



Safety Data Sheet

Material Name: COAL TAR CREOSOTE (PRESSURE APPLICATIONS)

SDS ID: 00227842

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name

COAL TAR CREOSOTE (PRESSURE APPLICATIONS)

Synonyms

AWPA P1/P13, EPA REG.# 61468-1, PMRA REG. #(s): 31098 (Commercial) and 21876 (Technical)

Chemical Family

Hydrocarbons, coal-tar

Product Description

Coal Tar Creosote (Pressure Applications) meets AWPAs specification for P1/P13 creosote and is an EPA registered pesticide. Extensive animal testing has been conducted by the Creosote Council on P1/P13 creosote and the results are reported in Section 11.

Product Use

Creosote (P1/P13) is registered only for pressure treatment of wood. Wood treaters must not knowingly pressure treat wood commodities that are not encompassed in the American Wood Protection Association (AWPA) Use Category System, as set forth in the most current edition of the AWPAs Book of Standards. Refer to product label for more details.

Restrictions on Use

Restricted Use Pesticide; for sale to and use only by certified applicators or persons under their direct supervision and only for those uses covered by the certified applicators' certification.

Details of the supplier of the safety data sheet

KOPPERS INC.

436 Seventh Avenue

Pittsburgh, PA 15219-1800

Mfg Contact: 412-227-2001 (SDS Requests: 866-852-5239)

CHEMTREC: 800-424-9300 (Outside USA: +1 703-527-3887)

Emergencies: (Medical in USA): 877-737-9047

Emergencies: (Medical Outside of USA): 651-632-9269

E-mail: naorgmsds@koppers.com

Section 2 - HAZARDS IDENTIFICATION

Classification in accordance with paragraph (d) of 29 CFR 1910.1200.

Serious Eye Damage/Eye Irritation - Category 2B

Carcinogenicity - Category 1B

Specific target organ toxicity - Single exposure - Category 3 (Respiratory system)

Hazardous to the Aquatic Environment - Acute - Category 1

Hazardous to the Aquatic Environment - Chronic - Category 2

GHS Label Elements

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Symbol(s)



Signal Word

Danger

Hazard Statement(s)

Causes eye irritation.

May cause cancer.

May cause respiratory irritation.

Very toxic to aquatic life.

Toxic to aquatic life with long lasting effects.

Precautionary Statement(s)

Prevention

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

Response

IF exposed or concerned: Get medical advice/attention.

IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

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.

Collect spillage.

Storage

Store in a well-ventilated place.

Keep container tightly closed.

Store locked up.

Disposal

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

Other Hazards

Heated material may cause thermal burns.



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Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
8001-58-9	COAL TAR CREOSOTE	100
-	The above listed complex substance contains the following constituents	-
85-01-8	PHENANTHRENE	8.80-17.89
91-57-6	2-METHYLNAPHTHALENE	5.37-13.17
83-32-9	ACENAPHTHENE	5.72-9.46
206-44-0	FLUORANTHENE	3.39-9.17
91-20-3	NAPHTHALENE	0.73-10.81
86-73-7	FLUORENE	4.72-5.80
129-00-0	PYRENE	2.42-5.89
132-64-9	DIBENZOFURAN	2.71-4.80
90-12-0	1-METHYLNAPHTHALENE	2.08-5.21
120-12-7	ANTHRACENE	1.29-4.22
92-52-4	DIPHENYL	0.90-2.58
91-22-5	QUINOLINE	0.91-2.41
86-74-8	CARBAZOLE	0.59-2.35
218-01-9	1,2-BENZPHENANTHRENE	1.02-1.91
496-11-7	2,3-DIHYDRO-1H-INDENE	0.00-2.76
56-55-3	BENZO(A)ANTHRACENE	0.94-1.56
192-97-2	BENZO(E)PYRENE	0.09-1.80
50-32-8	BENZO(A)PYRENE	0.08-1.10
208-96-8	ACENAPHTHYLENE	0.36-1.33
238-84-6	BENZO(A)FLUORENE	0.48-1.07



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243-17-4	BENZO(B)FLUORENE	0.37-0.93
132-65-0	DIBENZOTHIOPHENE	0.47-0.77
193-39-5	INDENO(1,2,3-CD)PYRENE	0.27-0.75
217-59-4	TRIPHENYLENE	0.25-0.52
119-65-3	ISOQUINOLINE	0.20-0.50
194-59-2	7H-DIBENZO(C,G)CARBAZOLE	0.00-0.32
53-70-3	DIBENZ(A,H)ANTHRACENE	0.30-0.91
205-99-2	BENZO(B)FLUORANTHENE	0.12-0.42
100-47-0	BENZONITRILE	0.00-0.53
95-48-7	O-CRESOL	0.00-0.51
191-24-2	BENZO(G,H,I)PERYLENE	0.10-0.48
95-15-8	BENZO(B)THIOPHENE	0.05-0.33
95-13-6	INDENE	0.00-0.37
3697-24-3	5-METHYLCHRYSENE	0.00-0.33
108-95-2	PHENOL	0.00-0.12
56-49-5	3-METHYLCHOLANTHRENE	0.00-0.23
526-73-8	1,2,3-TRIMETHYLBENZENE	0.00-0.22
207-08-9	BENZO(K)FLUORANTHENE	0.06-0.25
205-82-3	BENZO(J)FLUORANTHENE	0.09-0.25
7704-34-9	SULFUR	0.02-0.17
226-36-8	DIBENZ(A,H)ACRIDINE	0.01-0.14
108-67-8	1,3,5-TRIMETHYLBENZENE	0.00-0.12
224-42-0	DIBENZ(A,J)ACRIDINE	0.03-0.07
108-39-4	M-CRESOL	0.00-0.09
95-47-6	O-XYLENE	0.00-0.09



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106-44-5	P-CRESOL	0.00-0.09
105-67-9	2,4-XYLENOL	0.00-0.09
108-38-3	M-XYLENE	0.00-0.08
106-42-3	P-XYLENE	0.00-0.08
622-96-8	4-ETHYLTOLUENE	0.00-0.05
620-14-4	3-ETHYLTOLUENE	0.00-0.05

Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Creosotes, polynuclear aromatic hydrocarbons, Aromatic hydrocarbons, polycyclic (130489-29-2).

Section 4 - FIRST AID MEASURES

Inhalation

If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Skin

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. Wash all affected skin areas with warm soapy water. Skin contact causes photosensitization which can last for 36-72 hours after exposure. Keep out of direct sunlight for the next two to three days to avoid sunburn to the photosensitized skin areas. Use a broad spectrum blockout cream to protect against UV alpha ray exposure. Get medical attention, if needed.

Eyes

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

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 or convulsive person. If vomiting occurs, keep head lower than hips to help prevent aspiration.

Indication of any immediate medical attention and special treatment needed

Probable mucosal damage may contraindicate the use of gastric lavage. Vomiting may cause aspiration pneumonia.

Most Important Symptoms/Effects



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Acute

respiratory tract irritation, mild skin irritation, eye irritation, thermal burns from heated material

Delayed

skin cancer

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

regular dry chemical, carbon dioxide, water spray, regular foam

Unsuitable Extinguishing Media

high-pressure water streams.

Special Hazards Arising from the Chemical

Contact with heat may generate toxic and/or flammable gases. Containers may rupture or explode if exposed to heat.

Hazardous Combustion Products

carbon monoxide, carbon dioxide, oxides of nitrogen, polynuclear aromatic hydrocarbons

Fire Fighting Measures

Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Do not scatter spilled material with high-pressure water streams. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Use extinguishing agents appropriate for surrounding fire. Water may be used to blanket fire. Flood with fine water spray. Directly spraying water or foam onto hot burning product may cause frothing. For fires in cargo or storage area: Cool containers with water from unmanned hose holder or monitor nozzles until well after fire is out. If this is impossible then take the following precautions: Keep unnecessary people away, isolate hazard area and deny entry. Dike for later disposal.

Special Protective Equipment and Precautions for Firefighters

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

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Avoid inhalation or contact. Provide adequate ventilation. Wear personal protective clothing and equipment, see Section 8. Avoid release to the environment. Collect spillage.

Methods and Materials for Containment and Cleaning Up

Keep out of water supplies and sewers. This product is toxic to aquatic organisms. 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



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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. Avoid heat, flames, sparks and other sources of ignition. Do not touch or walk through spilled material. Stop leak if possible without personal risk. Absorb (with sand, earth, etc.) discharged material and dispose of in accordance with applicable Federal, State and local regulations. Contaminated materials must be handled and managed as RCRA Hazardous Waste and treated before disposal in an approved landfill. This waste is identified by the EPA as a U051 hazardous waste and must meet the treatment standards specified in 40 CFR 268 Subpart D. A RCRA hazardous waste storage permit is required for storage of wastes beyond 90 days. In Canada, report releases to provincial authorities, municipal authorities, or both, as required. If this product is spilled or leaked into the environment, the CERCLA (40 CFR 302.4) reportable quantity is 0.1 gallons (1 pound), and requires National Response Center notification.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling

Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Avoid ingestion. When using do not eat or drink. Wear protective gloves/clothing and eye/face protection. Wash exposed areas thoroughly with soap and water, or a waterless hand cleaner, after skin contact and before eating, drinking, using tobacco products, or restrooms. Use protective skin cream on exposed skin before and during work shift. To reduce sun sensitivity a sun-blocking lotion can also be applied prior to application of a protective cream. Remove and launder contaminated clothing separately from other laundry before reuse. After working with the product use warm soapy water and a wash cloth to thoroughly wash all areas of skin that have been contacted with product. After washing, apply a broad spectrum UV blockout cream on exposed skin areas before going into sunlight. Keep out of strong sunlight for two to three days after being affected by the product. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area.

Conditions for Safe Storage, Including any Incompatibilities

Store in a well-ventilated place.

Keep container tightly closed.

Store locked up.

Store and handle in accordance with all current regulations and standards. Notify State Emergency Response Commission for storage or use at amounts greater than or equal to the TPQ (U.S. EPA SARA Section 302). SARA Section 303 requires facilities storing a material with a TPQ to participate in local emergency response planning (U.S. EPA 40 CFR 355.30). Label all containers. Avoid heat, flames, sparks and other sources of ignition. Store in a cool, dry place. Protect from physical damage. Keep separated from incompatible substances.

Incompatible Materials

oxidizing materials

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Creosote is a complex mixture of variable composition, and while no odor threshold for creosote has been established, work done at the University of California has measured the odor thresholds for one of the



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more volatile components in creosote and determined that the involved odor threshold is in the part per billion range, and well below applicable exposure limits. On the basis of these data the perception of creosote odor in and of itself should not be taken as an indication of exposure in excess of accepted exposure limits.

Component Exposure Limits

COAL TAR CREOSOTE	8001-58-9
ACGIH:	0.2 mg/m ³ TWA as benzene soluble aerosol (related to Pitch, coal tar, high-temperature)
OSHA (US):	0.2 mg/m ³ TWA (Benzene soluble fraction) (related to Pitch, coal tar, high-temperature)
NAPHTHALENE	91-20-3
ACGIH:	10 ppm TWA
	Skin - potential significant contribution to overall exposure by the cutaneous route
OSHA (US):	10 ppm TWA; 50 mg/m ³ TWA
DIPHENYL	92-52-4
ACGIH:	0.2 ppm TWA
OSHA (US):	0.2 ppm TWA; 1 mg/m ³ TWA

EU - Occupational Exposure (98/24/EC) - Binding Biological Limit Values and Health Surveillance Measures

There are no biological limit values for any of this product's components.

ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)

COAL TAR CREOSOTE (8001-58-9)

Medium: urine Time: end of shift at end of workweek Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative) (related to Pitch, coal tar, high-temperature)

NAPHTHALENE (91-20-3)

Time: end of shift Parameter: 1-Naphthol with hydrolysis plus 2-Naphthol with hydrolysis (nonquantitative, nonspecific)

Engineering Controls

Ensure adequate ventilation. Ensure compliance with applicable exposure limits. Refer to product label for more details.

Individual Protection Measures, such as Personal Protective Equipment

Eye/face protection

Wear splash resistant safety goggles with a faceshield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area. Refer to product label for more details.



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Skin Protection

Wear washable or disposable coveralls or long-sleeved shirt and long pants. Wear socks plus industrial grade safety boots with chemical resistant soles. Individuals who enter pressure treatment cylinders and other related equipment that is contaminated with the wood treating formulation must wear protective clothing (including overalls, jackets, gloves and boots) impervious to the wood treatment formulations and a respirator. Protective clothing must be changed when it shows signs of contamination. Remove and launder contaminated clothing separately from other laundry before reuse. Refer to product label for more details.

Respiratory Protection

If the applicable TLVs and/or PELs are exceeded, use NIOSH-approved multipurpose air-purifying cartridge respirators, for organic vapors and P-100 particulate. Use a positive-pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known, or any other circumstance where air-purifying respirators may not provide adequate protection. Individuals who manually open cylinder doors must wear gloves and a NIOSH-approved multipurpose air-purifying cartridge respirators, for organic vapors and P-100 particulate. Refer to product label for more details.

Glove Recommendations

Individuals must wear gloves impervious to the wood treatment formulations in all situations where dermal contact with creosote is expected.

Protective Materials

Examples of impervious materials for protective clothing (e.g. overalls, jackets, gloves and boots) required during application and handling of creosote are polyvinyl acetate (PVA), polyvinyl chloride (PVC), Neoprene and NBR (Buna-N).

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	orange brown semi-liquid	Physical State	liquid
Odor	Not available	Color	brown to black
Odor Threshold	Not available	pH	Not available
Melting Point	Not available	Boiling Point	315 - 862 °F
Freezing point	Not available	Evaporation Rate	Not available
Boiling Point Range	Not available	Flammability (solid, gas)	Not applicable
Autoignition	Not available	Flash Point	289.9 °F
Lower Explosive Limit	Not available	Decomposition	Not available
Upper Explosive Limit	Not available	Vapor Pressure	0.021 - 0.168



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Vapor Density (air=1)	Not available	Specific Gravity (water=1)	1.072 at 60 °F
Water Solubility	(Insoluble)	Partition coefficient: n-octanol/water	Not available
Viscosity	Not available	Solubility (Other)	Not available
Density	Not available	Physical Form	semi-liquid at ambient temperature
Molecular Weight	Not available	OSHA Flammability Class	Not applicable

Other Information

No additional information is 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. Containers may rupture or explode if exposed to heat. Keep out of water supplies and sewers.

Incompatible Materials

oxidizing materials

Hazardous decomposition products

carbon monoxide, carbon dioxide, oxides of nitrogen, polynuclear aromatic hydrocarbons

Section 11 - TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation

irritation

Skin Contact

mild irritation, thermal burns from heated material, skin cancer

Eye Contact

irritation, thermal burns from heated material



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Ingestion

gastrointestinal irritation, bloating

Acute and Chronic Toxicity

Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and no selected endpoints have been identified

Product Toxicity Data

Product Analysis LD/LC 50 Toxicity Values

Oral LD50:	Rat 2197 mg/kg
Dermal LD50:	Rabbit >2000 mg/kg
Inhalation LC50:	Rat >5 mg/L 4 h

Immediate Effects

respiratory tract irritation, mild skin irritation, eye irritation, thermal burns from heated material

Delayed Effects

skin cancer

Irritation/Corrosivity Data

0.5 ml/4 hour(s) skin-rabbit mild (Draize Score-1.8/8.0); 0.1 ml eyes-rabbit mild (Draize Score-7.0/110.0), Rabbit Eye Irritation: No corneal changes; conjunctival changes all reversed by 8-21 days post treatment. Max irritation score = 7.0/110, Rabbit Dermal Irritation: Slight-to-well-defined erythema and very slight-to slight edema cleared by day 14, PSI = 1.8/8.0

Respiratory Sensitization

No data available.

Dermal Sensitization

Negative dermal sensitization in guinea pigs.

Component Carcinogenicity

COAL TAR CREOSOTE	8001-58-9
ACGIH:	A1 - Confirmed Human Carcinogen (related to Pitch, coal tar, high-temperature)
IARC:	Monograph 100F [2012]; Supplement 7 [1987]; Monograph 35 [1985] (related to Pitch, coal tar, high-temperature) (Group 1 (carcinogenic to humans))
NTP:	Known Human Carcinogen (related to Pitch, coal tar, high-temperature)
NIOSH:	potential occupational carcinogen

In a 6 month mouse skin cancer initiation-promotion study, undiluted creosote or a 1% or 50% creosote suspension was applied daily for two weeks followed by six months of twice-weekly applications. Creosote was tested as a tumor initiator with TPA as a promotor, as a promoter with DMBA as an initiator, and as both an initiator and a promoter. Repeated applications of creosote produced skin irritation and acted as an initiator, a promoter and a complete carcinogen.



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Germ Cell Mutagenicity

Did not exhibit a dominant lethal effect in testing with male rats administered orally at the maximum dose of 725 mg/kg for 5 days and is considered negative for the induction of a germ cell mutation effect.

Tumorigenic Data

No data available

Reproductive Toxicity

When tested in a 2-generation reproductive toxicity study in rats, no adverse reproductive or developmental effects were seen in the absence of paternal systemic toxicity. P1/P13 creosote is not considered a reproductive toxin. When tested in a developmental toxicity study in rats damage to the embryo or the fetus did not occur at dose levels that did not harm the mother. P1/P13 creosote is not considered a developmental toxin.

Specific Target Organ Toxicity - Single Exposure

respiratory system

Specific Target Organ Toxicity - Repeated Exposure

No data available.

Aspiration hazard

No data available.

Medical Conditions Aggravated by Exposure

respiratory disorders, skin disorders

Additional Data

This product is coal tar creosote. Volume 35 of the IARC monograph states that there is limited evidence that coal tar derived creosotes are carcinogenic in humans and sufficient evidence for the carcinogenicity of creosote in experimental animals (Group 2A). IARC's evaluation of the effects of coal tar creosote in humans is based on older occupational studies in the wood-preserving and construction industries. When applied to the skin of mice in experimental studies, creosote produced skin tumors and in one study produced lung tumors.

Today, with the use of engineering controls and personal protective equipment, occupational exposure to creosote components is expected to be below permissible exposure limits (measured as CTPVs). Recently, the largest health effects study to date of workers employed in creosote wood treating plants (2,179 employees at eleven plants from 1979-2001) conducted by Dr. Otto Wong, found no evidence supporting an increased risk of cancer death as a result of exposure to creosote. The NOAEL for rats in a 13-week subchronic inhalation study was 5.4 mg/m³. The NOAEL for female rats in a 90-day subchronic dermal study was greater than 400 mg/mg, and the NOAEL for male rats was 40 mg/kg.

Based on Buehler dermal sensitization testing, creosote is not considered to be a dermal sensitizing agent. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Prolonged and repeated skin exposure over many years in the absence of recommended hygiene practices may lead to changes in skin pigmentation, benign skin growth, and in some cases, result in skin cancer.

Inhalation – 90 day repeated exposure - Rats exposed to P1/P13 creosote for 6 hours/day 5 days/week for 13 weeks to 106, 59 and 5.4 mg/m³ showed weight loss or weight gain suppression in the top two exposure groups and staining of the animals' respiratory tract and lungs immediately after the 90-day



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exposure period. Creosote deposition in the nose and upper respiratory tract produced acute and chronic inflammation which decreased along the tract toward the lungs. The lung changes were limited to pigment deposition characterized as trace level in severity. There were no lung inflammatory changes or lesions of any type. One high-dose and one mid-dose animal showed signs of myocardial degeneration. Thyroid changes (follicular cell hypertrophy) were noted in creosote-exposed animals; this condition was reversible following termination of exposure for 6 weeks however trace levels of pigment remained in the lungs and nose along with cyst formation in the nose. No changes indicative of heart damage were observed in any animal following the recovery period. At the end of the exposure period and at the end of the recovery period, animals were evaluated by a veterinary ophthalmologist for signs of eye damage due to airborne creosote. No test material related eye changes were recorded. The NOAEL level in this study was 5.4 mg/m³.

Dermal – No systemic effects following single high-level exposure.

Dermal – 90 daily applications of P1/P13 creosote to their skin of rats at doses of 400, 40 or 4 mg/kg/day for 90 days produced essentially no effect other than slight skin irritation. All parameters for toxicity including ophthalmoscopic examination appeared to be completely unaffected by dermal creosote exposure.

In addition to containing information about the product as a whole, this data sheet also contains information about individual components of the product. Information of this nature may not have been derived from studies or data relating to this product and/or may have been derived from studies or data that did not involve human exposure and involved animal exposure only.

A neoplastic effect was reported in mice with subcutaneous injection of 46 mg/kg of diphenyl. Some polycyclic aromatic hydrocarbons (PAHs), found in coal tar complex substances, have been reported to cause lung and skin cancer in humans under conditions of poor personal hygiene, prolonged/repeated contact, and exposure to sunlight. The National Toxicology Program (NTP) and IARC have independently classified various PAH compounds present in coal tar substances as reasonably anticipated to be human carcinogens (NTP), probably carcinogenic to humans (IARC Group 2A), possibly carcinogenic to humans (IARC Group 2B), and not classifiable as to carcinogenicity to humans (IARC Group 3). The cancers reported in the studies upon which IARC based its conclusions involved lung, skin, liver, stomach, kidney and blood cancers in animals. Based on the results of animal experiments PAHs may cause injury to the liver, kidneys, lungs, blood and lymph systems. Some PAH's have also been associated with impaired fertility, heritable genetic damage and birth defects in mice.

Section 12 - ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Component Analysis - Aquatic Toxicity

COAL TAR CREOSOTE	8001-58-9
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Fish:	LC50 96 h Brachydanio rerio 2.6 - 6.6 mg/L [static]; LC50 96 h Oncorhynchus mykiss 0.57 mg/L [static]
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Persistence and Degradability

No information available for the product.

Bioaccumulative Potential

This material is believed not to bioaccumulate.

Mobility

Insoluble in water.

Other Toxicity

No data available.

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods

Pesticide wastes are toxic. Improper disposal of excess pesticide or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. Dispose in accordance with all applicable regulations.

Section 14 - TRANSPORT INFORMATION

US DOT Information:

Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., Marine Pollutant, RQ, (Contains: COAL TAR CREOSOTE, NAPHTHALENE)

Hazard Class: 9

UN/NA #: UN3082

Packing Group: III

Required Label(s): Class 9 - UN3082

Additional information: 'Environmentally hazardous substances, liquid, n.o.s.' applies for all container sizes. This material contains reportable quantity (RQ) Hazardous Substances.

IATA Information:

Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., Marine Pollutant, RQ

Hazard Class: 9

UN#: UN3082

Packing Group: III

Required Label(s): 9- Miscellaneous

Additional information: Passenger or cargo aircraft LTD QTY is 30 kg G (Pkg. instructions Y964), passenger or cargo aircraft 450 L (Pkg. instructions 964), S.P. A97 & A158, ERG 9L



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TDG Information:

Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., Marine Pollutant, RQ

Hazard Class: 9

UN#: UN3082

Packing Group: III

Required Label(s): Class 9 - UN3082

Additional information

STCC Code: 2814125; HAZ STCC Code: 4963330 US DOT Reportable Quantities COAL TAR CREOSOTE (8001-58-9) 1 lbs RQ; 0.454 kg RQ

Section 15 - REGULATORY INFORMATION

U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (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.

COAL TAR CREOSOTE	8001-58-9
SARA 313:	0.1 % de minimis concentration
CERCLA:	1 lb final RQ; 0.454 kg final RQ

SARA Section 311/312 (40 CFR 370 Subparts B and C)

Acute Health: Yes **Chronic Health:** Yes **Fire:** No **Pressure:** No **Reactivity:** 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
COAL TAR CREOSOTE	8001-58-9	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

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 meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

COAL TAR CREOSOTE	8001-58-9
	0.1 % (related to Pitch, coal tar, high-temperature)
PHENANTHRENE	85-01-8



Safety Data Sheet

Material Name: COAL TAR CREOSOTE (PRESSURE APPLICATIONS)

SDS ID: 00227842

	1 %
ACENAPHTHENE	83-32-9
	1 %
FLUORANTHENE	206-44-0
	1 %
NAPHTHALENE	91-20-3
	1 %
PYRENE	129-00-0
	1 %
ANTHRACENE	120-12-7
	1 %
DIPHENYL	92-52-4
	1 %
QUINOLINE	91-22-5
	1 %
1,2-BENZPHENANTHRENE	218-01-9
	0.1 %
2,3-DIHYDRO-1H-INDENE	496-11-7
	1 %
BENZO(A)ANTHRACENE	56-55-3
	0.1 %
BENZO(A)PYRENE	50-32-8
	0.1 %
INDENO(1,2,3-CD)PYRENE	193-39-5
	0.1 %
7H-DIBENZO(C,G)CARBAZOLE	194-59-2
	0.1 %



Safety Data Sheet

Material Name: COAL TAR CREOSOTE (PRESSURE APPLICATIONS)

SDS ID: 00227842

DIBENZ(A,H)ANTHRACENE	53-70-3
	0.1 %
BENZO(B)FLUORANTHENE	205-99-2
	0.1 %
3-METHYLCHOLANTHRENE	56-49-5
	0.1 %

Component Analysis - Inventory

COAL TAR CREOSOTE (8001-58-9)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	No	Yes

U.S. Inventory (TSCA)

This product is exempt.

Additional information

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. The pesticide label also includes other important information, including directions for use.

Following is the hazard information as required on the pesticide label: CAUTION: Harmful if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin and clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Section 16 - OTHER INFORMATION

Additional information

Creosote (P1/P13) is registered only for pressure treatment of wood. Wood treaters must not knowingly pressure treat wood commodities that are not encompassed by the following use category table, which provides examples from the American Wood Protection Association (AWPA) Use Category System, as set forth in the most current edition of the AWPA Book of Standards.

NFPA Ratings

Health: 2 Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Summary of Changes



Safety Data Sheet

Material Name: COAL TAR CREOSOTE (PRESSURE APPLICATIONS)

SDS ID: 00227842

Review: 07/02/2015; Updated: 12/21/2015; MSDS SUMMARY OF CHANGES. SECTION 14
TRANSPORTATION INFORMATION

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; 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

Disclaimer:

The information set forth in this Safety Data Sheet does not purport to be all-inclusive and should be used only as a guide. While the information and recommendations set forth herein are believed to be accurate, the company makes no warranty regarding such information and recommendations and disclaims all liability from reliance thereon.