



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name P1 Creosote Oil
Revision date 08-26-2011
Version # 01
CAS # Mixture
Product use Wood preservative.
Synonym(s) None.
Manufacturer/Supplier KMG- Bernuth, Inc.
9555 W. Sam Houston Parkway S.
Suite 600
Houston, Texas 77099
Phone Number: 713-600-3800
Emergency CHEMTREC: 1-800-424-9300
Emergency medical treatment: 1-800-322-8177

2. Hazards Identification

Physical state Liquid.
Appearance Oily, viscous liquid.
Emergency overview WARNING
Suspect cancer hazard - may cause cancer. Causes skin, eye and respiratory tract irritation. May be harmful if swallowed. May cause allergic skin reaction.
OSHA regulatory status This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).
Potential health effects
Routes of exposure Eye contact. Skin contact. Inhalation. Ingestion.
Eyes Causes eye irritation.
Skin Causes skin irritation. May cause allergic skin reaction. May cause photosensitization, evidenced by repeated occurrence of a dermatitic rash on exposure to sunlight.
Inhalation Causes respiratory tract irritation. Prolonged exposure is associated with lung cancer and urinary cancer.
Ingestion May be harmful if swallowed. Swallowing or vomiting of the liquid may result in aspiration into the lungs.
Target organs Eyes. Skin. Respiratory system. Reproductive system. Central nervous system.
Chronic effects Suspect cancer hazard - may cause cancer. May cause scrotal and bladder cancer. May cause allergic skin reaction. May cause damage to the liver and kidneys. May cause lung damage. May cause blood damage. May cause central nervous system effects. Repeated exposure to coal tar products may increase the risk of more serious skin disorders including a variety of skin cancers. Some skin cancers, such as malignant melanoma, have a high mortality rate. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. The coal tar component of this formulation contains polynuclear aromatic hydrocarbon (PAHs).
Signs and symptoms Inhalation: May cause damage to mucous membranes in nose, throat, lungs and bronchial system. Eye contact: May cause redness and pain. Chronic exposure may cause conjunctivitis, blepharoconjunctivitis and photophobia. Skin contact: Sensitization. Ingestion may cause nausea, headache and dizziness. Be aware that symptoms of chemical pneumonia (shortness of breath) may occur several hours after exposure.
Potential environmental effects Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Creosote	8001-58-9	98.5
Constituted components	-	-
Naphthalene	91-20-3	< 16.15

Phenanthrene	85-01-8	< 14.15
Acenaphthene	83-32-9	< 7.8
Fluoranthene	206-44-0	< 7.45
Pyrene	129-00-0	< 5.8
Dibenzofuran	132-64-9	< 4.5
Anthracene	120-12-7	< 3.8
1,2-Benzphenanthrene	218-01-9	< 1.5
Benz[a]anthracene	56-55-3	< 1.5
Benzo[b]fluoranthene	205-99-2	0.1 - 1
Benzo[a]pyrene	50-32-8	< 0.4
Benzo[k]fluoranthene	207-08-9	< 0.2
Benzo[j]fluoranthene	205-82-3	< 0.2
1,10-(1,2-Phenylene)pyrene	193-39-5	< 0.1
Quinoline	91-22-5	< 0.06
P-xylene	106-42-3	< 0.02

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First Aid Measures

First aid procedures

Eye contact	Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention if irritation develops and persists.
Skin contact	Remove contaminated clothes and rinse skin thoroughly with water for at least 15 minutes. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.
Inhalation	Move injured person into fresh air and keep person calm under observation. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water and give large amounts of milk or water to people not unconscious. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Get medical attention immediately.

Notes to physician In case of shortness of breath, give oxygen. Keep victim warm.

General advice Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire Fighting Measures

Flammable properties If strongly heated, the product releases polynuclear aromatic hydrocarbons (PAHs), which include carcinogenic substances.

Extinguishing media

Suitable extinguishing media	Extinguish with foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	None.

Protection of firefighters

Specific hazards arising from the chemical Thermal decomposition may produce smoke, oxides of carbon and lower molecular weight organic compounds whose composition have not been characterized.

Fire fighting equipment/instructions Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials. Caution should be exercised when using water or foam as frothing may occur, especially if directed onto containers of hot or burning material.

Hazardous combustion products

Aromatic hydrocarbon. Carbon Dioxide. Carbon monoxide. Nitrogen oxides. Sulfur oxides.

6. Accidental Release Measures

Personal precautions

This product must not be heated in a sealed or confined space which has no avenue to allow pressure relief of the expanding vapors. This could cause excessive pressure buildup, blow back of materials, and explosion. Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Stay upwind. Keep people away from and upwind of spill/leak. Ventilate closed spaces before entering. Ensure adequate ventilation. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Avoid inhalation of vapors and contact with skin and eyes. In case of spills, beware of slippery floors and surfaces. Wear suitable protective clothing. See Section 8 of the MSDS for Personal Protective Equipment.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not contaminate water.

Methods for containment

Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up

Remove sources of ignition.

Large Spills: Absorb in vermiculite, dry sand or earth and place into containers. Containers with collected spillage must be properly labeled with correct contents and hazard symbol. Collect and dispose of spillage as indicated in section 13 of the MSDS.

Small Spills: Absorb spillage with suitable absorbent material. Collect in containers and seal securely.

Never return spills in original containers for re-use.

Other information

Clean up in accordance with all applicable regulations.

7. Handling and Storage

Handling

People working with this product should get instructions before use. This product should only be used in an industrial workplace. Pregnant women should not work with the product, if there is the least risk of exposure. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Avoid inhalation of vapors and contact with skin and eyes. Do not smoke and do not spray near an open flame or other sources of ignition. Vapors are heavier than air and may travel along the floor and in the bottom of containers. Ground container and transfer equipment to eliminate static electric sparks. Observe good industrial hygiene practices.

Storage

Keep away from heat, sparks and open flame. Do not store near heat sources or expose to high temperatures. Store in closed original container in a dry place. Keep in a well-ventilated place. Keep this material away from food, drink and animal feed. Store away from incompatible materials.

8. Exposure Controls / Personal Protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value
Naphthalene (91-20-3)	TWA	10 ppm
	STEL	15 ppm
P-xylene (106-42-3)	TWA	100 ppm
	STEL	150 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Naphthalene (91-20-3)	PEL	10 ppm 50 mg/m3
	PEL	100 ppm 435 mg/m3

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Naphthalene (91-20-3)	TWA	10 ppm
	STEL	15 ppm
	TWA	52 mg/m3
	STEL	79 mg/m3
P-xylene (106-42-3)	TWA	100 ppm
	STEL	150 ppm

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
	TWA	434 mg/m3
	STEL	651 mg/m3

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value
Naphthalene (91-20-3)	TWA	10 ppm
	STEL	15 ppm
P-xylene (106-42-3)	TWA	100 ppm
	STEL	150 ppm

Canada. Ontario OELs. (Ministry of Labor - Control of Exposure to Biological or Chemical Agents)

Components	Type	Value
Naphthalene (91-20-3)	TWA	10 ppm
	STEL	15 ppm
P-xylene (106-42-3)	TWA	52 mg/m3
	STEL	78 mg/m3
	TWA	100 ppm
	STEL	150 ppm
	TWA	435 mg/m3
	STEL	650 mg/m3

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value
Benzo[a]pyrene (50-32-8)	TWA	0.005 mg/m3
Naphthalene (91-20-3)	TWA	10 ppm
	STEL	15 ppm
P-xylene (106-42-3)	TWA	52 mg/m3
	STEL	79 mg/m3
	TWA	100 ppm
	STEL	150 ppm
	TWA	434 mg/m3
	STEL	651 mg/m3

Mexico. Occupational Exposure Limit Values

Components	Type	Value
Naphthalene (91-20-3)	TWA	10 ppm
	STEL	15 ppm
P-xylene (106-42-3)	TWA	50 mg/m3
	STEL	75 mg/m3
	TWA	100 ppm
	STEL	150 ppm
	TWA	435 mg/m3
	STEL	655 mg/m3

Exposure guidelines

No exposure standards allocated.

Engineering controls

This product must not be heated in a sealed or confined space which has no avenue to allow pressure relief of the expanding vapors. This could cause excessive pressure buildup, blow back of materials, and explosion. Mechanical ventilation or local exhaust ventilation may be required. Use explosion-proof equipment. Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of dust, fumes and vapors. Provide access to washing facilities including soap, skin cleanser and fatty cream.

Personal protective equipment**Eye / face protection**

Wear approved safety goggles.

Skin protection

Wear protective gloves. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier. Wear appropriate chemical resistant clothing to prevent any possibility of skin contact.

Respiratory protection

If enclosed handling cannot be guaranteed, ventilation and protective clothing must be used. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke. Launder contaminated clothing before reuse. Remove and isolate contaminated clothing and shoes. Observe any medical surveillance requirements.

9. Physical & Chemical Properties

Appearance	Oily, viscous liquid.
Color	Dark brown.
Odor	Strong aromatic, tar-like.
Odor threshold	Not available.
Physical state	Liquid.
Form	Liquid.
pH	7 - 8
Melting point	Not applicable.
Freezing point	Not applicable.
Boiling point	> 381.2 °F (> 194 °C)
Flash point	> 311 °F (> 155 °C) Pensky-Martens Closed Cup (ASTM D-93)
Evaporation rate	< 1 (Butyl acetate = 1.0)
Flammability limits in air, upper, % by volume	No data available.
Flammability limits in air, lower, % by volume	No data available.
Vapor pressure	13 mm Hg (25°C, Approx.)
Vapor density	> 1 (Air=1)
Specific gravity	1.03 - 1.18
Solubility (water)	Insoluble.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	636.8 °F (336 °C)
Decomposition temperature	Not available.
Viscosity	No data available.
Bulk density	8.6 - 9.85 lb/gal
Density	1.03 - 1.18
Percent volatile	475 g/l

10. Chemical Stability & Reactivity Information

Chemical stability	Stable under normal temperature conditions.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Strong oxidizing agents. Mixing of chlorosulfonic acid and creosote oil in a closed container can cause an increase in temperature and pressure (NFPA 491M, 1991).
Hazardous decomposition products	Aromatic hydrocarbons. Carbon oxides. Nitrogen oxides. Sulfur oxides.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information**Toxicological data****Components****Test Results**

P-xylene (106-42-3)	Acute Dermal LD50 Rabbit: > 43 g/kg Acute Inhalation LCL0 Rat: 8000 mg/l 4 Hours Acute Oral LD50 Rat: 3523 - 8600 mg/kg
Anthracene (120-12-7)	Acute Dermal LD50 Rat: > 1320 mg/kg Acute Oral LD50 Rat: > 16000 mg/kg

Components	Test Results
Fluoranthene (206-44-0)	Acute Dermal LD50 Rabbit: 3180 mg/kg
Creosote (8001-58-9)	Acute Dermal LD50 Rabbit: > 2000 mg/kg
Naphthalene (91-20-3)	Acute Oral LD50 Rat: 725 mg/kg Acute Dermal LD50 Rabbit: > 2 g/kg
Quinoline (91-22-5)	Acute Oral LD50 Rat: 490 mg/kg Acute Dermal LD50 Rabbit: 540 mg/kg Acute Oral LD50 Rat: 331 mg/kg
Acute effects	May be harmful if swallowed.
Local effects	Causes skin, eye and respiratory tract irritation.
US ACGIH Threshold Limit Values: Skin designation	
Naphthalene (CAS 91-20-3)	Can be absorbed through the skin.
Sensitization	May cause allergic skin reaction. May cause photosensitization, evidenced by repeated occurrence of a dermatitic rash on exposure to sunlight.
Chronic effects	The coal tar pitch component of this formulation contains polynuclear aromatic hydrocarbons (PAHs). Some PAHs are recognized carcinogens and may cause skin, lung and bladder cancer. May cause central nervous system effects. May cause damage to the liver and kidneys. May cause lung damage. May cause blood damage. May cause photosensitization, evidenced by repeated occurrence of a dermatitic rash on exposure to sunlight. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. Chronic exposure may cause conjunctivitis, blepharoconjunctivitis and photophobia.
Carcinogenicity	Suspect cancer hazard. May cause scrotal and bladder cancer. Repeated exposure to coal tar products may increase the risk of more serious skin disorders including a variety of skin cancers. Some skin cancers, such as malignant melanoma, have a high mortality rate.
ACGIH Carcinogens	
1,2-Benzphenanthrene (CAS 218-01-9)	A3 Confirmed animal carcinogen with unknown relevance to humans.
Benz[a]anthracene (CAS 56-55-3)	A2 Suspected human carcinogen.
Benzo[a]pyrene (CAS 50-32-8)	A2 Suspected human carcinogen.
Benzo[b]fluoranthene (CAS 205-99-2)	A2 Suspected human carcinogen.
Naphthalene (CAS 91-20-3)	A4 Not classifiable as a human carcinogen.
P-xylene (CAS 106-42-3)	A4 Not classifiable as a human carcinogen.
IARC Monographs. Overall Evaluation of Carcinogenicity	
1,10-(1,2-Phenylene)pyrene (CAS 193-39-5)	2B Possibly carcinogenic to humans.
1,2-Benzphenanthrene (CAS 218-01-9)	2B Possibly carcinogenic to humans.
Acenaphthene (CAS 83-32-9)	3 Not classifiable as to carcinogenicity to humans.
Anthracene (CAS 120-12-7)	3 Not classifiable as to carcinogenicity to humans.
Benz[a]anthracene (CAS 56-55-3)	2B Possibly carcinogenic to humans.
Benzo[a]pyrene (CAS 50-32-8)	1 Carcinogenic to humans.
Benzo[b]fluoranthene (CAS 205-99-2)	2B Possibly carcinogenic to humans.
Benzo[j]fluoranthene (CAS 205-82-3)	2B Possibly carcinogenic to humans.
Benzo[k]fluoranthene (CAS 207-08-9)	2B Possibly carcinogenic to humans.
Fluoranthene (CAS 206-44-0)	3 Not classifiable as to carcinogenicity to humans.
Naphthalene (CAS 91-20-3)	2B Possibly carcinogenic to humans.
Phenanthrene (CAS 85-01-8)	3 Not classifiable as to carcinogenicity to humans.
P-xylene (CAS 106-42-3)	3 Not classifiable as to carcinogenicity to humans.
Pyrene (CAS 129-00-0)	3 Not classifiable as to carcinogenicity to humans.
US NTP Report on Carcinogens: Anticipated carcinogen	
1,10-(1,2-Phenylene)pyrene (CAS 193-39-5)	Anticipated carcinogen.
Benz[a]anthracene (CAS 56-55-3)	Anticipated carcinogen.
Benzo[a]pyrene (CAS 50-32-8)	Anticipated carcinogen.
Benzo[b]fluoranthene (CAS 205-99-2)	Anticipated carcinogen.
Benzo[j]fluoranthene (CAS 205-82-3)	Anticipated carcinogen.
Benzo[k]fluoranthene (CAS 207-08-9)	Anticipated carcinogen.
Naphthalene (CAS 91-20-3)	Anticipated carcinogen.
Mutagenicity	No data available.

Neurological effects	No data available.
Reproductive effects	No data available.
Symptoms and target organs	Inhalation: May cause damage to mucous membranes in nose, throat, lungs and bronchial system. Eye contact: May cause redness and pain. Skin contact: Sensitization. Ingestion may cause dizziness, nausea and vomiting. Be aware that symptoms of chemical pneumonia (shortness of breath) may occur several hours after exposure.
Further information	Swallowing or vomiting of the liquid may result in aspiration into the lungs.

12. Ecological Information

Ecotoxicological data

Components	Test Results
P-xylene (106-42-3)	EC50 Water flea (<i>Daphnia magna</i>): 3.55 - 6.31 mg/l 48 hours LC50 Rainbow trout,donaldson trout (<i>Oncorhynchus mykiss</i>): 2.6 mg/l 96 hours
Anthracene (120-12-7)	EC50 Water flea (<i>Daphnia magna</i>): 0.081 - 0.112 mg/l 48 hours LC50 Bluegill (<i>Lepomis macrochirus</i>): 0 - 0.0032 mg/l 96 hours
Pyrene (129-00-0)	LC50 Rainbow trout,donaldson trout (<i>Oncorhynchus mykiss</i>): > 2 mg/l 96 hours
Dibenzofuran (132-64-9)	LC50 Fathead minnow (<i>Pimephales promelas</i>): 0.84 - 1.31 mg/l 96 hours
Fluoranthene (206-44-0)	LC50 Winter flounder (<i>Pleuronectes americanus</i>): 0.0001 - 0.0001 mg/l 96 hours
Acenaphthene (83-32-9)	EC50 Water flea (<i>Daphnia magna</i>): 1.102 - 1.475 mg/l 48 hours LC50 Brown trout (<i>Salmo trutta</i>): 0.51 - 0.66 mg/l 96 hours
Phenanthrene (85-01-8)	EC50 Water flea (<i>Daphnia magna</i>): 0.185 - 0.243 mg/l 48 hours LC50 Sheepshead minnow (<i>Cyprinodon variegatus</i>): 0.438 - 0.523 mg/l 96 hours
Naphthalene (91-20-3)	EC50 Water flea (<i>Daphnia magna</i>): 1.09 - 3.4 mg/l 48 hours LC50 Rainbow trout,donaldson trout (<i>Oncorhynchus mykiss</i>): 0.91 - 2.82 mg/l 96 hours
Quinoline (91-22-5)	EC50 Water flea (<i>Daphnia magna</i>): 45.9 - 57.3 mg/l 48 hours LC50 Fathead minnow (<i>Pimephales promelas</i>): 0.12 - 1.32 mg/l 96 hours

Ecotoxicity	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Persistence and degradability	No data available.
Bioaccumulation / Accumulation	No data available.
Partition coefficient (n-octanol/water)	Not available.
Mobility in environmental media	The product is slightly soluble in water.

13. Disposal Considerations

Waste codes	U051: Waste Creosote
Disposal instructions	Dispose of this material and its container at hazardous or special waste collection point. Do not incinerate sealed containers. Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

DOT

Basic shipping requirements:

UN number	UN3082
Proper shipping name	Environmentally hazardous substances, liquid, n.o.s. (Naphthalene RQ = 1203 LBS, Anthracene RQ = 256237 LBS)
Hazard class	9
Packing group	III
Environmental hazards	
Marine pollutant	Yes
Labels required	9
Additional information:	
Special provisions	8, 146, 335, IB3, T4, TP1, TP29
Packaging exceptions	155
Packaging non bulk	203
Packaging bulk	241
ERG number	171

IATA

Basic shipping requirements:

UN number	3082
Proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (Naphthalene, Anthracene)
Hazard class	9
Packing group	III
Environmental hazards	
Marine pollutant	Yes
Additional information:	
ERG code	9L

IMDG

Basic shipping requirements:

UN number	3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Naphthalene, Anthracene)
Hazard class	9
Packing group	III
Environmental hazards	
Marine pollutant	Yes
EmS No.	F-A, S-F

TDG

Basic shipping requirements:

Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Naphthalene, Anthracene)
Hazard class	9
UN number	UN3082
Packing group	III
Marine pollutant	Yes
Additional information:	
Special provisions	16

General Read safety instructions, MSDS and emergency procedures before handling.

15. Regulatory Information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification(40 CFR 707, Subpt. D)

NAPHTHALENE (CAS 91-20-3)	0.1 % One-Time Export Notification only.
P-XYLENE (CAS 106-42-3)	1.0 % One-Time Export Notification only.

US CAA Section 112 Hazardous Air Pollutants (HAPs) List

DIBENZOFURANS (CAS 132-64-9)
NAPHTHALENE (CAS 91-20-3)
POLYCYCLIC ORGANIC MATTER (CAS 120-12-7)

POLYCYCLIC ORGANIC MATTER (CAS 129-00-0)
 POLYCYCLIC ORGANIC MATTER (CAS 193-39-5)
 POLYCYCLIC ORGANIC MATTER (CAS 205-82-3)
 POLYCYCLIC ORGANIC MATTER (CAS 205-99-2)
 POLYCYCLIC ORGANIC MATTER (CAS 206-44-0)
 POLYCYCLIC ORGANIC MATTER (CAS 207-08-9)
 POLYCYCLIC ORGANIC MATTER (CAS 218-01-9)
 POLYCYCLIC ORGANIC MATTER (CAS 50-32-8)
 POLYCYCLIC ORGANIC MATTER (CAS 56-55-3)
 POLYCYCLIC ORGANIC MATTER (CAS 83-32-9)
 POLYCYCLIC ORGANIC MATTER (CAS 85-01-8)
 P-XYLENES (CAS 106-42-3)
 QUINOLINE (CAS 91-22-5)

US EPCRA (SARA Title III) Section 302 - Extremely Hazardous Spill: Reportable quantity

Pyrene (CAS 129-00-0) 5000 LBS

US EPCRA (SARA Title III) Section 302 - Extremely Hazardous Substance: Threshold planning quantity, lower value

Pyrene (CAS 129-00-0) 1000 LBS

US EPCRA (SARA Title III) Section 302 - Extremely Hazardous Substance: Threshold planning quantity, upper value

Pyrene (CAS 129-00-0) 10000 LBS

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

1,10-(1,2-Phenylene)pyrene (CAS 193-39-5)	0.1 % Substance is not eligible for the de minimis exemption except for the purposes of supplier notification requirements.
1,2-Benzphenanthrene (CAS 218-01-9)	1.0 % Substance is not eligible for the de minimis exemption except for the purposes of supplier notification requirements.
Anthracene (CAS 120-12-7)	1.0 %
Benz[a]anthracene (CAS 56-55-3)	0.1 % Substance is not eligible for the de minimis exemption except for the purposes of supplier notification requirements.
Benzo[a]pyrene (CAS 50-32-8)	0.1 % Substance is not eligible for the de minimis exemption except for the purposes of supplier notification requirements.
Benzo[b]fluoranthene (CAS 205-99-2)	0.1 % Substance is not eligible for the de minimis exemption except for the purposes of supplier notification requirements.
Benzo[j]fluoranthene (CAS 205-82-3)	0.1 % Substance is not eligible for the de minimis exemption except for the purposes of supplier notification requirements.
Benzo[k]fluoranthene (CAS 207-08-9)	0.1 % Substance is not eligible for the de minimis exemption except for the purposes of supplier notification requirements.
Creosote (CAS 8001-58-9)	0.1 %
Dibenzofuran (CAS 132-64-9)	1.0 %
Fluoranthene (CAS 206-44-0)	1.0 % Substance is not eligible for the de minimis exemption except for the purposes of supplier notification requirements.
Naphthalene (CAS 91-20-3)	0.1 %
Phenanthrene (CAS 85-01-8)	1.0 %
P-xylene (CAS 106-42-3)	1.0 %
Quinoline (CAS 91-22-5)	1.0 %

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Reportable threshold

1,10-(1,2-Phenylene)pyrene (CAS 193-39-5)	100 LBS
1,2-Benzphenanthrene (CAS 218-01-9)	100 LBS
Benz[a]anthracene (CAS 56-55-3)	100 LBS
Benzo[a]pyrene (CAS 50-32-8)	100 LBS
Benzo[b]fluoranthene (CAS 205-99-2)	100 LBS
Benzo[j]fluoranthene (CAS 205-82-3)	100 LBS
Benzo[k]fluoranthene (CAS 207-08-9)	100 LBS
Fluoranthene (CAS 206-44-0)	100 LBS

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

1,10-(1,2-Phenylene)pyrene (CAS 193-39-5)	Listed.
1,2-Benzphenanthrene (CAS 218-01-9)	Listed.
Anthracene (CAS 120-12-7)	Listed.
Benz[a]anthracene (CAS 56-55-3)	Listed.
Benzo[a]pyrene (CAS 50-32-8)	Listed.
Benzo[b]fluoranthene (CAS 205-99-2)	Listed.
Benzo[j]fluoranthene (CAS 205-82-3)	Listed.
Benzo[k]fluoranthene (CAS 207-08-9)	Listed.
Creosote (CAS 8001-58-9)	Listed.
Dibenzofuran (CAS 132-64-9)	Listed.
Fluoranthene (CAS 206-44-0)	Listed.

Naphthalene (CAS 91-20-3)	Listed.
Phenanthrene (CAS 85-01-8)	Listed.
P-xylene (CAS 106-42-3)	Listed.
Quinoline (CAS 91-22-5)	Listed.

CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)

Creosote: 1
 Naphthalene: 100
 Phenanthrene: 5000
 Acenaphthene: 100
 Fluoranthene: 100
 Pyrene: 5000
 Dibenzofuran: 100
 Anthracene: 5000
 1,2-Benzphenanthrene: 100
 Benz[a]anthracene: 10
 Benzo[b]fluoranthene: 1
 Benzo[a]pyrene: 1
 Benzo[k]fluoranthene: 5000
 1,10-(1,2-Phenylene)pyrene: 100
 Quinoline: 5000
 P-xylene: 100

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
 Delayed Hazard - Yes
 Fire Hazard - No
 Pressure Hazard - No
 Reactivity Hazard - No

Section 302 extremely hazardous substance (40 CFR 355, Appendix A) No

Section 311/312 (40 CFR 370) Yes

Drug Enforcement Administration (DEA) (21 CFR 1308.11-15) Not controlled

Canadian regulations This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS status Controlled

WHMIS classification D2A - Other Toxic Effects-VERY TOXIC

WHMIS labeling



Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

US - California Hazardous Substances (Director's): Listed substance

1,10-(1,2-Phenylene)pyrene (CAS 193-39-5)	Listed.
1,2-Benzphenanthrene (CAS 218-01-9)	Listed.
Acenaphthene (CAS 83-32-9)	Listed.
Anthracene (CAS 120-12-7)	Listed.
Benz[a]anthracene (CAS 56-55-3)	Listed.
Benzo[a]pyrene (CAS 50-32-8)	Listed.
Benzo[b]fluoranthene (CAS 205-99-2)	Listed.
Benzo[j]fluoranthene (CAS 205-82-3)	Listed.
Benzo[k]fluoranthene (CAS 207-08-9)	Listed.
Creosote (CAS 8001-58-9)	Listed.
Fluoranthene (CAS 206-44-0)	Listed.
Naphthalene (CAS 91-20-3)	Listed.
Phenanthrene (CAS 85-01-8)	Listed.
P-xylene (CAS 106-42-3)	Listed.
Pyrene (CAS 129-00-0)	Listed.
Quinoline (CAS 91-22-5)	Listed.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

1,10-(1,2-Phenylene)pyrene (CAS 193-39-5)	Listed.
1,2-Benzphenanthrene (CAS 218-01-9)	Listed.
Benz[a]anthracene (CAS 56-55-3)	Listed.
Benzo[a]pyrene (CAS 50-32-8)	Listed.
Benzo[b]fluoranthene (CAS 205-99-2)	Listed.
Benzo[j]fluoranthene (CAS 205-82-3)	Listed.
Benzo[k]fluoranthene (CAS 207-08-9)	Listed.
Creosote (CAS 8001-58-9)	Listed.
Naphthalene (CAS 91-20-3)	Listed.
Quinoline (CAS 91-22-5)	Listed.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

1,10-(1,2-Phenylene)pyrene (CAS 193-39-5)	Listed: January 1, 1988 Carcinogenic.
1,2-Benzphenanthrene (CAS 218-01-9)	Listed: January 1, 1990 Carcinogenic.
Benz[a]anthracene (CAS 56-55-3)	Listed: July 1, 1987 Carcinogenic.
Benzo[a]pyrene (CAS 50-32-8)	Listed: July 1, 1987 Carcinogenic.
Benzo[b]fluoranthene (CAS 205-99-2)	Listed: July 1, 1987 Carcinogenic.
Benzo[j]fluoranthene (CAS 205-82-3)	Listed: July 1, 1987 Carcinogenic.
Benzo[k]fluoranthene (CAS 207-08-9)	Listed: July 1, 1987 Carcinogenic.
Creosote (CAS 8001-58-9)	Listed: October 1, 1988 Carcinogenic.
Naphthalene (CAS 91-20-3)	Listed: April 19, 2002 Carcinogenic.
Quinoline (CAS 91-22-5)	Listed: October 24, 1997 Carcinogenic.

US - Massachusetts RTK - Substance: Listed substance

1,10-(1,2-Phenylene)pyrene (CAS 193-39-5)	Listed.
1,2-Benzphenanthrene (CAS 218-01-9)	Listed.
Acenaphthene (CAS 83-32-9)	Listed.
Anthracene (CAS 120-12-7)	Listed.
Benz[a]anthracene (CAS 56-55-3)	Listed.
Benzo[a]pyrene (CAS 50-32-8)	Listed.
Benzo[b]fluoranthene (CAS 205-99-2)	Listed.
Benzo[j]fluoranthene (CAS 205-82-3)	Listed.
Benzo[k]fluoranthene (CAS 207-08-9)	Listed.
Creosote (CAS 8001-58-9)	Listed.
Dibenzofuran (CAS 132-64-9)	Listed.
Fluoranthene (CAS 206-44-0)	Listed.
Naphthalene (CAS 91-20-3)	Listed.
Phenanthrene (CAS 85-01-8)	Listed.
P-xylene (CAS 106-42-3)	Listed.
Pyrene (CAS 129-00-0)	Listed.
Quinoline (CAS 91-22-5)	Listed.

US - New Jersey Community RTK (EHS Survey): Reportable threshold

1,10-(1,2-Phenylene)pyrene (CAS 193-39-5)	500 LBS
1,2-Benzphenanthrene (CAS 218-01-9)	500 LBS
Anthracene (CAS 120-12-7)	500 LBS
Benz[a]anthracene (CAS 56-55-3)	500 LBS
Benzo[a]pyrene (CAS 50-32-8)	500 LBS
Benzo[b]fluoranthene (CAS 205-99-2)	500 LBS
Benzo[j]fluoranthene (CAS 205-82-3)	500 LBS
Benzo[k]fluoranthene (CAS 207-08-9)	500 LBS
Creosote (CAS 8001-58-9)	500 LBS
Dibenzofuran (CAS 132-64-9)	500 LBS
Fluoranthene (CAS 206-44-0)	500 LBS
Naphthalene (CAS 91-20-3)	500 LBS
Phenanthrene (CAS 85-01-8)	500 LBS
P-xylene (CAS 106-42-3)	500 LBS
Pyrene (CAS 129-00-0)	500 LBS
Quinoline (CAS 91-22-5)	500 LBS

US - New Jersey RTK - Substances: Listed substance

1,10-(1,2-Phenylene)pyrene (CAS 193-39-5)	Listed.
1,2-Benzphenanthrene (CAS 218-01-9)	Listed.
Acenaphthene (CAS 83-32-9)	Listed.
Anthracene (CAS 120-12-7)	Listed.
Benz[a]anthracene (CAS 56-55-3)	Listed.
Benzo[a]pyrene (CAS 50-32-8)	Listed.
Benzo[b]fluoranthene (CAS 205-99-2)	Listed.
Benzo[j]fluoranthene (CAS 205-82-3)	Listed.
Benzo[k]fluoranthene (CAS 207-08-9)	Listed.
Creosote (CAS 8001-58-9)	Listed.
Dibenzofuran (CAS 132-64-9)	Listed.
Fluoranthene (CAS 206-44-0)	Listed.
Naphthalene (CAS 91-20-3)	Listed.
Phenanthrene (CAS 85-01-8)	Listed.
P-xylene (CAS 106-42-3)	Listed.
Pyrene (CAS 129-00-0)	Listed.
Quinoline (CAS 91-22-5)	Listed.

US - Pennsylvania RTK - Hazardous Substances: Listed substance

1,10-(1,2-Phenylene)pyrene (CAS 193-39-5)	Listed.
1,2-Benzphenanthrene (CAS 218-01-9)	Listed.
Acenaphthene (CAS 83-32-9)	Listed.
Anthracene (CAS 120-12-7)	Listed.
Benz[a]anthracene (CAS 56-55-3)	Listed.
Benzo[a]pyrene (CAS 50-32-8)	Listed.
Benzo[b]fluoranthene (CAS 205-99-2)	Listed.
Benzo[j]fluoranthene (CAS 205-82-3)	Listed.
Benzo[k]fluoranthene (CAS 207-08-9)	Listed.
Creosote (CAS 8001-58-9)	Listed.
Dibenzofuran (CAS 132-64-9)	Listed.
Fluoranthene (CAS 206-44-0)	Listed.
Naphthalene (CAS 91-20-3)	Listed.
Phenanthrene (CAS 85-01-8)	Listed.
P-xylene (CAS 106-42-3)	Listed.
Pyrene (CAS 129-00-0)	Listed.
Quinoline (CAS 91-22-5)	Listed.

US - Pennsylvania RTK - Hazardous Substances: Special hazard

1,10-(1,2-Phenylene)pyrene (CAS 193-39-5)	Special hazard.
Benz[a]anthracene (CAS 56-55-3)	Special hazard.
Benzo[a]pyrene (CAS 50-32-8)	Special hazard.
Benzo[b]fluoranthene (CAS 205-99-2)	Special hazard.
Benzo[j]fluoranthene (CAS 205-82-3)	Special hazard.
Benzo[k]fluoranthene (CAS 207-08-9)	Special hazard.
Creosote (CAS 8001-58-9)	Special hazard.

Mexico regulations

This safety data sheet was prepared in accordance with the Official Mexican Standard (NOM-018-STPS-2000).

16. Other Information

Further information

HMIS® is a registered trade and service mark of the NPCA.
H - Goggles, Gloves, Apron, Vapor Respirator

HMIS® ratings

Health: 2*
Flammability: 1
Physical hazard: 0
Personal protection: H

NFPA ratings

Health: 2
Flammability: 1
Instability: 0

Disclaimer

NOTICE: The information presented herein is based on data considered to be accurate as of the date of preparation of this Safety Data Sheet (SDS) and was prepared pursuant to Government regulation(s) that identify specific types of information to be provided. This SDS may not be used as a commercial specification sheet of manufacturer or seller, and no warranty or representation, expressed or implied, is made as to the accuracy or comprehensiveness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. Additional information may be needed to evaluate other uses of the product, including use of the product in combination with any materials or in any processes other than those specifically referenced. Information provided herein with respect to any hazards that may be associated with the product is not meant to suggest that use of the product in a given application will necessarily result in any exposure or risk to workers or the general public. No responsibility can be assumed by vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product. Purchasers and users assume all risk of use, storage and handling of the product in compliance with applicable federal, state and local laws and regulations. Purchasers and users of the product specifically should advise all of their employees, agents, contractors and customers who will use the product of this (M)SDS.

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