

MATERIAL SAFETY DATA SHEET

SECTION 1 - MANUFACTURER INFORMATION

MANUFACTURER/DISTRIBUTOR:

Pierce Chemicals/Royal Bond, Inc.
4722 Bronze Way
Dallas, Texas 75236-1997

EMERGENCY TELEPHONE: 1-800-424-9300
Telephone Number: (214) 333-4230
DATE PREPARED/REVISED: February 12, 1999 / May 8, 2006
Prepared by: Pierce Royal Bond Research Department

TRADE NAME/SYNONYMS: Dry Hair Cleaner
CHEMICAL FAMILY: Accessory Embalming Aid
CHEMICAL NAME/SYNONYMS: Not applicable

Product Code: **04105**
FORMULA: Not applicable

DOT/UN HAZARD CLASSIFICATION:
Flammable Liquids, N.O.S.(Methanol), 3, UN1993,
PG II, LTD QTY

SECTION 2 - HAZARDOUS INGREDIENTS

PRODUCT CONTAINS HAZARDOUS INGREDIENTS: YES

| CHEMICAL NAME | SUBJECT TO SARA 313 | CAS NUMBER | % | PEL OSHA | TLV-ACGIH |
|-------------------|---------------------|------------|----|--|--|
| Perchloroethylene | Yes | 127-18-4 | 83 | 25 ppm A3; 170 mg/m ³ TWA 100 ppm A3; 685 mg/m ³ STEL | 25 ppm A3; 170 mg/m ³ TWA 100 ppm A3; 685 mg/m ³ STEL |
| Methanol ** | Yes | 67-56-10 | 17 | 200 ppm - 260 mg/m ³ | 200 ppm - 260 mg/m ³ |
| | | | | | |

** Potential contribution to overall exposure possible via skin absorption.

PRODUCT CONTAINS CARCINOGENS (NTP, IARC, OSHA) NTP:Yes IARC: Yes OSHA: Yes
CHEMICAL/Common Name: Perchloroethylene
All components listed as required by Federal, California, New Jersey, and Pennsylvania regulations.

SECTION 3 - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: 151° F
EVAPORATION RATE (ETHYL ACETATE=1): <1
MELTING POINT: No information
pH: 4
SOLUBILITY IN WATER: Poor Solubility in Water
APPEARANCE AND ODOR INFORMATION: Clear colorless liquid with ether-like odor

SPECIFIC GRAVITY (WATER=1): 1.441 g/ml
VAPOR DENSITY (AIR=1): 1.1
VAPOR PRESSURE (mm Hg): 155 mm Hg @ 68°F
% VOLATILE BY WEIGHT: 99.9%

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED): 46° F (ASTM D93) **FLAMMABLE LIMITS:** LEL: 6 UEL: 36

EXTINGUISHING MEDIA: Use dry chemical, alcohol foam or CO₂. Water may be ineffective, but should be used to keep fire exposed containers cool.

SPECIAL FIRE FIGHTING PROCEDURES: Fire fighters should wear a NIOSH/MSHA-approved pressure-demand, self-contained breathing apparatus (SCBA) for possible exposure to hydrogen chloride and possibly traces of phosgene and complete personal protective equipment. Use water spray to cool fire exposed structures and to disperse vapor cloud if fire is not present. Dilution of burning liquid with water spray will reduce intensity of flames.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Keep away from heat, sparks and flames. Under certain atmospheric conditions a static electrical charge can ignite flammable vapors from contents of plastic bottles.

SECTION 5 - REACTIVITY DATA

UNSTABLE: NO CONDITIONS TO AVOID: Avoid sparks, glowing surfaces/heat, electric arcs and open flames.
STABLE: YES

INCOMPATIBILITY (MATERIALS TO AVOID): Avoid contamination with caustic soda, caustic potash or oxidizing materials. Shock sensitive explosives may be formed.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Thermal decomposition may produce carbon dioxide and/or carbon monoxide, hydrogen chloride and possibly traces of phosgene.

HAZARDOUS POLYMERIZATION: Will not occur
CONDITIONS TO AVOID FOR POLYMERIZATION: Not applicable

SECTION 6 - HEALTH HAZARD DATA

INGESTION (SWALLOWING): Poisonous if swallowed. Causes severe irritation and inflammation of mouth, throat and stomach. Severe stomach pains follow with possible loss of consciousness. Blindness or death may occur.

INHALATION (BREATHING): Can cause irritation of the respiratory system, dizziness, nausea, light-headedness, headache, loss of coordination and equilibrium, unconsciousness and even death in confined or poorly ventilated areas.

SKIN (DERMAL): Prolonged or repeated contact with liquid on the skin can cause irritation and dermatitis. The problem may be accentuated by liquid becoming trapped against the skin by contaminated clothing and shoes. Skin absorption can occur.

EYE CONTACT: High vapor concentrations or liquid contact causes irritation, tearing and burning sensation.

PRIMARY ROUTES OF ENTRY: Eyes, Nose, Mouth, Skin contact

NOTES TO PHYSICIAN

ORAL: Signs of methanol poisoning are not evident immediately after ingestion. Danger of chemical pneumonia must be weighed against toxicity when considering emptying the stomach. If lavage is performed, suggest endotracheal and/or esophagoscopy control.

RESPIRATORY: Anesthetic or narcotic effect may occur. Administer oxygen if available. Bronchodilators, expectorants and antitussives may be of help.

SKIN: Chronic exposure may cause defatting type of dermatitis. The skin is considered to be a significant route of exposure for methanol.

EYES: May cause conjunctivitis. Stain for evidence of corneal injury.

SYSTEMIC: May increase myocardial irritability. Avoid epinephrine or similar acting drugs if at all possible. Consult standard literature. No specific antidote. Treated based on the sound judgement of the physician and reaction of patient.

EMERGENCY FIRST AID PROCEDURES:

INGESTION: If conscious, drink large quantities of water. **DO NOT INDUCE VOMITING.** Take immediately to a hospital or physician. If unconscious or in convulsions, take immediately to a hospital. **DO NOT** give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call physician and/or transport to medical facility.

SKIN CONTACT: Wash the skin with plenty of soap and water for at least 15 minutes, while removing contaminated clothing and shoes. If irritation persists, contact a physician. Clean clothing and shoes before reuse.

EYE CONTACT: Flush eyes with water for at least 15 minutes. **CONTACT A PHYSICIAN IMMEDIATELY.**

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Immediately evacuate the area and provide maximum ventilation. Only personnel equipped with proper respiratory and skin/eye protection should be permitted in area. Eliminate ignition sources. Dike spill to minimize contamination. Use foam to control vapors. Place leaking containers in well ventilated area. Prevent contamination of ground and surface waters. Recover or absorb spilled material with an absorbent and place into closed containers for disposal. **DO NOT FLUSH INTO SEWER.**

WASTE DISPOSAL METHODS: Dispose of spill residue in accordance with all local, state and federal regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Do not use in poorly ventilated or confined area. Keep container closed when not in use. Vapors are heavier than air and will collect in low areas. Do not store in open, unlabeled or mislabeled container.

OTHER PRECAUTIONS: Keep away from heat, sparks, electric arcs and flames. Avoid breathing vapors. Avoid contact with eyes, prolonged or repeated contact with skin. Do not take internally. Do not drink, eat or smoke in work area. Wash thoroughly with soap and water after handling. **AVOID CONTAMINATION OF WATER SUPPLIES.**

SECTION 8 - CONTROL MEASURES

RESPIRATORY PROTECTION: Use full face NIOSH/MSHA approved organic vapor respirator within limitations of these devices. For emergencies or working in confined areas wear full-faced NIOSH/MSHA approved self contained breathing apparatus or air-supplying respirator.

VENTILATION: **LOCAL EXHAUST: RECOMMENDED** **SPECIAL:** No information
MECHANICAL: Not recommended **OTHER:** No information

EYE PROTECTION: Use chemical safety goggles

GLOVES: Heavy duty neoprene or equal. Permeation/degradation values of chemical mixtures cannot be predicted from pure components or chemical classes. Thus, these materials are normally best estimates based on available pure component data. A significant difference in breakthrough time has been reported for generically similar gloves from different manufacturers.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: For operations where spills or splashing may occur, use an impervious body covering and shoe coverings. A safety shower and eye bath should be available.

WORK PRACTICES: Never use without proper ventilation. Always use proper protective clothing.

HYGIENIC PRACTICES: Observe good personal hygiene practices and recommended procedures. Wash exposed areas promptly and thoroughly after skin contact from working with this product and before eating, drinking, using tobacco products or restrooms.

OTHER ENGINEERING CONTROLS: None

ADDITIONAL COMMENTS: The data in the Material Safety Data Sheet relates only to specific material designated herein and does not relate to use in combination with any other material or in any process. The information set forth herein is furnished free of charge and is based on technical data that Pierce Chemicals/Royal Bond believes to be reliable. It is intended for use by persons having technical skill and at their own discretion and risk. Since conditions and use are outside of our control, we make no warranties, express or implied and assume no liability in connection with any use of the information.