

2/15/06
AK

Material Safety Data Sheet

KMG-B Penta OL Technical Pentachlorophenol

Version: Original

Date Issued: 01/17/2005

MSDS No. 6148303

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY: KMG- Bernuth, Inc.
10611 Harwin, Suite 402
Houston, Texas 77036
PHONE NUMBER: 713-988-9252
EMERGENCY PHONE: CHEMTREC: 1-800-424-9300
NAME USED ON LABEL: KMG-B Penta OL Technical Pentachlorophenol

PRODUCT USE: Wood Preservative

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

<u>IDENTITY</u>	<u>CAS NUMBER</u>	<u>TYPICAL %</u>	<u>OTHER INFORMATION</u>
Pentachlorophenol	87-86-5	86.0 %	
Other Chlorophenols	Mixture	10.0 %	

Ingredients not precisely identified are proprietary or non-hazardous.
Values are not product specifications.

SECTION 3: HAZARDS IDENTIFICATION

HEALTH HAZARDS: Primary Exposure Routes via inhalation and skin absorption.

Inhalation: Pentachlorophenol dust may be fatal if inhaled. Symptoms of over-exposure include sneezing, weakness, excessive sweating, headache, nausea, vomiting and difficult breathing. High concentrations can cause unconsciousness, convulsions and death. Concentrations greater than 1 mg/m³ can cause nasal irritation.

Skin: Pentachlorophenol can be harmful or fatal if absorbed through the skin. It causes skin burns on prolonged or repeated contact. An allergic reaction may develop in a limited number of persons.

Eyes: Pentachlorophenol causes irritation to the eye at 1 mg/m³. If exposure is prolonged, slight transient corneal damage may occur.

Ingestion: Pentachlorophenol may be fatal if ingested. Symptoms of overexposure include sneezing, weakness, excess sweating, headache, nausea, vomiting and difficult breathing. High concentrations can cause unconsciousness, convulsions and death.

Chloracne: Human exposure to pentachlorophenol may result in the development of chloracne. The usual symptoms of chloracne are the formation of blackheads, whiteheads and yellow cysts over the temples and around the ears. Mild cases resemble other forms of acne or skin changes observed with aging. Symptoms reverse upon removal of exposure source.

MATERIAL SAFETY DATA SHEET

KMG-B Penta OL Technical Pentachlorophenol

Version: Original

Date Issued: 01/17/2005

MSDS No. 6148303

SECTION 3: HAZARDS IDENTIFICATION (Continued)

Chronic Toxicity: Chronic overexposure of lab animals to pentachlorophenol has caused toxic effects of liver and kidneys.

Reproductive Toxicity: Pentachlorophenol has been determined to be embryo and fetotoxic to rats but not to hamsters. Pentachlorophenol has not been found to cause teratogenic effects (birth defects) in lab animals, but can cause delays in normal fetal development. EPA has expressed an opinion that pentachlorophenol may produce defects in the offspring of lab animals. **Exposure to pentachlorophenol during pregnancy should be avoided.**

Carcinogenicity: The National Toxicology Program (NTP) has evaluated pentachlorophenol for possible cancer-causing effects in lab animals and has indicated a statistically significant increase in benign liver tumors. Vascular tumors were seen in female mice but not males. Increased medulla tumors were observed in both sexes of mice. In other carcinogenicity studies, one in mice and one in rats, failed to show increased incidence of tumors. The International Agency for Research on Cancer (IARC) has concluded there is sufficient evidence of carcinogenicity to lab animals and inadequate evidence of carcinogenicity to humans, resulting in a classification as a 2B animal carcinogen.

SECTION 4: FIRST AID MEASURES

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not give anything by mouth to an unconscious person. Do not induce vomiting unless told to by a poison control center or doctor.

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. 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.

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.

NOTE TO PHYSICIAN: This product is a metabolic stimulant. Treatment is supportive. Forced Diuresis may be effective to reduce total body-burden. Treat hyperthermia with physical measures. Do not administer aspirin, phenothiazines or atropine since they may enhance toxicity.

SECTION 5: FIREFIGHTING MEASURES

FLASH POINT: Nonflammable

AUTOIGNITION TEMPERATURE: Not applicable

FLAMMABLE LIMITS (STP): Noncombustible

EXTINGUISHING MEDIA: Use dry chemical, carbon dioxide or water spray. Use water spray to cool fire exposed containers.

MATERIAL SAFETY DATA SHEET

KMG-B Penta OL Technical Pentachlorophenol

Version: Original

Date Issued: 01/17/2005

MSDS No. 6148303

SECTION 5: FIREFIGHTING MEASURES (Continued)

PROTECTIVE EQUIPMENT: Fire fighters should wear MSHA/NIOSH approved self-contained positive-pressure breathing apparatus and full protective clothing. Avoid exposing the skin to the product.

NFPA RATING: Health 3 Fire 0 Reactivity 0

SPECIAL HAZARDS: Unusual Fire and Explosion Hazards – Fumes and vapors from the hot or burning product may contain hydrogen chloride (HCl), carbon monoxide (CO) and carbon dioxide (CO₂).

SECTION 6: ACCIDENTAL RELEASE MEASURES

METHODS FOR CLEANING UP: Do not dispose of spilled material in streams or waterways. Improper disposal of excess pesticide, spray mixture, spills or rinsate is a violation of Federal law

Spills: Restrict access to the spill area. Ventilate the spill area. Wear suitable protective clothing. Sweep spilled material and place in original container or in another approved container for disposal according to the applicable State and Federal laws.

Reportable Quantity: Reportable quantity (RQ) is 10 lbs. Spills in excess of the reportable quantity must be reported to the United States Environmental Protection Agency's National Response Center at 800-424-8802.

Waste Disposal: Pesticide wastes are toxic. Dispose of wastes and residues of this product in accordance with state and federal regulation. If these wastes or residues cannot be disposed of in accordance with label directions, contact your state Pesticide or Environmental Control Agency, or the Hazardous Waste Representative of the United States Environmental Protection Agency for guidance. It is the responsibility of the user to determine which state and federal regulations apply to the user's facility.

SECTION 7: HANDLING AND STORAGE SECTION

REQUIREMENTS FOR STORAGE ROOMS: Store away from food or feed in a secure, well-ventilated area protected from extremes of temperature. Avoid bringing this product into contact with open flames, electric arcs or hot surfaces which can cause thermal decomposition.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS:

ACGIH TLV TWA (8 hour) 0.5 mg/m³ OSHA PEL TWA (8 hour) 0.5 mg/m³

VENTILATION: Do not use in closed or confined space. Open door and/or windows. Provide exhaust ventilation or other engineering controls to keep the airborne concentration below 0.5 mg/m³.

BODY PROTECTION: Wear PVC, neoprene, nitrile latex or equivalent gloves and tightly woven clothing including long sleeve shirt when handling pentachlorophenol. When mixing penta solutions, wear protective clothing, gloves, boots or shoes, which are suitable for the solvent used.

MATERIAL SAFETY DATA SHEET

KMG-B Penta OL Technical Pentachlorophenol

Version: Original

Date Issued: 01/17/2005

MSDS No. 6148303

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (Continued)

HYGIENE: Avoid contact with skin and breathing dust. Do not eat, drink or smoke in work area. Wash hands prior to eating, drinking or using restroom. Shower and change into uncontaminated clothing before leaving work premises.

EYE PROTECTION: Use protective eyewear. Do not wear contact lenses. When mixing penta solutions, wear chemical goggles and/or face shield.

RESPIRATORY PROTECTION: Where concentrations of pentachlorophenol exceed or are likely to exceed 0.5 mg/m^3 , a NIOSH/MSHA approved organic vapor-dust filter type respirator is acceptable. A NIOSH/MSHA approved self-contained breathing apparatus or air line respirator with full face piece, is required for concentrations above 150.0 mg/m^3 , or during emergency and spills. Follow applicable respirator use standards and regulations.

OTHER PROTECTIVE EQUIPMENT: Safety shower and eye wash stations should be available. Monitoring should be performed regularly to determine exposure levels.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

CHEMICAL FORMULA	$\text{C}_6\text{Cl}_5\text{OH}$
MOLECULAR WEIGHT	266.32
FORMULATION:	Technical concentrate
PHYSICAL STATE:	Solid
COLOR:	Brownish- grey
ODOR:	Phenolic
BOILING POINT:	310°C @ 760 mm Hg
MELTING POINT:	190°C
FREEZING TEMPERATURE:	Not applicable
VAPOR PRESSURE:	40 mm Hg @ 211.2°C
VAPOR DENSITY:	9.2
EVAPORATION RATE:	Not applicable
SPECIFIC GRAVITY:	1.98 (Water = 1.0)
BULK DENSITY:	123.6 lb/ft^3 @ 20°C
SOLUBILITY IN WATER:	14 ppm @ 20°C

SECTION 10: STABILITY AND REACTIVITY

HAZARDOUS REACTIONS (CONDITIONS TO AVOID):

Stability: Stable under normal conditions.

Incompatibility: Avoid contact with strong oxidizers and alkalis.

Hazardous polymerization: Material is not known to polymerize.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride, chlorine, chlorinated hydrocarbons. Avoid contact with open flames, electrical arcs or hot surfaces which may cause decomposition..

MATERIAL SAFETY DATA SHEET

KMG-B Penta OL Technical Pentachlorophenol

Version: Original

Date Issued: 01/17/2005

MSDS No. 6148303

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (rat):	27 mg/kg
Acute Dermal LD₅₀ (rat):	96 mg/kg
Acute Inhalation (rat – 4 hr):	200 mg/kg
Primary Eye Irritation (rabbit):	Not a primary irritant
Primary Dermal Irritation (rabbit):	Slight irritant
Dermal Sensitization :	Not expected to cause sensitization

EFFECTS OF OVEREXPOSURE: Acute overexposure symptoms include sneezing, weakness, excessive sweating, headache, nausea, vomiting, difficulty in breathing, unconsciousness, convulsions and death. Chronic exposure has caused toxic liver and kidney effects in lab animals. Exposure to pentachlorophenol during pregnancy should be avoided.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY ASSESSMENT: Maybe toxic to aquatic wildlife.

OTHER ECOLOGY INFORMATION: Toxic to wildlife.

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Wastes resulting from the use of this product may be disposed of on site or at an Approved waste disposal facility. Do not contaminate waterways by cleaning of equipment or by disposal of wastes.

CONTAINER DISPOSAL: Empty containers retain product residue. Triple rinse, or equivalent, empty container, return rinse water to dilution mixture, and dispose of dilution mixture as hazardous waste if it cannot be disposed of by use according to label instructions. Do not reuse container. Offer it for recycling or reconditioning, or puncture and dispose of in properly permitted landfill.

SECTION 14: TRANSPORT INFORMATION

DOT DESCRIPTION: RQ, Pentachlorophenol, 6.1, UN 3155, PG II, Marine Pollutant

FREIGHT DESCRIPTION: Toxic, 3155, Class 6 (PLACARD REQUIRED)

EMERGENCY RESPONSE GUIDE (ERG): Page 256 Guide 154

SECTION 15: REGULATORY INFORMATION

UNITED STATES EPA: EPA Reg. No. 61483-3

EPA Signal Word: DANGER - POISON

OTHER: SARA 313 Inventory Ingredients – Subject to reporting requirements

CERCLA REPORTABLE QUANTITY – 10 Lbs/4.54 KG

CALIFORNIA PROPOSITION 65 – Listed as known carcinogen

OTHER RIGHT TO KNOW STATES - New Jersey, Pennsylvania, Minnesota, Massachusetts

MATERIAL SAFETY DATA SHEET
KMG-B Penta OL Technical Pentachlorophenol

Version: Original

Date Issued: 01/17/2005

MSDS No. 6148303

SECTION 16: OTHER INFORMATION

This Material Safety Data Sheet may be used to comply with OSHA's Hazardous Communication Standard, 29 CFR 1910.1200, and the Standard must be consulted to ensure full compliance.

KMG-Bernuth, Inc. believes that the information and recommendations contained herein (including data and statements) are accurate as of the date thereon. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OR MERCHANTABILITY, OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates to the specific product designated and may not be valid where such product is used in combination with any other materials or in any process. Further, since the conditions and methods of use of the product and of the information referred to herein are beyond the control of KMG-Bernuth, Inc, KMG-Bernuth, Inc. expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information..

MSDS No.: 6148303

Revision No.: Original

Supersedes: None

Date: January 17, 2005

Approved by: _____