Safety Data Sheet

Material Name: RT-12 **SDS ID: STE-008**

* * *Section 1 - IDENTIFICATION* * *

Material Name: RT-12

Trade Names/Synonyms

Road tar; refined tar

Chemical Family

Aromatic hydrocarbons

Recommended Use

Road tar emulsion base.

Restrictions on Use

None known.

Manufacturer Information

Stella-Jones Corporation
Park West One, Suite 500
1000 Cliff Mine Road
Pittsburgh, PA 15275
Phone: 412-325-0202

CHEMTREC®: 800-424-9300 (Intl. 703-527-3887)

* * *Section 2 - HAZARDS IDENTIFICATION* * *

Classification in accordance with 29 CFR 1910.1200

Skin Corrosion / Irritation, Category 2
Eye Damage / Irritation, Category 2A
Sensitization - Skin, Category 1
Germ Cell Mutagenicity, Category 1B
Carcinogenicity, Category 1A
Toxic to Reproduction, Category 1B
Specific Target Organ Toxicity - Single Exposure, Category 1 (blood)
Specific Target Organ Toxicity - Single Exposure, Category 2 (eyes)
Specific Target Organ Toxicity - Repeated Exposure, Category 1 (blood, eyes, and respiratory system)
Hazardous to the Aquatic Environment - Chronic Hazard, Category 4

GHS LABEL ELEMENTS

Symbol(s)

Signal Word

DANGER

Hazard Statement(s)

Causes skin irritation
Causes serious eye irritation

May cause an allergic skin reaction
May cause genetic defects
May cause cancer
May damage fertility or the unborn child
Causes damage to blood.
May cause damage to eyes.
Causes damage to blood, eyes, and respiratory system through prolonged or repeated exposure.
May cause long lasting harmful effects to aquatic life

Precautionary Statement(s)

Prevention

Do not breathe dust or mist. Do not eat, drink, or smoke when using this product. Wash thoroughly after handling. Wear protective gloves/clothing and eye/face protection. Contaminated work clothing should not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid release to the environment.

Response

IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs, seek medical advice/attention. Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF exposed or concerned: Get medical advice/attention.

Storage

Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) Not Otherwise Classified

May cause thermal burns from heated material.

* * *Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS* * *

CAS	Component	Percent
65996-93-2	Coal tar pitches	100
206-44-0	Fluoranthene	3.69
129-00-0	Pyrene	3.12
91-20-3	Naphthalene	1.64
120-12-7	Anthracene	1.42
56-55-3	Benz[a]anthracene	1.22
218-01-9	Chrysene	0.93
83-32-9	Acenaphthene	0.77
50-32-8	Benzo[a]pyrene	0.72
205-99-2	Benzo(b)fluoranthene	0.68
132-64-9	Dibenzofuran	0.57
193-39-5	Indeno(1,2,3-cd)pyrene	0.57
85-01-8	Phenanthrene	0.51
86-74-8	9H-Carbazole	0.49
207-08-9	Benzo(k)fluoranthene	0.41
205-82-3	Benzo(j)fluoranthene	0.37
189-64-0	Dibenzo(a,h)pyrene	0.22
192-65-4	Dibenzo(a,e)pyrene	0.19
91-22-5	Quinoline	0.19

92-52-4	Biphenyl	0.17
189-55-9	Dibenzo(a,i)pyrene	0.16
53-70-3	Dibenzo(a,h)anthracene	0.14

Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Aromatic hydrocarbons, polycyclic (130498-29-2).

* * *Section 4 - FIRST AID MEASURES* * *

Description of Necessary Measures

Inhalation

Remove person to fresh air and keep comfortable for breathing. If person is not breathing, call 911 or an ambulance, then give artifical respiration, preferably by mouth-to-mouth, if possible. Call a POISON CENTER or doctor/physician.

Skin

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. For thermal burns, cool affected areas as quickly as possible by drenching or immersing in water. If skin irritation or rash occurs: Get medical advice/attention.

Eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion

Call a poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

Most Important Symptoms/Effects

Acute

Thermal burns from heated material, skin irritation, eye irritation, allergic reactions, blood damage, eye damage

Delayed

Blood damage, eye damage, respiratory system damage, heritable genetic damage, cancer, reproductive effects

Indication of Immediate Medical Attention and Special Treatment

Treat symptomatically and supportively.

* * *Section 5 - FIRE FIGHTING MEASURES* * *

Suitable Extinguishing Media

Use carbon dioxide, regular dry chemical, regular foam or water.

Unsuitable Extinguishing Media

Do not use high-pressure water streams.

Specific Hazards Arising from the Chemical

Slight fire hazard. Closed containers may rupture violently when heated. Contact with heat may generate toxic and/or flammable gases.

Hazardous Comustion Products

Combustion: oxides of carbon

Fire Fighting Measures

Stop leak if possible without personal risk. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Water may be used to blanket fire. Directly spraying water or foam onto hot burning product may cause frothing. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire.

Special Protective Equipment and Precautions for Firefighters

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

* * *Section 6 - ACCIDENTAL RELEASE MEASURES* * *

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8.

Methods and Materials for Containment and Cleaning Up

In case of spillage, stop the flow of material and block any potential routes to water systems. Absorb (with sand, earth, etc.) discharged material and dispose of in accordance with applicable Federal, State and local regulations. If spill is large, be prepared to isolate the hazard area. Deny access to the spill area to persons who are not involved in the cleanup and/or who have not been properly trained in spill management of hazardous liquids. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollution Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

* * *Section 7 - HANDLING AND STORAGE* * *

Precautions for Safe Handling

Do not breathe vapor or mist. Avoid prolonged or repeated contact with skin or eyes. Do not eat, drink, or smoke when using this product. Wash thoroughly after handling. Wear appropriate protective equipment when performing maintenance on contaminated equipment. Observe good hygiene and safety practices when handling this product. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with molten material.

Conditions for Safe Storage, including any Incompatibilities

Store in accordance with all current regulations and standards. Store locked up. Do not store in open, unlabeled or mislabled containers. Protect from physical damage. Keep in a closed, properly labeled container in a cool (shaded), dry, well-ventilated area. Keep separated from incompatible substances. Maintain good housekeeping.
Incompatibilities Avoid oxidizing materials.

* * *Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION* * *

Component Exposure Limits

Coal tar pitches (65996-93-2)

ACGIH:	0.2 mg/m3 TWA (as benzene soluble aerosol)
NIOSH:	0.1 mg/m3 TWA (Cyclohexane-extractable fraction) 80 mg/m3 IDLH
OSHA (US):	0.2 mg/m3 TWA (benzene soluble fraction)
OSHA (vacated):	0.2 mg/m3 TWA (benzene soluble fraction)
Mexico:	0.002 mg/m3 TWA LMPE-PPT; 0.02 mg/m3 TWA LMPE-PPT (as Particulate polycyclic aromatic hydrocarbons) 0.015 ppm STEL [LMPE-CT]; 0.03 mg/m3 STEL [LMPE-CT]

Pyrene (129-00-0)

OSHA (US):	0.2 mg/m3 TWA

Naphthalene (91-20-3)

ACGIH:	10 ppm TWA Skin - potential significant contribution to overall exposure by the cutaneous route
NIOSH:	10 ppm TWA; 50 mg/m3 TWA 15 ppm STEL; 75 mg/m3 STEL

250 ppm IDLH
OSHA (US): 10 ppm TWA; 50 mg/m3 TWA
OSHA (vacated): 10 ppm TWA; 50 mg/m3 TWA
15 ppm STEL; 75 mg/m3 STEL
Mexico: 10 ppm TWA LMPE-PPT; 50 mg/m3 TWA LMPE-PPT
15 ppm STEL [LMPE-CT]; 75 mg/m3 STEL [LMPE-CT]

Anthracene (120-12-7)
OSHA (US): 0.2 mg/m3 TWA

Chrysene (218-01-9)
OSHA (US): 0.2 mg/m3 TWA

Benzo[a]pyrene (50-32-8)
OSHA (US): 0.2 mg/m3 TWA

Phenanthrene (85-01-8)
OSHA (US): 0.2 mg/m3 TWA

Biphenyl (92-52-4)
ACGIH: 0.2 ppm TWA
NIOSH: 0.2 ppm TWA; 1 mg/m3 TWA
100 mg/m3 IDLH
OSHA (US): 0.2 ppm TWA; 1 mg/m3 TWA
OSHA (vacated): 0.2 ppm TWA; 1 mg/m3 TWA
Mexico: 0.2 ppm TWA LMPE-PPT; 1.5 mg/m3 TWA LMPE-PPT
0.6 ppm STEL [LMPE-CT]; 4 mg/m3 STEL [LMPE-CT]

Appropriate Engineering Controls

Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

Individual Protection Measures, such as Personal Protective Equipment

Eyes/Face Protection

Wear chemical safety goggles with a faceshield or chemical splash hood. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin Protection

Wear appropriate chemical resistant clothing. To reduce sun sensitivity, a sun-blocking lotion (SPF15+) can also be applied. Wear washable or disposable coveralls or long-sleeved shirt and long pants. Wear socks plus industrial grade safety boots with chemical resistant soles. At elevated temperatures: Wear appropriate heat resistant clothing.

Glove Recommendations

Wear appropriate chemical resistant gloves. At elevated temperatures: Wear appropriate heat resistant gloves.

Respiratory Protection

If the applicable TLVs and/or PELs are exceeded, use canister or cartridge respirators, which are MSHA/NIOSH-approved, with organic vapor cartridges.

* * *Section 9 - PHYSICAL AND CHEMICAL PROPERTIES* * *

Physical State:	Liquid	**Appearance:**	black viscous liquid
Color:	black	**Physical Form:**	viscous liquid @ 70 °F
Odor:	aromatic odor	**Odor Threshold:**	Not available
pH:	Not available	**Melting Point:**	Not available
Boiling Point:	>325 °F; >150 °C	**Decomposition:**	Not available
Flash Point:	>300 °F	**Evaporation Rate:**	Not available
OSHA Flammability Class:	IIIB	**LEL:**	Not available

UEL:	Not available	**Vapor Pressure:**	<5 mm @ 20 °C
Vapor Density (air = 1):	Not available	**Density:**	Not available
Specific Gravity (water = 1):	Not available	**Water Solubility:**	Negligible
Log KOW:	Not available	**Coeff. Water/Oil Dist:**	Not available
Auto Ignition:	Not available	**Viscosity:**	Not available
Volatility:	Not available		

* * *Section 10 - STABILITY AND REACTIVITY* * *

Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable at normal temperatures and pressure.

Possibility of Hazardous Reactions

Will not polymerize.

Conditions to Avoid

Avoid heat, flames, sparks and other sources of ignition. When heated above its boiling point, may generate vapors that may ignite in air and a source of ignition. Avoid contact with water when in a confined space at elevated temperatures.

Incompatible Materials

Avoid oxidizing materials.

Hazardous Decomposition

Combustion: oxides of carbon

* * *Section 11 - TOXICOLOGICAL INFORMATION* * *

Acute and Chronic Toxicity

Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Fluoranthene (206-44-0)

Oral LD50 Rat 2 g/kg

Pyrene (129-00-0)

Oral LD50 Rat 2700 mg/kg

Naphthalene (91-20-3)

Dermal LD50 Rabbit 1120 mg/kg; Inhalation LC50 Rat >340 mg/m3 1 h; Oral LD50 Rat 1110 mg/kg

Anthracene (120-12-7)

Dermal LD50 Rat >1320 mg/kg; Oral LD50 Rat >16000 mg/kg

Acenaphthene (83-32-9)

Oral LD50 Rat 10000 mg/kg

Phenanthrene (85-01-8)

Oral LD50 Mouse 700 mg/kg

9H-Carbazole (86-74-8)

Oral LD50 Rat >5000 mg/kg

Quinoline (91-22-5)

Dermal LD50 Rabbit 540 µL/kg; Oral LD50 Rat 331 mg/kg

Biphenyl (92-52-4)

Oral LD50 Rat 2140 mg/kg; Inhalation LC50 Mouse >0.275 mg/L 4 h

Information on Likely Routes of Exposure

Inhalation

Irritation, difficulty breathing, vomiting, drowsiness, dizziness, headache, loss of coordination

Ingestion

Gastrointestinal irritation, nausea, vomiting, stomach pain

Skin Contact

Irritation, allergic reactions, sensitivity to sunlight, thermal burns from heated material, skin discoloration, skin disorders, cancer

Eye Contact

Irritation (possibly severe), tearing, sensitivity to sunlight, thermal burns from heated material

Immediate Effects

Respiratory tract irritation, skin irritation, eye irritation, allergic reactions, blood damage, eye damage

Delayed Effects

Blood damage, eye damage, respiratory system damage, heritable genetic damage, cancer, reproductive effects

Medical Conditions Aggravated by Exposure

Medical conditions may include respiratory disorders, skin disorders, and central nervous system disorders.

Irritation/Corrosivity Data

Respiratory tract irritation, skin irritation, eye irritation

Respiratory Sensitization

No information available for the product.

Dermal Sensitization

May cause an allergic skin reaction.

Carcinogenicity

Component Carcinogenicity

Coal tar pitches (65996-93-2)

NTP: Reasonably Anticipated To Be A Human Carcinogen (related to Aromatic hydrocarbons, polycyclic)

Fluoranthene (206-44-0)

IARC: Monograph 92 [2010]; Supplement 7 [1987]; Monograph 32 [1983] (Group 3 (not classifiable))

NTP: Reasonably Anticipated To Be A Human Carcinogen (related to Aromatic hydrocarbons, polycyclic)

Pyrene (129-00-0)

IARC: Monograph 92 [2010]; Supplement 7 [1987]; Monograph 32 [1983] (Group 3 (not classifiable))

NTP: Reasonably Anticipated To Be A Human Carcinogen (related to Aromatic hydrocarbons, polycyclic)

Naphthalene (91-20-3)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

IARC: Monograph 82 [2002] (Group 2B (possibly carcinogenic to humans))

NTP: Reasonably Anticipated To Be A Human Carcinogen

Anthracene (120-12-7)

IARC: Monograph 92 [2010]; Supplement 7 [1987]; Monograph 32 [1983] (Group 3 (not classifiable))

NTP: Reasonably Anticipated To Be A Human Carcinogen (related to Aromatic hydrocarbons, polycyclic)

Benz[a]anthracene (56-55-3)

ACGIH: A2 - Suspected Human Carcinogen

IARC: Monograph 92 [2010]; Supplement 7 [1987]; Monograph 32 [1983] (Group 2B (possibly carcinogenic to humans))

NTP: Reasonably Anticipated To Be A Human Carcinogen

Chrysene (218-01-9)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

IARC: Monograph 92 [2010]; Supplement 7 [1987]; Monograph 32 [1983] (Group 2B (possibly carcinogenic to humans))

NTP: Reasonably Anticipated To Be A Human Carcinogen (related to Aromatic hydrocarbons, polycyclic)

Acenaphthene (83-32-9)

IARC: Monograph 92 [2010] (Group 3 (not classifiable))

NTP: Reasonably Anticipated To Be A Human Carcinogen (related to Aromatic hydrocarbons, polycyclic)

Benzo[a]pyrene (50-32-8)

ACGIH: A2 - Suspected Human Carcinogen

IARC: Monograph 100F [2012]; Monograph 92 [2010]; Supplement 7 [1987]; Monograph 32 [1983] (overall evaluation upgraded from Group 2B to Group 1 based on mechanistic and other relevant data) (Group 1 (carcinogenic to humans))

NTP: Reasonably Anticipated To Be A Human Carcinogen

Benzo(b)fluoranthene (205-99-2)

ACGIH: A2 - Suspected Human Carcinogen

IARC: Monograph 92 [2010]; Supplement 7 [1987]; Monograph 32 [1983] (Group 2B (possibly carcinogenic to humans))

NTP: Reasonably Anticipated To Be A Human Carcinogen

Indeno(1,2,3-cd)pyrene (193-39-5)

IARC: Monograph 92 [2010]; Supplement 7 [1987]; Monograph 32 [1983] (Group 2B (possibly carcinogenic to humans))

NTP: Reasonably Anticipated To Be A Human Carcinogen

Phenanthrene (85-01-8)

IARC: Monograph 92 [2010]; Supplement 7 [1987]; Monograph 32 [1983] (Group 3 (not classifiable))

NTP: Reasonably Anticipated To Be A Human Carcinogen (related to Aromatic hydrocarbons, polycyclic)

9H-Carbazole (86-74-8)

IARC: Monograph 103 [2013]; Monograph 71 [1999]; Supplement 7 [1987]; Monograph 32 [1983] (Group 2B (possibly carcinogenic to humans))

Benzo(k)fluoranthene (207-08-9)

IARC: Monograph 92 [2010]; Supplement 7 [1987]; Monograph 32 [1983] (Group 2B (possibly carcinogenic to humans))

NTP: Reasonably Anticipated To Be A Human Carcinogen

Benzo(j)fluoranthene (205-82-3)

IARC: Monograph 92 [2010]; Supplement 7 [1987]; Monograph 32 [1983] (Group 2B (possibly carcinogenic to humans))

NTP: Reasonably Anticipated To Be A Human Carcinogen

Dibenzo(a,h)pyrene (189-64-0)

IARC: Monograph 92 [2010]; Supplement 7 [1987]; Monograph 32 [1983] (Group 2B (possibly carcinogenic to humans))

NTP: Reasonably Anticipated To Be A Human Carcinogen

Dibenzo(a,e)pyrene (192-65-4)

IARC: Monograph 92 [2010]; Supplement 7 [1987]; Monograph 32 [1983] (Group 3 (not classifiable))

NTP: Reasonably Anticipated To Be A Human Carcinogen

Dibenzo(a,i)pyrene (189-55-9)

IARC: Monograph 92 [2010]; Supplement 7 [1987]; Monograph 32 [1983] (Group 2B (possibly carcinogenic to humans))

NTP: Reasonably Anticipated To Be A Human Carcinogen

Dibenzo(a,h)anthracene (53-70-3)

IARC: Monograph 92 [2010]; Supplement 7 [1987]; Monograph 32 [1983] (overall evaluation upgraded from 2B to 2A with supporting evidence from other relevant data) (Group 2A (probably carcinogenic to humans))

NTP: Reasonably Anticipated To Be A Human Carcinogen

Mutagenic Data

May cause genetic defects

Reproductive Effects Data

May cause reproductive effects.

Specific Target Organ Toxicity - Single Exposure

Blood, eyes

Specific Target Organ Toxicity - Repeated Exposure

Blood, eyes, respiratory system

Aspiration Hazard

No information is available.

* * *Section 12 - ECOLOGICAL INFORMATION* * *

Ecotoxicity

May cause long-term adverse effects in the aquatic environment.

Component Analysis - Aquatic Toxicity

Pyrene (129-00-0)

Invertebrate: 48 Hr EC50 water flea: 1.8 mg/L

Naphthalene (91-20-3)

Fish: 96 Hr LC50 Pimephales promelas: 5.74 - 6.44 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 1.6 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 0.91 - 2.82 mg/L [static]; 96 Hr LC50 Pimephales promelas: 1.99 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 31.0265 mg/L [static]

Invertebrate: 48 Hr LC50 Daphnia magna: 2.16 mg/L; 48 Hr EC50 Daphnia magna: 1.96 mg/L [Flow through]; 48 Hr EC50 Daphnia magna: 1.09 - 3.4 mg/L [Static]

Anthracene (120-12-7)

Fish: 96 Hr LC50 Lepomis macrochirus: 0 - 0.00318 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 0.00278 mg/L [static]

Invertebrate: 48 Hr EC50 Daphnia magna: 0.081 - 0.112 mg/L

Benz[a]anthracene (56-55-3)

Invertebrate: 48 Hr EC50 Daphnia magna: 0.0042 mg/L

Acenaphthene (83-32-9)

Fish: 96 Hr LC50 Pimephales promelas: 0.509 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 0.6 - 0.75 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 1.3 - 2.1 mg/L [static]

Algae: 96 Hr EC50 Pseudokirchneriella subcapitata: 0.23 - 1.15 mg/L

Invertebrate: 48 Hr EC50 Daphnia magna: 41 mg/L; 48 Hr EC50 Daphnia magna: 3.45 mg/L; 48 Hr EC50 Daphnia magna: 1.102 - 1.475 mg/L [Static]

Dibenzofuran (132-64-9)

Fish: 96 Hr LC50 Pimephales promelas: 0.84 - 1.31 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 1.04 - 1.25 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 1 - 3.2 mg/L [static]

Quinoline (91-22-5)

Fish: 96 Hr LC50 Pimephales promelas: 77.8 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 46 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 40 mg/L [static]

Algae: 72 Hr EC50 Desmodesmus subspicatus: 84 mg/L [static]; 96 Hr EC50 Desmodesmus subspicatus: 90 mg/L [static]

Invertebrate: 48 Hr EC50 Daphnia magna: 28.5 mg/L; 48 Hr EC50 Daphnia magna: 45.9 - 57.3 mg/L [Static]

Biphenyl (92-52-4)

Fish: 96 Hr LC50 Pimephales promelas: 1.65 - 2.29 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 1.17 - 1.81 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 4.3 - 5.1 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 1.4 - 1.6 mg/L [static]

Invertebrate: 48 Hr EC50 Daphnia magna: 0.63 - 0.85 mg/L [Static] (<24 hours old)

Persistence and Degradability

No information available for the product.

Bioaccumulative Potential

No information available for the product.

Mobility

No information available for the product.

* * *Section 13 - DISPOSAL CONSIDERATIONS* * *

Disposal Methods

Absorb (with sand, earth, etc.) discharged material and dispose of in accordance with applicable Federal, State and local regulations.

Waste Numbers

There are no applicable U.S. EPA listed waste codes (40 CFR 261 Subpart D) for this product.

* * *Section 14 - TRANSPORT INFORMATION* * *

US DOT Information

Shipping Name: Elevated temperature liquid, n.o.s. (Contains: Benzo[a]pyrene, Dibenzo(a,h)anthracene), RQ
UN/NA #: UN3257 **Hazard Class:** 9 **Packing Group:** III
Required Label(s): 9
Other Information: Above 212 °F (100 °C) and above the flash point, use 'Elevated temperature liquid, flammmable, n.o.s.; 3; UN3256; PG III, RQ'

US DOT Reportable Quantities

Fluoranthene (206-44-0)
100 lbs RQ; 45.4 kg RQ
Pyrene (129-00-0)
5000 lbs RQ; 2270 kg RQ
Naphthalene (91-20-3)
100 lbs RQ; 45.4 kg RQ
Anthracene (120-12-7)
5000 lbs RQ; 2270 kg RQ
Benz[a]anthracene (56-55-3)
10 lbs RQ; 4.54 kg RQ
Chrysene (218-01-9)
100 lbs RQ; 45.4 kg RQ
Acenaphthene (83-32-9)
100 lbs RQ; 45.4 kg RQ
Benzo[a]pyrene (50-32-8)
1 lbs RQ; 0.454 kg RQ

Benzo(b)fluoranthene (205-99-2)
1 lbs RQ; 0.454 kg RQ
Dibenzofuran (132-64-9)
100 lbs RQ; 45.4 kg RQ
Indeno(1,2,3-cd)pyrene (193-39-5)
100 lbs RQ; 45.4 kg RQ
Phenanthrene (85-01-8)
5000 lbs RQ; 2270 kg RQ
Benzo(k)fluoranthene (207-08-9)
5000 lbs RQ; 2270 kg RQ
Quinoline (91-22-5)
5000 lbs RQ; 2270 kg RQ
Biphenyl (92-52-4)
100 lbs RQ; 45.4 kg RQ
Dibenzo(a,i)pyrene (189-55-9)
10 lbs RQ; 4.54 kg RQ
Dibenzo(a,h)anthracene (53-70-3)
1 lbs RQ; 0.454 kg RQ

TDG Information

Shipping Name: Elevated temperature liquid, n.o.s. (Contains: Benzo[a]pyrene, Dibenzo(a,h)anthracene)
UN #: UN3257 **Hazard Class:** 9 **Packing Group:** III
Required Label(s): 9
Other Information: Above 212 °F (100 °C) and above the flash point, use 'Elevated temperature liquid, flammmable, n.o.s.; 3; UN3256; PG III, RQ'

Component Marine Pollutants (IMDG)

This material contains one or more of the following chemicals required by IMDG to be identified as marine pollutants.
Naphthalene (91-20-3)
IMDG regulated marine pollutant (UN1334); IMDG regulated marine pollutant (UN2304)

* * *Section 15 - REGULATORY INFORMATION* * *

Component Analysis

U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Fluoranthene (206-44-0)
SARA 313: 1.0 % Supplier notification limit
CERCLA: 100 lb final RQ; 45.4 kg final RQ

Pyrene (129-00-0)
SARA 302: 1000 lb lower TPQ; 10000 lb upper TPQ
SARA 304: 5000 lb EPCRA RQ
CERCLA: 5000 lb final RQ; 2270 kg final RQ

Naphthalene (91-20-3)
SARA 313: 0.1 % de minimis concentration
CERCLA: 100 lb final RQ; 45.4 kg final RQ

Anthracene (120-12-7)

SARA 313: 1.0 % de minimis concentration
CERCLA: 5000 lb final RQ; 2270 kg final RQ

Benz[a]anthracene (56-55-3)
SARA 313: 0.1 % Supplier notification limit
CERCLA: 10 lb final RQ; 4.54 kg final RQ

Chrysene (218-01-9)
SARA 313: 1.0 % Supplier notification limit
CERCLA: 100 lb final RQ; 45.4 kg final RQ

Acenaphthene (83-32-9)
CERCLA: 100 lb final RQ; 45.4 kg final RQ

Benzo[a]pyrene (50-32-8)
SARA 313: 0.1 % Supplier notification limit
CERCLA: 1 lb final RQ; 0.454 kg final RQ

Benzo(b)fluoranthene (205-99-2)
SARA 313: 0.1 % Supplier notification limit
CERCLA: 1 lb final RQ; 0.454 kg final RQ

Dibenzofuran (132-64-9)
SARA 313: 1.0 % de minimis concentration
CERCLA: 100 lb final RQ; 45.4 kg final RQ

Indeno(1,2,3-cd)pyrene (193-39-5)
SARA 313: 0.1 % Supplier notification limit
CERCLA: 100 lb final RQ; 45.4 kg final RQ

Phenanthrene (85-01-8)
SARA 313: 1.0 % de minimis concentration
CERCLA: 5000 lb final RQ; 2270 kg final RQ

Benzo(k)fluoranthene (207-08-9)
SARA 313: 0.1 % Supplier notification limit
CERCLA: 5000 lb final RQ; 2270 kg final RQ

Benzo(j)fluoranthene (205-82-3)
SARA 313: 0.1 % Supplier notification limit

Dibenzo(a,h)pyrene (189-64-0)
SARA 313: 0.1 % Supplier notification limit

Dibenzo(a,e)pyrene (192-65-4)
SARA 313: 0.1 % Supplier notification limit

Quinoline (91-22-5)
SARA 313: 1.0 % de minimis concentration
CERCLA: 5000 lb final RQ; 2270 kg final RQ

Biphenyl (92-52-4)
SARA 313: 1.0 % de minimis concentration
CERCLA: 100 lb final RQ; 45.4 kg final RQ

Dibenzo(a,i)pyrene (189-55-9)
SARA 313: 0.1 % Supplier notification limit
CERCLA: 10 lb final RQ; 4.54 kg final RQ

Dibenzo(a,h)anthracene (53-70-3)
SARA 313: 0.1 % Supplier notification limit
CERCLA: 1 lb final RQ; 0.454 kg final RQ

FIFRA Information

SARA 311/312 Hazardous Categories

Acute Health: Yes **Chronic Health:** Yes **Fire:** No **Pressure:** No **Reactive:** No

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Fluoranthene ([1]related to: Aromatic hydrocarbons, polycyclic)	206-44-0	Yes	Yes	Yes[1]	Yes	Yes
Pyrene ([1]related to: Aromatic hydrocarbons, polycyclic)	129-00-0	Yes	Yes	Yes[1]	Yes	Yes
Naphthalene	91-20-3	Yes	Yes	Yes	Yes	Yes
Anthracene ([1]related to: Aromatic hydrocarbons, polycyclic)	120-12-7	Yes	Yes	Yes[1]	Yes	Yes
Benz[a]anthracene	56-55-3	Yes	Yes	Yes	Yes	Yes
Chrysene	218-01-9	Yes	Yes	Yes	Yes	Yes
Acenaphthene ([1]related to: Aromatic hydrocarbons, polycyclic)	83-32-9	Yes	Yes	Yes[1]	Yes	Yes
Benzo[a]pyrene	50-32-8	Yes	Yes	Yes	Yes	Yes
Benzo(b)fluoranthene	205-99-2	Yes	Yes	Yes	Yes	Yes
Dibenzofuran	132-64-9	No	Yes	No	Yes	Yes
Indeno(1,2,3-cd)pyrene	193-39-5	Yes	Yes	Yes	Yes	Yes
Phenanthrene ([1]related to: Aromatic hydrocarbons, polycyclic)	85-01-8	Yes	Yes	Yes[1]	Yes	Yes
9H-Carbazole	86-74-8	Yes	No	No	No	No
Benzo(k)fluoranthene	207-08-9	Yes	Yes	Yes	Yes	Yes
Benzo(j)fluoranthene	205-82-3	Yes	Yes	Yes	Yes	Yes
Dibenzo(a,h)pyrene	189-64-0	Yes	Yes	Yes	Yes	Yes
Dibenzo(a,e)pyrene	192-65-4	Yes	Yes	Yes	Yes	Yes
Quinoline	91-22-5	Yes	Yes	Yes	Yes	Yes
Biphenyl	92-52-4	Yes	Yes	Yes	Yes	Yes
Dibenzo(a,i)pyrene	189-55-9	Yes	Yes	Yes	Yes	Yes
Dibenzo(a,h)anthracene	53-70-3	Yes	Yes	Yes	Yes	Yes

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

Canada

This product has been classified in accordance with the criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

WHMIS CLASSIFICATION: D2A, D2B.

Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which fall under WHMIS criteria specified in the Controlled Products Regulations and present above the threshold limits listed on the IDL.

Fluoranthene (206-44-0)

1 %

Pyrene (129-00-0)

1 %

Naphthalene (91-20-3)

1 %

Anthracene (120-12-7)

1 %

Benz[a]anthracene (56-55-3)

0.1 %

Chrysene (218-01-9)
0.1 %
Benzo[a]pyrene (50-32-8)
0.1 %
Benzo(b)fluoranthene (205-99-2)
0.1 %
Indeno(1,2,3-cd)pyrene (193-39-5)
0.1 %
Dibenzo(a,h)pyrene (189-64-0)
0.1 %
Dibenzo(a,i)pyrene (189-55-9)
0.1 %
Dibenzo(a,h)anthracene (53-70-3)
0.1 %

Component Analysis - Inventory

All the components of this substance are listed on or are exempt from the inventories.

Component Analysis - Inventory

Component	CAS	US	CA
Coal tar pitches	65996-93-2	Yes	DSL
Fluoranthene	206-44-0	Yes	NSL
Pyrene	129-00-0	Yes	DSL
Naphthalene	91-20-3	Yes	DSL
Anthracene	120-12-7	Yes	DSL
Benz[a]anthracene	56-55-3	Yes	NSL
Chrysene	218-01-9	Yes	DSL
Acenaphthene	83-32-9	Yes	DSL
Benzo[a]pyrene	50-32-8	Yes	DSL
Benzo(b)fluoranthene	205-99-2	No	No
Dibenzofuran	132-64-9	Yes	DSL
Indeno(1,2,3-cd)pyrene	193-39-5	Yes	NSL
Phenanthrene	85-01-8	Yes	DSL
9H-Carbazole	86-74-8	Yes	DSL
Benzo(k)fluoranthene	207-08-9	No	No
Benzo(j)fluoranthene	205-82-3	No	No
Dibenzo(a,h)pyrene	189-64-0	No	No
Dibenzo(a,e)pyrene	192-65-4	No	No
Quinoline	91-22-5	Yes	DSL
Biphenyl	92-52-4	Yes	DSL
Dibenzo(a,i)pyrene	189-55-9	No	No
Dibenzo(a,h)anthracene	53-70-3	Yes	NSL

* * *Section 16 - OTHER INFORMATION* * *

NFPA Ratings: Health: 2 **Fire:** 1 **Reactivity:** 0
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CPR - Controlled Products Regulations; DSL - Domestic Substances List; EPA - Environmental Protection Agency; F - Fahrenheit; IARC - International Agency for Research on Cancer; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; Kow - Octanol/water partition coefficient; LEL - Lower Explosive Limit; LOLI - List Of LIsts™ - ChemADVISOR's Regulatory Database; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; OSHA - Occupational Safety and Health Administration; RCRA - Resource Conservation and Recovery Act; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

Other Information

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. Read the Safety Data Sheet before handling product.

SDS History

Revision 2.0000, 22 May 2015: Updated to OSHA GHS SDS format.

End of Sheet STE-008