

**COMMENTS:** This product is distributed by BOWERS INK COMPANY • 611 EWING AVE. Nashville, TN 37203 • 615-254-6730

To the best of our knowledge, this Material Safety Data Sheet conforms to the requirements of **US OSHA 29 CFR 1910.1200, 91/155/EEC** and the **Canadian Hazardous Products Act**.

## LASER PMS INKS

### 1. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENT

CHEMICAL NAME	REGULATED AS	WT. %	EXPOSURE LIMITS	
			OSHA PEL	ACGIH TLV
Petroleum Distillates, Technical White Oils CAS #8042-47-5	Oil mist, mineral	30-38%	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>
Linseed Oil CAS #8001-26-1	Vegetable oil mist	11-18%	5 mg/m <sup>3</sup> respirable 15 mg/m <sup>3</sup> total	10 mg/m <sup>3</sup>

Mineral and vegetable oils are listed in 29 CFR 1910.1200, Table Z-1-A, for oil mists. While it is not expected that this product would be subject to misting under normal use situations, misting may occur under upset or unpredictable conditions. The primary route of entry is through inhalation and the target organ is the lungs.

### 2. HAZARDS IDENTIFICATION

#### POTENTIAL HEALTH EFFECTS

- EYES:** May cause mild eye irritation, tearing and redness.
- SKIN:** May cause irritation in the form of redness, burning or dermatitis.
- INGESTION:** May be irritating to the mouth, throat and stomach. May cause abdominal discomfort, nausea, vomiting and diarrhea if swallowed.
- INHALATION:** Not considered a respiratory hazard under normal use conditions, however may cause minor respiratory irritation in some individuals. Avoid breathing vapors or mists whenever possible.
- CHRONIC:** Chronic exposure can cause dizziness, weakness, fatigue, and headache.
- CARCINOGENICITY:** See Sections 10 and 14.

①

### 3. FIRST AID MEASURES

**EYES:** Immediately flush eyes with plenty of water for two to three minutes, remove any contact lenses and continue flushing for up to 15 minutes. Seek medical attention if symptoms persist.

**SKIN:** Wash thoroughly with soap and water. Seek medical attention if irritation develops.

**INGESTION:** Give water to conscious victims. Do not induce vomiting if swallowed except as a last measure. If vomiting occurs lean victim forward to reduce the risk of aspiration into the lungs. Seek medical attention if adverse symptoms develop.

**INHALATION:** Remove to fresh air and supply oxygen if breathing is difficult. Seek medical attention immediately.

### 4. FIRE FIGHTING MEASURES

**FLASHPOINT AND METHOD:** >215°F (102°C)

**FLAMMABLE LIMITS:** not determined

**AUTOIGNITION TEMPERATURE:** >400°F (204°C)

**FLAMMABLE CLASS:** OSHA/NFPA Class III B Liquid

**EXTINGUISHING MEDIA:** Carbon Dioxide, Dry Chemical, Foam and Water Spray

**HAZARDOUS COMBUSTION PRODUCTS:** Oxides of carbon and noxious fumes.

**FIRE FIGHTING EQUIPMENT:** Wear full protective equipment and a NIOSH-approved Self-Contained Breathing Apparatus with full facepiece operated in the pressure demand mode. Water spray may be used to keep fire-exposed containers cool until they can be evacuated.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Hazardous polymerization will not occur.

### 5. ACCIDENTAL RELEASE MEASURES

Prevent the spread of liquid by diking with earth, clay or commercially available materials. Use a liquid vacuum of absorbent material and store in a sealed container for disposal. Material should not be permitted to leak into public drainage systems or waterways. Do not flush spilled liquid down sanitary sewer drains.

### 6. HANDLING AND STORAGE

**HANDLING:** Use appropriate personal protective equipment as specified in Section 7

**STORAGE:** Store in unopened containers under cool and dry conditions. Keep away from heat, sparks and open flames.

②

## 7. EXPOSURE CONTROLS / PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Use in areas with good general ventilation.

### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Wear safety glasses with side shields or goggles when handling this material.

**SKIN:** Wear impervious gloves and appropriate protective clothing as required to minimize contact with skin.

**RESPIRATORY:** Respiratory protection is not normally required under normal product use. However, a respiratory protection program that meets OSHA 29 CFR 1910.134 requirements must be followed whenever workplace conditions warrant respirator use.

**WORK HYGIENIC PRACTICES:** Good personal hygiene practices should always be followed.

## 8. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Paste

**ODOR:** Mild

**COLOR:** Yellow

**VAPOR PRESSURE:** Not Determined

**VAPOR DENSITY:** Heavier than air.

**BOILING POINT:** 440-590°F

**SOLUBILITY IN WATER:** Insoluble

**EVAPORATION RATE:** Less than ethyl ether

**SPECIFIC GRAVITY:** 0.94 (water=1)

**DENSITY:** 7.82 lbs/gal.

**VOC:** 15.2 percent by weight. (EPA Method 24)

**COMMENTS:** Actual values may vary by +/- 5%

## 9. STABILITY AND REACTIVITY

**STABLE:** YES

**HAZARDOUS POLYMERIZATION:** NO

**CONDITION TO AVOID:** Heat, open flame or other sources of ignition.

**STABILITY:** Stable but may react with strong oxidizing agents.

## 10. TOXICOLOGICAL INFORMATION

**When used according to manufacturer's intent and specifications, this product will not cause any adverse toxicological effects.**

### CARCINOGENICITY:

**IARC:** Not Listed

**NTP:** Not Listed

**OSHA:** Not Listed

## 11. ECOLOGICAL INFORMATION

May cause adverse environmental impact if material reaches ground water systems, surface waterways or public sewage systems.

## 12. DISPOSAL CONSIDERATIONS

Dispose of waste at an appropriate waste disposal facility according to current applicable laws and regulations. In most municipalities, this product may be landfilled depending on product characteristics at time of disposal. Check with local solid waste disposal authorities for further information and instructions.

## 13. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PRIMARY HAZARD CLASS/DIVISION: Not Regulated

## 14. (A) REGULATORY INFORMATION – UNITED STATES

### SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

**311/312 HAZARD CATEGORIES:** This product is not considered to be a hazardous substance under the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**313 REPORTABLE INGREDIENTS:** Manganese Compounds (0.01% - 0.02% by weight)  
Cobalt Compounds (0.03% - 0.04% by weight)

**302 EHS / 304 EMERGENCY PLANNING:** Not Listed

### CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

**CERCLA REGULATORY:** Not Listed

### TSCA (TOXIC SUBSTANCE CONTROL ACT)

**TSCA REGULATORY:** All components of this product are listed or excluded from listing on the TSCA Chemical Substance Inventory.

**RCRA STATUS:** Not Regulated

### CLEAN AIR ACT

**40 CFR Part 61-CAA HAZARDOUS AIR POLLUTANTS:** Manganese and Cobalt Compounds are listed as Hazardous Air Pollutants.

**40 CFR Part 68-RMP FOR CHEMICAL ACCIDENT RELEASE PREVENTION:** Not Listed

**40 CFR Part 82-PROTECTION OF STRATOSPHERIC OZONE:** This product neither contains nor is manufactured with an ozone-depleting substance subject to the labeling requirements of the Clean Air Act Amendment.

## OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

*29 CFR 1910-PROCESS SAFETY MANAGEMENT*

*OF HIGHLY HAZARDOUS CHEMICALS:* Not Regulated

*PROPOSITION 65 STATEMENT:* No ingredients listed.

### 14. (B) REGULATORY INFORMATION – CANADA

**WHMIS (WORKER HAZARDOUS MATERIALS INFORMATION SYSTEM):** This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and it is believed the MSDS contains all of the information required by the CPR.

**DOMESTIC SUBSTANCES LIST (INVENTORY):** All components of this product are listed on the DSL

### 15. OTHER INFORMATION

APPROVED BY: BOWERS INK COMPANY

*NFPA CODES:* HEALTH: 1 FIRE: 1 REACTIVITY: 0

*HMS CODES:* HEALTH: 1 FIRE: 1 REACTIVITY: 0 PROTECTION: X

**ADDITIONAL MSDS INFORMATION:** The OSHA Hazard Communication Standard, 29 CFR 1910.1200, paragraph (g)(4), specifically permits chemical manufacturers to produce a single MSDS for a category of complex mixtures where those mixtures “have similar hazards and contents.” Therefore, this MSDS applies to the range of products described in Section 1, or all products with the same Product Name listed in Section 1. Where specific data is required for the purposes of regulatory reporting, a Technical Data Sheet will be provided for the specific product upon request to the Bowers Ink Company Technical Department at 615-244-2342.

**MANUFACTURER DISCLAIMER:** Information given herein is offered in good faith as accurate, but without guarantee. Conditions of use and suitability of the product for particular uses are beyond our control. All risks of use of the product are therefore assumed by the user. Nothing is intended as a recommendation for uses which infringe on valid patents or as extending license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users.

**BOWERS**  
INK COMPANY

⑤