**MATERIAL SAFETY DATA SHEET**

**#IUD-14 BLACK INK**

**PANNIER CORPORATION**

207 SANDUSKY STREET, PITTSBURGH, PA 15212-5823 U.S.A.

**IMPORTANT:** Read this MSDS before handling and disposing of this product and pass this information on to employees, customers and users of this product.

**PRODUCT DESCRIPTION:** #IUD-14 BLACK INK

**PREPARATION DATE:** 07/01/03

**SECTION I - GENERAL INFORMATION**

**TRADE NAME:** PANNIER "MASTER MARKER"

**GENERIC NAME:** Flexographic Ink

**CHEMICAL FAMILY:** Mixture

**CAS NO.:** NOT AVAILABLE (MIXTURE)

**DOT HAZARDOUS MATERIALS PROPER SHIPPING NAME:** Ink

**DOT HAZARD CLASS:** Flammable Liquid

**UN/NA ID NO.:** UN 1210

**HMIS CODES:** 2H, 3F, 0R

**SECTION II - HAZARDOUS INGREDIENTS**

<table>
<thead>
<tr>
<th>HAZARDOUS COMPONENTS</th>
<th>CAS NUMBER</th>
<th>OCCUPATIONAL EXPOSURE LIMITS</th>
<th>WEIGHT PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol Monobutyl Ether</td>
<td>111-76-2</td>
<td>50 PPM</td>
<td>25 PPM</td>
</tr>
<tr>
<td>Isopropyl Alcohol</td>
<td>67-63-0</td>
<td>500 PPM</td>
<td>400 PPM</td>
</tr>
<tr>
<td>N-Propyl Alcohol</td>
<td>71-23-8</td>
<td>250 PPM</td>
<td>200 PPM</td>
</tr>
<tr>
<td>Polyamide Resin</td>
<td>679-893-04</td>
<td>UNKNOWN</td>
<td>UNKNOWN</td>
</tr>
<tr>
<td>N-Propyl Acetate</td>
<td>109-60-4</td>
<td>250 PPM</td>
<td>200 PPM</td>
</tr>
</tbody>
</table>

*INDICATES TOXIC CHEMICAL(S) SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III AND OF 40 CFR 372.

**SECTION III - PHYSICAL DATA**

**BOILING POINT:** 198 °F

**VAPOR DENSITY:** Heavier than air

**EVAPORATION RATE:** Slower than ether

**MATERIAL V.O.C.:** Approx. 9.0 LB/GL

**APPEARANCE AND ODOR:** Black Liquid With Alcohol Odor

**SECTION IV - FIRE AND EXPLOSION HAZARD DATA**

**FLASH POINT:** Approx. 81 °F

**% VOLATILE/VOL:** 71%

**EXTINGUISHING MEDIA:** Foam, Carbon Dioxide, or Dry Chemical

**SPECIAL FIREFIGHTING PROCEDURES:** Water spray may spread fire. Water may be used to cool closed containers to prevent pressure buildup and possible auto ignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable.

**SECTION V - REACTIVITY DATA**

**STABILITY:** Stable

**CONDITIONS TO AVOID:** Heat, Sparks and Open Flames

**INCOMPATIBILITY (MATERIALS TO AVOID):** Alkalis, oxidizing materials, water and moist air

**HAZARDOUS DECOMPOSITION OR BYPRODUCTS:** May liberate carbon monoxide, carbon dioxide and unidentified organic compounds in black smoke.

**HAZARDOUS POLYMERIZATION:** Will not occur.
SECTION VI - HEALTH HAZARD DATA

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Inhalation of vapors or mist may irritate nose and throat. Inhalation of high concentrations may cause headache, nausea, vomiting, unconsciousness and coma. Prolonged contact may cause swelling and skin damage.

SKIN CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE: SKIN: Skin contact may cause irritation and reddening. Frequent or widespread contact may absorb harmful amounts.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: This product is readily absorbed through the skin.

CARCINOGENICITY: NTP? No IARC MONOGRAPHS? No OSHA REGULATED? No


SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Remove all sources of ignition (flames, hot surfaces and electrical static or frictional sparks). Avoid breathing vapors and contact with skin. Recover as much free liquid as possible with non-sparking tools. Remove remainder with inert absorbent.

WASTE DISPOSAL METHOD: Dispose in accordance with federal, state and local regulations. Do not incinerate closed containers.

SECTION VIII - CONTROL MEASURES

VENTILATION: Use only in well ventilated area to keep vapor concentration below PEL.

IF SPRAYED: Use NIOSH approved self contained breathing apparatus in the pressure demand mode or a supplied air respirator.

PROTECTIVE GLOVES: Required for prolonged or repeated contact.

EYE PROTECTION: If splash hazard exists, use safety eyewear.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Use protective garment as required.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Keep containers closed. Store in well ventilated area. Observe safe handling and storing methods for flammables.

OTHER PRECAUTIONS: Containers should be grounded when pouring.

SECTION X - REGULATORY INFORMATION

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III TOXIC CHEMICAL(S) SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III AND OF 40 CFR 372.

CHEMICAL CAS NUMBER
Glycol Ethers 111-76-2 40.0% by wt.

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