

Safety Data Sheet

Creosote Oil

1/24/2019 Version 5

SDS No. 2

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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|-----------------------|-------------------|---|-------------------------|
| Product Name: | Creosote Oil | Emergency Phone Number (24 hr.): | 800-424-9300 (CHEMTREC) |
| CAS Number: | 8001-58-9 | Non-Emergency Phone Number: | 903-656-2536 |
| Chemical Name: | Coal Tar Creosote | Non-Emergency FAX Number: | 903-656-2151 |
| Synonyms: | AWPA P1 | | |
| Product Use: | Wood Preservative | | |

SECTION 2: HAZARDS IDENTIFICATION

Emergency Overview: Coal tar creosote is a brown to black, oily liquid with a strong aromatic, petroleum-like odor. This substance has been associated with acute and chronic health effects, including cancer.

Primary Routes of Exposure: Eyes, dermal, inhalation, ingestion.

Potential Acute Health Effects: This substance causes substantial but temporary eye injury. It is harmful if swallowed or absorbed through skin. Exposure to the chemical causes eye, skin and respiratory tract irritation. Symptoms of systemic poisoning include nausea, salivation, vomiting, respiratory difficulties, dizziness, headache, loss of pupillary reflex, cyanosis, hypothermia, profuse sweating, and mild convulsions. Prolonged or frequent exposure may cause allergic reactions in some individuals.

Potential Chronic Health Effects: Prolonged and repeated skin exposure over the 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. Prolonged or repeated inhalation exposure may lead to respiratory system effects as inflammation and possibly changes in liver, thyroid and blood elements.

Medical Conditions Aggravated by Exposure: Persons with preexisting skin disorders or central nervous functional illnesses may be at increased risk from overexposure. Exposure to vapor may aggravate preexisting lung condition. Persons with glucose-6-phosphate dehydrogenase deficiency of the red blood cells are more susceptible to hemolytic anemia.



SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS

COMPOSITION:

| Name | CAS # | % by Weight | Exposure Limits | |
|-------------------|-----------|-------------|--|---|
| | | | OSHA PEL | ACGIH TLV |
| Creosote coal tar | 8001-58-9 | 97.5 | 0.2 mg/m ³ as 8-hr TWA (coal tar pitch volatiles) TWA – 5 mg/m ³ | 0.2 mg/m ³ as 8-hr TWA (coal tar pitch volatiles) |

SECTION 4: FIRST AID MEASURES

IF IN 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.

IF SWALLOWED: Call 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.

IF ON SKIN OR CLOTHING: 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.

IF INHALED: 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.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Vomiting may cause aspiration pneumonia.

SECTION 5: FIRE FIGHTING MEASURES

Flash Point: >93.3°C (>200°F)

Method: PMCC

Flammable Limits: UFL: Not available

LFL: Not available

Flammability Classification: Not available

Hazardous Products of Combustion: Toxic vapors may be release upon thermal decomposition (nitrogen oxides, carbon monoxide, carbon dioxide, sulfur dioxide, PAH's)

Potential for Dust Explosion: Not applicable

Special Flammability Hazards: Creosote coal tar at elevated temperatures may generate vapors that may ignite in the presence of air and a source of ignition. Closed containers may explode when exposed to extreme heat.

Fire Fighting Media and Instructions: Water fog, carbon dioxide, dry chemical, foam, sand, or steam. Water spray may cause frothing or eruption in closed tanks

Protective Equipment: Wear self-contained breathing apparatus and full protective clothing. Skin and eye contact should be avoided. Normal fire-fighting procedures may be used.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Containment Techniques: Contain the spilled material using inert solids (i.e., sand, earth, etc.) and, if hot, allow the material to cool. Collected material may then be shoveled into disposal containers.

Cleanup Procedures & Equipment: Wear protective equipment during cleanup. Remove all ignition sources. Ventilate area of spill or leak.

Evacuation Procedures: Isolate the release area and deny entry to unnecessary and unprotected personnel.

Special Instructions: Avoid exposure to hot material during cleanup. Ensure thorough decontamination of the release area and cleanup personnel. Contaminated materials must be handled and managed as RCRA hazardous waste.

Special Reporting Requirements: The CERCLA reportable quantity is 0.1 gallon (1 pound). See 40 CFR § 302.4.

SECTION 7: HANDLING AND STORAGE

Storage Precautions: Protect containers from physical damage, sparks and flame.

Storage Recommendations: Outside or detached storage is preferable. Maintain dry, ventilated conditions for storage. Containers should be periodically inspected.

Precautions for Unique Hazards: Not applicable

Practices to Minimize Risk: Wear appropriate protective equipment when performing maintenance on contaminated equipment. Avoid prolonged or repeated contact with skin or breathing of vapors. Do not smoke or eat in areas where the material is handled. Wash hands thoroughly before eating, drinking, smoking or using the toilet. A complete soap and water shower should be taken at the end of each work day. Contaminated clothing should not be re-worn until cleaned. Launder contaminated clothing separately from other laundry before reuse.

Special Handling Equipment: Closed system handling of coal tar creosote may create excessive vapor concentrations in confined spaces, i.e., tanks, rail cars, tank trailers. Follow appropriate confined space entry procedures, including wearing protective equipment, when entering any confined space that has been in creosote coal tar service.

Dangerous Incompatibility Reactions: Keep away from strong oxidizing agents.

Incompatibility with Materials of Construction: None known

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

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| Exposure Limits: | OSHA PEL: 0.2 mg/m ³ as 8-hr TWA (coal tar pitch volatiles) | ACGIH TLV: 0.2 mg/m ³ as 8-hr TWA (coal tar pitch volatiles) |
| Personal Protective Equipment: | Use NIOSH-approved chemical cartridge respirator with organic vapor cartridges, or any supplied-air respirator as necessary for protection from coal tar distillate vapors (which may contain coal tar pitch volatiles). Wear impervious gloves (i.e., latex rubber), boots, work uniform and safety glasses or chemical goggles. Application of certain protective creams for coal tar products and sunscreens (SPF of at least 15) before and during work may be beneficial in reducing the risk of overexposure. | |
| Respirator Caution: | Observe OSHA regulations for respirator use (29 CFR 1910.134). Air-purifying respirators must not be used in oxygen-deficient atmospheres. | |
| Ventilation: | All operations should be conducted in well-ventilated conditions. Local exhaust ventilation should be provided. | |
| Other Engineering Controls: | All appropriate engineering controls should be used to minimize exposure potential. | |
| Thermal Hazards: | When handling hot distillate (i.e., taking samples), wear appropriate thermal protection equipment and use tongs as needed. Use of chemical goggles or face shields is highly recommended when handling heated material. | |
| Additive or Synergistic Effects: | Overexposure to this material causes photosensitization of the skin. See sunscreen recommendations above. | |

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Color: Dark brown to black; 2.5Y2/2 to 2.5Y4/2 on the Munsell color scheme

Physical State: Liquid

Chemical Formula: Complex hydrocarbon mixture which includes polynuclear aromatic hydrocarbons (PAHs)

Molecular Weight: Not applicable

Odor: Sharp, aromatic, wood-like odor

Boiling Point: >180°C (>356°F)

Melting Point: Not applicable

Vapor Pressure: 11.1 mm Hg at 24.4°C

Vapor Density: >1.0 (air = 1)

Specific Gravity: Not available

Bulk Density: 8.7 lbs/gal

Solubility in Water: 313 ug/ml
pH Value: 7 – 8
Stability: Stable at normal temperatures and pressure
VOC Content: Not available
Flash Point: >93.3°C (>200°F)
Viscosity: 14.60 mm/s at 25°C
Partition Coefficient: LogP is 3.247

SECTION 10: STABILITY AND REACTIVITY

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| Chemical Stability: | Stable at a temperature and pressure |
| Conditions to Avoid: | Contact with water can cause frothing or eruption of closed tanks. |
| Incompatibilities: | Strong oxidizers |
| Hazardous Decomposition Products: | Will not occur under normal conditions of use |
| Hazardous Polymerization: | Will not occur |

SECTION 11: TOXICOLOGICAL INFORMATION

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| Acute Oral LD₅₀: | 2451 mg/kg (male) 1893 mg/kg | Species: | rat (estimated) |
| Acute Dermal LD₅₀: | >2000 mg/kg | Species: | rabbit |
| Acute Inhalation LC₅₀: | >5 mg/L | Species: | rat |
| Skin/Eye Irritation: | Moderate skin irritant / Substantial but temporary eye irritant | | |
| Target Organs: | Skin, possibly lungs, nasal passages, bladder, liver, kidney and central nervous system. | | |
| Carcinogenicity: | Creosote has been shown to be positive for carcinogenicity in an initiation/promotion study. Creosote has been classified as a B1 carcinogen in the Integrated Risk Information System (IRIS). | | |
| Teratogenicity: | Available data do not show any effects. | | |
| Reproductive Effects: | Decreased body weights were observed in animal studies. | | |
| Neurotoxicity: | No data available. | | |
| Mutagenicity: | Creosote has been shown to exert positive mutagenic effects in vitro. | | |
| Additional Toxicity Information: | Creosote is a dermal sensitizer. Overexposures may lead to photosensitization of the skin. | | |

SECTION 12: ECOLOGICAL INFORMATION

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| Ecotoxicity: | Freshwater fish weighted LC ₅₀ = 405 ug/L Freshwater invertebrate weighted EC ₅₀ = 267 ug/L Saltwater fish weighted LC ₅₀ = 1150 ug/L Saltwater invertebrate weighted EC ₅₀ or LC ₅₀ = 399 ug/L |
|---------------------|---|

Environmental Fate: PAHs in creosote undergo photo-oxidation from surface water, and photo-oxidation half-lives are short. Photo-oxidized products of PAHs are persistent in air, water and soils and are bio-accumulative. Some PAHs on surface may partition (adsorb) into soils and sediments, and those with 4-5 fused rings may stay longer in sediments. Some of these may partition (desorb) into water again. PAHs which leach out of creosote treated wood did not show a huge degree of migration in soils. PAHs have a tendency to biodegrade in soils under aerobic conditions.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal: Product should be disposed of as a RCRA hazardous. Its Hazardous Waste Number is U051. See 40 CFR Part 261. This waste is toxic. Improper disposal is a violation of Federal law. If this waste cannot be disposed of 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.

SECTION 14: TRANSPORT INFORMATION

U.S. DOT Name: Environmentally Hazardous Substance, Liquid, N.O.S.
ID Identification: UN3082
Hazard Class: 9
Packing Group: III
Emergency Guidebook Number: NAERG 171

SECTION 15 REGULATORY INFORMATION

Federal Regulations:

1. SARA Title III/CERCLA – Reportable Quantity – 1 lb.
2. RCRA – Hazardous Waste – U051
3. TSCA Inventory – Listed
4. Toxic Release Inventory – Listed
5. FIFRA – Restricted Use Pesticide for Pressure Treatment Use

State Regulations: California Proposition 65 – Listed because known to cause cancer

WHMIS Classification (Canada): D2A

Canadian Inventory (DSL/NDSL): Listed

EINECS Inventory: Listed

HMIS (USA):

Health Hazard: 2
Fire Hazard: 1
Reactivity: 0

National Fire Protection Association (USA):

Health: 2
Flammability: 1
Reactivity: 0

SECTION 16: OTHER INFORMATION

References:

1. Reregistration Eligibility Decision for Creosote (Case 0139); U.S. Environmental Protection Agency (EPA 739-R-08-007; September 2008)
2. 40 CFR Part 261
3. 49 CFR Part 172
4. 29 CFR § 1910.1000
5. 40 CFR § 302.4

Other Special Considerations: This product's EPA FIFRA pesticide label should be consulted for applicable precautionary statements, protective equipment requirements and storage and disposal instructions.

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