

Material Safety Data Sheet

CREOSOTE OIL

(AWPA P1/P13)

Version: 2

Date Issued: 03/31/08

MSDS No. 614839

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY: KMG-Bernuth, Inc.
10611 Harwin, Suite 402
Houston, Texas 77036

PHONE NUMBER: 800-322-8177

EMERGENCY PHONE: CHEMTREC: 1-800-424-9300

NAME USED ON LABEL: Creosote Oil

PRODUCT USE: Wood Preservative

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

<u>IDENTITY</u>	<u>CAS NUMBER</u>	<u>TYPICAL %</u>	<u>OTHER INFORMATION</u>
Coal Tar Creosote (AWPA P1/P13)	8001-58-9	98.5 %	Mixture of aromatic and heterocyclic hydrocarbons
Phenanthrene	85-01-8	< 14.15	Max. impurity level
Flouranthene	206-44-0	< 7.45	Max. impurity level
Pyrene	129-00-0	< 5.80	Max. impurity level
Acenaphthene	83-32-9	< 7.80	Max. impurity level
9H-Fluorene	86-73-7	< 6.60	Max. impurity level
Naphthalene	91-20-3	< 16.15	Max. impurity level
Dibenzofuran	132-64-9	< 4.50	Max. impurity level
Anthracene	120-12-7	< 3.80	Max. impurity level
Benzo (a) anthracene	56-55-3	< 1.50	Max. impurity level
Chrysene	218-01-9	< 1.50	Max. impurity level
Biphenyl	95-52-4	< 1.50	Max. impurity level
Indeno (1,2,3-c,d) pyrene	193-39-5	< 0.10	Max. impurity level
Quinoline	91-22-5	< 0.06	Max. impurity level
Benzo (a) pyrene	50-32-8	< 0.40	Max. impurity level
p-Xylene	106-42-3	< 0.02	Max. impurity level
Benzo (b) fluoranthene	205-99-2	< 0.30	Max. impurity level
Benzo (j) fluoranthene	205-82-3	< 0.20	Max. impurity level
Benzo (k) fluoranthene	207-08-9	< 0.20	Max. impurity level

SECTION 3: HAZARDS IDENTIFICATION

PHYSICAL HAZARDS: Do not use or store neat heat or open flame. Close container after each use.

HEALTH HAZARDS: WARNING. May be fatal if swallowed, inhaled or absorbed through skin. Causes skin and eye irritation, which is accentuated by sunlight. May cause severe burns. Do not get in eyes, on skin or on clothing. Do not breath vapors or spray mist. Use with adequate ventilation. Do not take internally. Wash thoroughly after skin contact, before eating, drinking, use of tobacco products, or using restrooms.

SECTION 4: FIRST AID MEASURES

IF SWALLOWED: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

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SECTION 4: FIRST AID MEASURES -- CONTINUED

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

IF IN EYES: Hold eyes 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. Call a poison control center or doctor for treatment advice.

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.

HOTLINE NUMBER: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-322-8177 for emergency medical advice.

NOTE TO PHYSICIAN: Contains petroleum distillate – vomiting may cause aspiration pneumonia.

SECTION 5: FIREFIGHTING MEASURES

FLASH POINT: > 155° C (> 311° F) ASTM D-93 (Pensky Marten Closed Cup)

AUTOIGNITION TEMPERATURE: Product is not self-igniting.

FLAMMABLE LIMITS (STP): Not Determined

EXTINGUISHING MEDIA: For small fire, use dry chemical, carbon dioxide, water spray or foam. For large fire, preferably use water/fog. Alternatively, use foam. Cool containing vessels with water in order to prevent pressure build-up, auto-ignition or explosion. Contain run-off to prevent contamination of surface waters.

PROTECTIVE EQUIPMENT: Self-contained breathing apparatus with full facepiece and full protective clothing should be worn when fumes and/or smoke are present.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Noxious fumes (carbon monoxide, acrid smoke) may be emitted under fire conditions. Water sprays may cause frothing or eruption in closed tanks.

HMIS RATING: Health 2 Fire 1 Reactivity 1

NFPA RATING: Health 2 Fire 1 Reactivity 1

SECTION 6: ACCIDENTAL RELEASE MEASURES

IN CASE OF SPILL OR OTHER RELEASE: Wear long-sleeved shirt and long pants, rubber boots over shoes and socks, chemical resistant waterproof gloves, protective chemical safety goggles and a NIOSH-approved pesticide respirator or air-supplied respirator. Absorb with sand, earth, etc., sweep up and place in an approved chemical container. Use non-sparking tools and remove ignition sources. Do not allow product to contaminate surface waters and don't flush to sewer systems.

Dispose 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

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SECTION 6: ACCIDENTAL RELEASE MEASURES - CONTINUED

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.

SECTION 7: HANDLING AND STORAGE

DO NOT contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Keep closures tight and upright to prevent leakage. Keep container closed when not in use. Do not store above 140° F.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

WARNING: May be fatal if swallowed, inhaled or absorbed through skin. Causes skin and eye irritation, which is accentuated by sunlight. May cause severe burns. Do not get in eyes, on skin or on clothing. Do not breath vapors or spray mist. Use with adequate ventilation. Do not take internally. Wash thoroughly after skin contact, before eating, drinking, use of tobacco products, or using restrooms.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Examples of acceptable materials for protective clothing (e.g., gloves, overalls, jackets, and boots) required during application and handling of creosote are polyvinyl acetate (PVA), polyvinyl chloride (PVC), neoprene, butyl rubber, or nitrile.

Applicators and other handlers must wear:

- Long-sleeved shirt (or jacket) and long pants
- Shoes (or boots) plus socks
- Chemical resistant gloves
- Protective eyewear
- Chemical resistant apron or overalls

Additionally, for applicators who manually open pressure treatment cylinder doors, who enter such cylinders or related equipment or who are exposed to wood treatment vapors (see below for more details):

- Properly fitting, well-maintained, NIOSH-approved respirator with an organic vapor (OV) cartridge or canister with any R, P, or HE prefilter.

Individuals must wear gloves impervious to the wood treatment formulations in all situations where dermal contact with creosote is expected (e.g. handling freshly treated wood and manually opening cylinder doors).

Individuals who manually open cylinder doors must wear gloves and a respirator.

Individuals who enter pressure treatment cylinders and other related equipment that is contaminated with wood treatment formulation (e.g., cylinders that are in operation or are not free of the treatment formulation) must wear protective clothing (including overalls, jacket, gloves, and boots) impervious to the wood treatment formulation and a respirator.

Avoid inhaling vapors. If inhalation of vapors cannot be avoided, applicators must wear a properly fitting, well-maintained half-mask cartridge or canister respirator which is NIOSH-approved.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION - CONTINUED

USER SAFETY REQUIREMENTS: Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS: Applicators must not eat, drink, or use tobacco products during those parts of the application process that may expose them to the wood treatment formulation (manually opening/closing cylinder doors, moving trams out of cylinders, mixing chemicals, and handling freshly treated wood). Wash thoroughly after skin contact and before eating, drinking, use of tobacco products, or using restrooms.

Protective clothing must be changed when it shows signs of contamination. Applicators must leave protective clothing and work shoes or boots at the plant. Worn-out protective clothing and equipment must be disposed of in any general landfill, in the trash or in any other manner approved for pesticides.

OCCUPATIONAL EXPOSURE LIMITS:

OSHA TWA (benzene-soluble fraction)	0.2 mg/m ³
ACGIH TWA (benzene-soluble fraction)	0.2 mg/m ³
NIOSH recommended TWA 10 hours (cyclohexane-extractable fraction)	0.1 mg/m ³

OCCUPATIONAL EXPOSURE STANDARDS: Not established

VENTILATION: Use in areas of adequate natural ventilation or provide exhaust ventilation or other engineering controls to keep the airborne concentration of vapors below their respective threshold limit value.

EYE PROTECTION: See **PERSONAL PROTECTIVE EQUIPMENT (PPE)** above.

BODY PROTECTION: See **PERSONAL PROTECTIVE EQUIPMENT (PPE)** above.

RESPIRATORY PROTECTION: See **PERSONAL PROTECTIVE EQUIPMENT (PPE)** above.

OTHER PROTECTIVE EQUIPMENT: Eyewash station and safety shower in work area.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

FORMULATION:	Concentrate
PHYSICAL STATE:	Oily, viscous liquid
COLOR:	Dark Brown
ODOR:	Strong aromatic, tar-like
BOILING POINT:	>194° C (>381° F)
MELTING POINT:	Not applicable
FREEZING POINT:	Not available
VAPOR PRESSURE:	~13 mm Hg @ 25° C
VAPOR DENSITY:	>1.0 (air = 1.0)
EVAPORATION RATE:	<1.0 (Butyl acetate = 1.0)
SPECIFIC GRAVITY:	1.03 – 1.18 (Avg. = 1.09)
BULK DENSITY:	8.60 – 9.85 lbs/gal (Avg. = 9.1 lbs/gal)
SOLUBILITY IN WATER:	Insoluble (~322 ug/mL)
pH VALUE:	7-8
% VOLATILES:	475 g/l (3.96 lbs/gal)

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SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY:	Stable
CONDITIONS TO AVOID:	Excessive heat and open flame
MATERIALS TO AVOID:	Strong acids, especially chlorosulfonic acid
HAZARDOUS DECOMPOSITION PRODUCTS:	Oxides of carbon. Incomplete combustion may lead to formation of carbon monoxides and/or other asphyxiates.
HAZARDOUS POLYMERIZATION:	Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE ORAL LD₅₀:	725 mg/kg (rat) 433 mg/kg (mouse)
ACUTE DERMAL LD₅₀:	7950 mg/kg (species not identified)

EFFECTS OF OVEREXPOSURE:

Acute overexposure may be fatal if swallowed, inhaled or absorbed through skin. Causes skin and eye irritation, which is accentuated by sunlight. May cause severe burns. Do not get in eyes, on skin or on clothing. Do not breathe vapors or spray mist. Use with adequate ventilation.

Ingestion: Irritation of the gastrointestinal tract followed by nausea and vomiting, abdominal discomfort, rapid pulse, etc. May be fatal.

Inhalation: May cause irritation to the respiratory tract, dizziness, respiratory difficulty, convulsions. May be fatal.

Eyes: May cause irritation, which is accentuated by sunlight and may cause severe corneal injury, including keratitis, conjunctivitis and corneal abrasion.

Skin: May cause irritation, which is accentuated by sunlight and may cause severe burns.

Cancer Hazard: Prolonged and repeated skin exposure over many years in the absence of recommended hygienic practices may lead to changes in skin pigmentation, benign skin growth and in some cases, result in skin cancer. In addition, prolonged and repeated breathing of product vapor at levels above the recommended exposure level may present a lung cancer risk.

Creosote is listed as and NTB carcinogen, an IRC probable carcinogen.

SECTION 12: ECOLOGICAL INFORMATION

MARINE POLLUTANT: This product is toxic to fish and wildlife. Do not apply directly to any body of water or wetlands. Do not contaminate water by cleaning equipment or disposal of wastes. 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 Pollutant 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.

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SECTION 13: DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture 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 Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Dispose in accordance with applicable Federal, State and local regulations. Product wastes must be handled and managed as a 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.

CONTAINER DISPOSAL: Bulk Tanks: Triple rinse (or equivalent) and wash with appropriate cleaners before reusing.

TREATED WOOD DISPOSAL: Wood which has been treated with this product should be discarded by burial or ordinary trash collection. Do not burn treated wood in an outdoor fire or in stoves or fireplaces because toxic chemicals may be produced as part of the smoke and ashes.

SECTION 14: TRANSPORT INFORMATION

DOT PROPER SHIPPING NAME: UN 3082, Environmentally Hazardous Substance, Liquid, N.O.S. (Creosote), 9, III, Marine Pollutant (Creosote), RQ (Creosote)

SECTION 15: REGULATORY INFORMATION

UNITED STATES EPA: EPA Reg. No. 61483-9
EPA Signal Word – WARNING

OTHER:

SARA 311 Hazards Classification: Immediate, Delayed, Fire

SARA 313 Toxic Chemicals: See Section 2 for list of chemicals, CAS numbers and maximum concentration by % weight.

REPORTABLE QUANTITIES: Creosote – 8001-58-9: 1 pound

CALIFORNIA PROPOSITION 65 – Contains chemicals known to the state to cause cancer or reproductive toxicity.

WHMIS CLASSIFICATION (CANADA): Class D, Division 2, Subdivision A, very toxic material.

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SECTION 16: OTHER INFORMATION

Reason for MSDS Revision: General periodic review and update.

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof KMG-Bernuth, Inc. (Company). makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Company be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.

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Approved by Scott Hathorn III