin irritation
Causes serious eye damage
May cause allergy or asthma symptoms or breathing difficulties if inhaled
Suspected of causing cancer
May cause an allergic skin reaction.
Toxic to aquatic life with long lasting effects

Appearance Black-brown solid or semi-solid at room temperature. Liquid at temperatures >70°C.

Physical State Liquid

Odor Hydrocarbon / Tar

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Avoid breathing dust/fume/gas/mist/vapors/spray
In case of inadequate ventilation wear respiratory protection
Wear protective gloves/protective clothing/eye protection/face protection
Wash hands and any possibly exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Contaminated work clothing should not be allowed out of the workplace
Avoid release to the environment

Precautionary Statements - Response
Immediately call a POISON CENTER or doctor
Specific treatment, see supplemental first aid information.
IF exposed or concerned: Get medical advice/attention
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
If skin irritation or rash occurs: Get medical attention
Wash contaminated clothing before reuse
IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container at an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Composition varies depending on source of crude and specifications of final product. May contain minor amounts of sulfur, nitrogen and oxygen containing compounds.

Composition Information

Name	CAS Number	% Concentration
Asphalt	8052-42-4	25-75
Polymer Modifier (SBS or SBR)	Mixture	0-6
Sulfur Compounds	Mixture	0-5
Cationic Emulsifier (contains alkylamines)	Mixture	0-5
Hydrochloric Acid	7647-01-0	0-2.75
Triethylenetetramine	112-24-3	0-0.25
Naphthalene	91-20-3	0-0.2
Polycyclic Aromatic Hydrocarbons	Mixture	< 0.1
Hydrogen sulfide	7783-06-4	< 0.1

All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.

4. FIRST AID MEASURES

First aid measures

General advice

In case of accident or if you feel unwell, seek medical advice immediately (show directions for use or safety data sheet if possible).

Inhalation

If symptoms of overexposure to asphalt fume develop, move to fresh air in a position comfortable for breathing. If symptoms or irritation occur, call a poison control center or doctor.

Skin contact

Hot material: DO NOT DELAY. Immediately immerse or place the affected skin under a water stream for at least 15 minutes. Urgent medical attention is required for burns to the face, eyes, hands, feet, genitalia, and for circumferential or large burn areas. GET MEDICAL ATTENTION IMMEDIATELY.
Do not attempt to remove solidified asphalt if not a physician. Leave burn uncovered. Ice (or “cold packs”) may be used in the event that water is unavailable. Only remove clothing if not adhering to the skin. Be aware that although it is very important to cool the burn thoroughly and completely, the overuse of ice may increase the risk of hypothermia.

Cold material: To remove cold asphalt not associated with a burn, wash with soap and water or waterless cleaner. If symptoms or irritation or rash occur, call a poison control center or doctor.

Eye contact

Hot material: After contact with hot asphalt, lay the person flat on their back, remove contact lenses if easy to do, and flush with water from a continuous stream for at least 15 minutes by allowing the water to flow over the bridge of the nose to the eyes. GET MEDICAL ATTENTION IMMEDIATELY.

Cold material: If irritation develops, flush eyes with water. If irritation or redness persists call a poison control center or a doctor.

Ingestion

Ingestion not likely. Small amounts of ingested asphalt usually require no treatment. If large amounts are swallowed, call a poison control center or doctor.

Most important signs and symptoms, both short-term and delayed with overexposure

Adverse effects

Frequent or prolonged contact with cold material may cause irritation. Additional effects may include skin sensitization. Exposure to hot melted material can cause thermal burns.

Indication of any immediate medical attention and special treatment needed

Notes to physician

Immediately address any airway, breathing, or circulation concerns.

SKIN & EYE CONTACT: Prolonged flushing/cooling is necessary if the patient is treated on scene or soon after asphalt contact. Topical antibiotics should be liberally applied to the adhered asphalt-skin interface to aid in asphalt removal. A non-adherent material, such as Adaptic®, can then be applied and covered with sterile gauze. If topical antibiotics are not available, other materials that may be effective include mineral oil, baby oil, petroleum jelly (e.g. Vaseline®), mayonnaise, or butter. Do not use organic solvents such as kerosene, gasoline, or ethanol, as these can result in tissue damage or a fire hazard. Dressings should be changed every 4 hours until natural separation occurs. Initiate standard burn management at that time. Once cooled, adhered asphalt is not harmful to the skin, and in fact, provides a sterile cover over the affected area. The asphalt will detach itself within a few days as healing occurs. If it is necessary to remove the asphalt, only medically approved solvents or warm paraffin should be used to prevent further skin damage. Circumferential asphalt contact can have a tourniquet effect and impair distal circulation and nerve function. Create a longitudinal split or cut (analogous to an escharotomy) may

be required completely across the residual asphalt to relieve pressure in the underlying tissue. For eye exposures with adherent asphalt, consult with an ophthalmologist. If hot material has caused burns to the eye, early ophthalmologic evaluation is recommended.

INHALATION: Inhalation exposure can produce toxic effects. Treat intoxications as hydrogen sulfide exposures. At high concentrations hydrogen sulfide may produce pulmonary edema, respiratory depression, and/or respiratory paralysis. The first priority in treatment should be the establishment of adequate ventilation and the administration of 100% oxygen. Monitor for respiratory distress. If cough or difficulty inbreathing develops, evaluate for upper respiratory tract inflammation, bronchitis, and pneumonitis.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

For small fires, Class B fire extinguishing media such as CO2, dry chemical, foam (AFFF/ATC) or water fog can be used. For large fires, water spray, fog or foam (AFFF/ATC) can be used. Firefighting should be attempted only by those who are adequately trained and equipped with proper protective equipment.

Unsuitable extinguishing media

Do not use straight streams. Water contact can cause violent eruption of hot asphalt.

Specific hazards arising from the chemical

This product is not a combustible liquid per the OSHA Hazard Communication Standard, but will ignite and burn at temperatures exceeding the flash point.

Hazardous combustion products

Smoke, carbon monoxide, and other products of incomplete combustion.

Explosion data

Sensitivity to mechanical impact: No.

Sensitivity to static discharge: No.

Special protective equipment and precautions for firefighters

Firefighters should wear full protective clothing and positive-pressure self-contained breathing apparatus (SCBA) with a full face-piece, as appropriate. Avoid using straight water streams. Water spray and foam must be applied carefully to avoid frothing and from as far a distance as possible. Avoid excessive water spray application. Keep run-off water out of sewers and water sources.

Additional firefighting tactics

Not applicable

NFPA	Health 3	Flammability 1	Instability 0	Special Hazard -

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Keep public away. Isolate and evacuate area. Shut off source if safe to do so.

Protective equipment

Use personal protection measures as recommended in Section 8.

Emergency procedures

Advise authorities and National Response Center (800-424-8802) if the product has entered a water course or sewer. Notify local health and pollution control agencies, if appropriate.

Environmental precautions

Avoid release to the environment. Avoid subsoil penetration.

Methods and materials for containment

Contain liquid with sand or soil.

Methods and materials for cleaning up

Use suitable absorbent materials such as vermiculite, sand, or clay to clean up residual liquids. Recover and return free product to proper containers.

7. HANDLING AND STORAGE

Safe handling precautions

Avoid contact with skin, eyes and clothing. Avoid breathing fumes, gas, or vapors. Use only with adequate ventilation. Wash thoroughly after handling. Use good personal hygiene practices and wear appropriate personal protective equipment. Comply with all applicable EPA, OSHA, NFPA and consistent state and local requirements.

Harmful concentrations of hydrogen sulfide (H2S) gas can accumulate in excavations and low-lying areas as well as the vapor space of storage and bulk transport compartments. Stay upwind and vent open hatches before unloading. Sulfur containing products may cause polysulfide deposits (iron sulfide) to form inside iron storage tanks. These pyrophoric deposits, upon exposure to air, can ignite spontaneously. Keep heating coils and flues in storage tanks, trucks and kettles covered with product (8"). Do not overheat.

Storage conditions

Store in properly closed containers that are appropriately labeled and in a cool, well-ventilated area.

Incompatible materials

Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Name	ACGIH TLV	OSHA PELS	NIOSH IDLH
Asphalt 8052-42-4	0.5 mg/m³ TWA	-	-
Hydrochloric Acid 7647-01-0	2 ppm Ceiling	Ceiling: 5 ppm Ceiling: 7 mg/m³	IDLH: 50 ppm
Naphthalene 91-20-3	10 ppm TWA Skin - potential significant contribution to overall exposure by the cutaneous route	TWA: 10 ppm TWA: 50 mg/m³	250 ppm
Hydrogen sulfide 7783-06-4	1 ppm TWA 5 ppm STEL	Ceiling: 20 ppm Peak: 50 ppm	100 ppm

Notes: No further information available.

Engineering measures

Local or general exhaust required in an enclosed area or when there is inadequate ventilation.

Personal protective equipment

Eye protection

Wear goggles and faceshield when handling hot material.

Skin and body protection

Wear insulated gloves when handling hot material. Contact the glove manufacturer for specific advice on glove selection and breakthrough times. Wear the appropriate thermal resistant clothing and footwear when handling and applying hot asphalt. Rubberized suits or coats may be needed for some maintenance operations with hot material.

Respiratory protection

Where there is potential for airborne exposure to hydrogen sulfide (H2S) above exposure limits, a NIOSH approved, self-contained breathing apparatus (SCBA) or equivalent operated in a pressure demand or other positive pressure mode should be used. When H2S vapors exceed permissible limits, i.e., in confined spaces or bulk transport loading/unloading, a positive-pressure atmosphere supplying respirator is recommended. Self-contained breathing apparatus should be used for fire fighting.

Provided hydrogen sulfide (H2S) is not detected: if there is potential to exceed the exposure limits for asphalt fumes a NIOSH certified air purifying respirator equipped with organic vapor cartridges/canisters with R or P95 filters should be used. A respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed when conditions warrant the use of a respirator.

Note: Air purifying respirators are not to be used in atmospheres that exceed the maximum use concentration (as directed by regulation or the manufacturer's instructions), in oxygen deficient atmospheres, (less than 19.5 percent oxygen) or under conditions that are immediately dangerous to life and health (IDLH).

Hygiene measures Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Black-brown solid or semi-solid at room temperature. Liquid at temperatures >70°C.
Physical State	Liquid
Color	Dark brown to black
Odor	Hydrocarbon / Tar
Odor Threshold	No data available.

Property	**Values (method)**
pH	Not applicable.
Melting Point / Freezing Point	No data available.
Initial Boiling Point / Boiling Range	> 100 °C / > 212 °F (ASTM D6997)
Flash Point	No data available.
Evaporation Rate	No data available.
Flammability (solid, gas)	Not applicable.
Flammability Limit in Air (%):	
Upper Flammability Limit:	No data available.
Lower Flammability Limit:	No data available.
Explosion Limits	No data available.
Vapor Pressure	Negligible @ 77°F (ASTM D323)
Vapor Density	No data available.
Specific Gravity / Relative Density	0.95-1.05
Water Solubility	Negligible
Partition Coefficient	No data available.
Autoignition Temperature	No data available.
Decomposition Temperature	No data available.
Kinematic Viscosity	No data available.
VOC Content (%)	No data available.

10. STABILITY AND REACTIVITY

Reactivity The product is non-reactive under normal conditions.

Chemical stability Stable under recommended storage conditions.

Possibility of hazardous reactions None under normal processing.

Hazardous polymerization Will not occur.

Conditions to avoid Sources of heat or ignition.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition products None known under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Potential short-term adverse effects from overexposures

Inhalation May cause sensitization by inhalation. Fumes or vapors from the heated material may be irritating to the respiratory tract. May release highly toxic hydrogen sulfide gas that quickly fatigues the sense of smell.

Eye contact Corrosive to the eyes and may cause severe damage including blindness. Vapors may cause eye irritation and sensitivity to light. Contact with hot material may cause thermal burns.

Skin contact Irritating to skin. May cause an allergic skin reaction. Contact with hot material may cause thermal burns.

Ingestion Ingestion may cause irritation, pain and/or burning. Ingestion of large quantities could lead to gastrointestinal obstruction. Swallowing hot material may cause burns to the mouth, throat, and stomach.

Acute toxicological data

Name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrochloric Acid 7647-01-0	238-277 mg/kg (Rat)	> 5010 mg/kg (Rabbit)	1.68 mg/L (Rat) 1 h
Triethylenetetramine 112-24-3	2500 mg/kg (Rat)	550 mg/kg (Rabbit), 1000 - 2000 mg/kg (Rat)	-
Naphthalene 91-20-3	533 mg/kg (Mouse)	> 2000 mg/kg (Rabbit)	> 340 mg/m³ (Rat) 1 h
Hydrogen sulfide 7783-06-4	-	-	444 ppm (Rat) 4 h

Immediate and delayed effects as well as chronic effects from short and long-term exposure

PETROLEUM ASPHALT: Eye and upper respiratory tract irritation has been reported in some asphalt workers (paving and roofing operations) but they are typically mild and transient. Some studies indicate that asphalt paving workers may experience lower respiratory tract symptoms (e.g., coughing, wheezing, and shortness of breath) and pulmonary function changes. Other studies of asphalt workers found no consistent relationship between exposure to asphalt fumes and pulmonary function. Increased levels of 1-hydroxypyrene (a marker for exposure to polycyclic aromatic hydrocarbons) have been observed in the urine of asphalt workers. Genotoxicity studies (e.g., DNA adducts in the urine) of asphalt workers have been largely inconclusive.
A slight increase in lung cancer mortality was reported in a study of European workers exposed to paving and mastic asphalt, but conclusions were equivocal. A follow-up case-control epidemiology study of asphalt paving workers sponsored by the International Association for Research in Cancer (IARC) concluded that there was no evidence that asphalt exposure was linked to lung cancer. An increase in skin tumors was observed in lifetime studies of laboratory rodents exposed to extracts of asphalt (bitumen). The relevance of these studies to humans is not clear. No increase in skin tumors was observed in a lifetime bioassay where laboratory mice were treated with paving fume condensates. No increase in lung or other tumors were observed in a lifetime inhalation study in laboratory rats exposed to fumes from paving asphalt.

ASPHALTS USED IN ROOFING OPERATIONS: Some asphalts including roofing flux are further processed (oxidized/air-rectified) by the user or customer before use. An increased incidence of skin tumors was observed in a mouse skin carcinogenicity study where animals were exposed to condensed fumes collected from an oxidized roofing asphalt (BURA Type III) at above 450°F. Additional studies where mice were exposed to oxidized roofing asphalt fume condensates both as a tumor initiator and as a tumor promoter indicate that roofing fume condensate caused tumors as a result of initiation.

HYDROCHLORIC ACID: Hydrochloric acid (HCl) is a strong acid that is corrosive to all living tissue. Skin contact to concentrated solutions of HCl will cause skin burns. Vapors may cause irritation at concentrations above the TLV. Inhalation of HCl mists at high concentrations caused destruction of respiratory tissues, lung damage and systemic toxicity. Repeated exposures at concentrations of about 34 ppm HCl did not produce immediate effects or organ damage.

NAPHTHALENE: Excessive exposure to naphthalene may cause nausea, vomiting, diarrhea, blood in the urine, and a yellow color to the skin. Lifetime inhalation exposure of laboratory rodents to naphthalene resulted in cancers of the respiratory tract in male and female rats. A small increase in cancer of the lung was observed in female mice, but no evidence of lung cancer was observed in male mice. Long-term exposure to excessive airborne naphthalene concentrations may result in destruction of red blood cells, a condition referred to as hemolytic anemia.

HYDROGEN SULFIDE: Hydrogen sulfide has a strong, unpleasant odor resembling that of rotten eggs. Odor, however, is not a reliable means for detecting potentially dangerous concentration of the gas, as the sense of smell diminishes very rapidly at

concentrations of 50 ppm or higher. Eye irritation has been reported at 4 ppm. Irritation of the respiratory tract may occur at 50 ppm. Hydrogen sulfide gas may be fatal if inhaled in sufficient concentrations. Immediate loss of consciousness and death resulting from respiratory paralysis has occurred at concentrations as low as 500 ppm.

POLYCYCLIC AROMATIC HYDROCARBONS (PAHs): Cancer is the most significant endpoint for PAHs. Certain PAHs are weak carcinogens which become carcinogenic after undergoing metabolism. Chronic or repeated exposure increases the likelihood of tumor initiation. Increased incidence of tumors of the skin, bladder, lung and gastrointestinal tract have been described in individuals overexposed to certain PAHs. Overexposure to PAHs has also been associated with photosensitivity and eye irritation. Inhalation overexposure of PAHs has been associated with respiratory tract irritation, cough, and bronchitis. Dermal overexposure has been associated with precancerous lesions, erythema, dermal burns, photosensitivity, acneiform lesions and irritation. Oral overexposure to PAHs has been associated with precancerous growths of the mouth (leukoplakia). Mild nephrotoxicity, congestion and renal cortical hemorrhages and elevated liver function tests, changes in the immune system and other effects have been observed in rats exposed to high levels of PAHs by ingestion. The International Agency for Research on Cancer (IARC) has concluded that some PAHs are probably carcinogenic to humans.

Adverse effects related to the physical, chemical and toxicological characteristics

Signs and symptoms Frequent or prolonged contact with cold material may cause irritation. Rash. Contact with hot material may cause thermal burns.

Acute toxicity None known.

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes serious eye damage.

Sensitization May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Mutagenic effects None known.

Carcinogenicity Suspected of causing cancer.
Cancer designations are listed in the table below

Name	ACGIH (Class)	IARC (Class)	NTP	OSHA
Asphalt 8052-42-4	Not classifiable (A4)	Emissions of straight-run asphalt from paving operations - Possible human carcinogen (2B)	Not Listed	Not Listed
Hydrochloric Acid 7647-01-0	Not Listed	Group 3	Not Listed	Not Listed
Naphthalene 91-20-3	Confirmed animal carcinogen (A3)	Possible human carcinogen (2B)	Reasonably anticipated to be a human carcinogen	Not Listed
Polycyclic Aromatic Hydrocarbons Mixture	Suspected human carcinogen(A2)	Carcinogenic to humans (1)	Reasonably anticipated to be a human carcinogen	Not Listed

Reproductive toxicity None known.

Specific Target Organ Toxicity (STOT) - single exposure Not classified.

Specific Target Organ Toxicity (STOT) - repeated exposure Not classified.

Aspiration hazard Potential for aspiration if swallowed.

12. ECOLOGICAL INFORMATION

Ecotoxicity This product should be considered toxic to aquatic organisms, with the potential to cause

long lasting adverse effects in the aquatic environment.

Name	Fish	Crustacea	Algae/aquatic plants
Triethylenetetramine 112-24-3	96-hr LC50 = 100 mg/l Guppy (semi-static) 96-hr LC50 = 495 mg/l Fathead minnow 96-hr LC50 = 570 mg/l Guppy (semi-static)	48-hr LC50 = 31.1 mg/l Daphnia magna	72-hr EC50 = 2.5 mg/l Algae 72-hr EC50 = 20 mg/l Algae 96-hr EC50 = 3.7 mg/l Algae
Naphthalene 91-20-3	96-hr LC50 = 0.91-2.82 mg/l Rainbow trout (static) 96-hr LC50 = 1.99 mg/l Fathead minnow (static)	48-hr LC50 = 1.6 mg/l Daphnia magna	-
Hydrogen sulfide 7783-06-4	96-hr LC50 = 0.016 mg/l Fathead minnow 96-hr LC50 = 0.013 mg/l Rainbow trout	-	-

Persistence and degradability Not expected to be readily biodegradable.

Bioaccumulation Has the potential to bioaccumulate.

Mobility in soil Not classified in terms of mobility in air, soil and water.

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Description of waste residues No information available.

Safe handling of wastes Handle in accordance with applicable local, state, and federal regulations. Use personal protection measures as required.

Disposal of wastes / methods of disposal The user is responsible for determining if any discarded material is a hazardous waste (40 CFR 262.11). Dispose of in accordance with federal, state and local regulations.

Contaminated packaging disposal Empty containers should be completely drained and then discarded or recycled, if possible. Dispose of in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT

UN/Identification No: UN 3257
UN Proper Shipping Name: Elevated Temperature Liquid, N.O.S.
Transport Hazard Class(es): 9
Packing Group: III

Comments: (Hot Petroleum Asphalt) This material must not be transported when heated at or above its flash point.

IATA Forbidden by passenger air transport
UN/Identification No: Not applicable
UN Proper Shipping Name: Not applicable
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable

IMDG

UN/Identification No: UN 3257
UN Proper Shipping Name: Elevated Temperature Liquid, N.O.S.
Transport Hazard Class(es): 9

Packing Group:	III
EmS No:	F-A, S-P
Marine Pollutant:	Yes

15. REGULATORY INFORMATION

Regulatory Information

US TSCA Chemical Inventory This product and/or its components are listed on the TSCA Chemical Inventory or are exempt.

Canada DSL/NDSL Inventory This product and/or its components are listed either on the Domestic Substances List (DSL) or are exempt.

EPA Superfund Amendment & Reauthorization Act (SARA)

SARA Section 302 This product may contain component(s) that have been listed on EPA's Extremely Hazardous Substance (EHS) List:

Name	CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs
Hydrochloric Acid	500
Hydrogen sulfide	500

SARA Section 304 This product may contain component(s) identified either as an EHS or a CERCLA Hazardous substance which in case of a spill or release may be subject to SARA reporting requirements:

Name	Hazardous Substances RQs
Hydrochloric Acid 7647-01-0	5000 lb 2268 kg
Naphthalene 91-20-3	100 lb 45.4 kg
Polycyclic Aromatic Hydrocarbons Mixture	1 lb 0.454 kg
Hydrogen sulfide 7783-06-4	100 lb 45.4 kg

SARA Section 311/312 The following EPA hazard categories apply to this product:

Skin corrosion or irritation
Serious eye damage or eye irritation
Respiratory or Skin sensitization
Carcinogenicity
Hazard Not Otherwise Classified (HNOC)-Health

SARA Section 313 This product may contain component(s), which if in exceedance of the de minimus threshold, may be subject to the reporting requirements of SARA Title III Section 313 Toxic Release Reporting (Form R).

Name	CERCLA/SARA 313 Emission reporting
Asphalt 8052-42-4	0.1 % Supplier notification limit
Hydrochloric Acid 7647-01-0	1.0 % de minimis concentration
Naphthalene 91-20-3	0.1 % de minimis concentration
Polycyclic Aromatic Hydrocarbons	0.1 % Supplier notification limit

Mixture	
Hydrogen sulfide 7783-06-4	1.0 % de minimis concentration

U.S. State Regulations

California Proposition 65 This product can expose you to chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm.

Name	California Proposition 65
Naphthalene 91-20-3	Carcinogen, initial date 04/19/2002
Polycyclic Aromatic Hydrocarbons Mixture	Carcinogen, initial date 07/01/1987

For more information, go to www.P65Warnings.ca.gov.

State Right-To-Know Regulations The following component(s) of this material are identified on the regulatory lists below:

Name	New Jersey Right-To-Know	Pennsylvania Right-To-Know	Massachusetts Right-To Know
Asphalt 8052-42-4	Listed	Listed	Listed
Sulfur Compounds Mixture	Listed	Listed	Listed
Hydrochloric Acid 7647-01-0	Listed	Listed	Listed
Triethylenetetramine 112-24-3	Listed	Listed	Listed
Naphthalene 91-20-3	Listed	Listed	Listed
Polycyclic Aromatic Hydrocarbons Mixture	Listed	Listed	Listed
Hydrogen sulfide 7783-06-4	Listed	Listed	Listed

16. OTHER INFORMATION

Prepared by Toxicology & Product Safety

NFPA

Revision Notes

Revision date 12/28/2021

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is intended as guidance for safe handling, use, processing, storage, transportation, accidental release, clean-up and disposal and is not considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination

with any other materials or in any process, unless specified in the text.