HOLLAND INK CORPORATION OF AMERICA
92 Union Street, Mineola, NY 11501

Material Safety and Data Sheet prepared by Wim De Boer

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER: Van Son Holland Ink Corporation of America
29 Union Street, Mineola, NY 11501

Emergency Telephone: 516-294-8811
Product Class: Offset Black Ink Oxidizing
Trade Name: CML Black 22011, Black Diamond, CML Process Black

2. INGREDIENT COMPOSITION INFORMATION

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No.</th>
<th>WT%</th>
<th>OSHA (PEL)</th>
<th>ACGIH (TLV)</th>
<th>Carcinogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Black</td>
<td>1333-86-4</td>
<td>15-30</td>
<td>3.5mg/M3</td>
<td>3.5mg/M3</td>
<td>No</td>
</tr>
<tr>
<td>Organic Pigments</td>
<td>See Table 2</td>
<td>2-10</td>
<td>3.5mg/M3</td>
<td>3.5mg/M3</td>
<td>No</td>
</tr>
<tr>
<td>Synthetic Resins</td>
<td>Various</td>
<td>30-50</td>
<td>N/A</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>Vegetable Oil Includes</td>
<td>Various</td>
<td>20-30</td>
<td>N/A</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>Linseed Oil</td>
<td>8001-26-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soy Oil</td>
<td>8001-22-7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Severe Acid Treated or Solvent Refined</td>
<td>64742-13-8</td>
<td>10-20</td>
<td>5mg/M3</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>Middle Distillate</td>
<td>64741-91-9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Severe Hydrotreated Naphthenic Middle Distillate</td>
<td>64742-53-6</td>
<td>5-10</td>
<td>5mg/M3</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>Polymeric Wax Blend</td>
<td>N/A</td>
<td>3-5</td>
<td>N/A</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>Cobalt Drier</td>
<td>61789-52-4</td>
<td>0-1</td>
<td>0.1mg/M3</td>
<td>N/A</td>
<td>IARC</td>
</tr>
<tr>
<td>Manganese Drier</td>
<td>8030-70-4</td>
<td>0-1</td>
<td>5mg/M3</td>
<td>N/A</td>
<td>No</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION


4. FIRST AID MEASURES

**EFFECTS OF OVEREXPOSURE**

**Eye Contact** .............................................Direct contact may cause irritation.

**Skin Contact** .............................................Prolonged contact or repeated exposure may cause minor irritation.

**Inhalation** .............................................Excess inhalation of mist or vapor may cause dizziness, nausea or irritation of nasal and respiratory passages.

**Ingestion** .............................................May cause gastrointestinal irritation.

**Medical Conditions aggravated by normal exposure:**

**Target Organs:** Skin, eyes, lungs.

**Primary Routes of entry** .............................................Eyes, inhalation, dermal.

**EMERGENCY FIRST AID PROCEDURES**

- **Eye Contact** .............................................Flush with large amounts of water until irritation subsides.
  - If irritation persists, contact a physician.

- **Skin Contact** .............................................Wash with soap and water. Remove contaminated clothing and wash thoroughly before reusing.

- **Ingestion** .............................................If swallowed, do not induce vomiting. Call a physician.

- **Inhalation** .............................................Remove individual to fresh air.

5. FIRE FIGHTING MEASURES

**Flash Point** .............................................Above 250°F Method used: closed cup

**Explosion Limits** .............................................LEL: N/A UEL: N/A

**Extinguishing Media** .............................................Foam, carbon dioxide, dry chemical. Water spray may be applied to cool exposed closed containers.

**Unusual Fire and Explosion Hazards** .............................................Dense smoke may be generated when burning. Carbon Monoxide and Carbon Dioxide generated as combustion products.

**Special Fire Fighting Procedures** .............................................Self-contained breathing apparatus recommended.

6. ACCIDENTAL RELEASE MEASURES

**Procedure when material spilled or released:** Wipe up. Dispose of wipes in approved waste containers.

**Waste Disposal Method:** Dispose of in accordance with Federal, State and Local regulations.
7. HANDLING AND STORAGE

Handling: Avoid storage above 90° F. Keep containers closed when not in use.

Other Precautions: None required.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation: Use sufficient ventilation.

Protective Gloves: Gloves recommended.

Respiratory Protection: None required.

Eye Protection: Goggles recommended.

Other Protection: None required.

9. PHYSICAL AND CHEMICAL PROPERTIES

Volatile Organic Compounds: (VOCs) 0.84 lbs./gallon

Boiling Range °F: > 500°

Vapor Density vs. Air: Heavier

Density: 7.33 lbs./gallon ASTM D1475

Type of Odor: Oily

Appearance: Black viscous paste.

Evaporation Rate vs. Butyl Acetate: Slower

Percentage Volatile By Weight: 11.5% ASTM D2369

10. STABILITY AND REACTIVITY

Product Stability: Stable

Conditions to Avoid: Strong oxidizing agents. Avoid storage above 90°F.

Keep containers closed when not in use.

Hazardous Decomposition Products: None.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Carcinogen: Contains no materials that are considered carcinogenic by OSHA or the National Toxicology Program (NTP). The International Agency for Research on Cancer (IARC) lists cobalt compounds and carbon black as possible human carcinogens (Class 2B.)

Mutagen: No

Teratogen: No

Reproductive Toxicity: No

12. ECOLOGICAL INFORMATION

This product has not been evaluated, but there is no evidence to suggest it will cause any significant environmental problem.

13. DISPOSAL CONSIDERATIONS

Material Released or spilled: This product is not regulated under the Federal Resource Conservation and Recovery Act (RCRA) as a hazardous waste. State and/or local regulations may apply. Spill should be contained, absorbed with suitable absorbent material and placed in suitable containers for disposal in a licensed facility in accordance with Local, State and Federal laws. Do not discharge into waterways or sewer systems.

14. TRANSPORT INFORMATION

DOT (HM 181) : Not required

Shipping Labels: None required

15. REGULATORY INFORMATION

TSCA (Toxic Substance Control Act) ................. All ingredients listed in TSCA Inventory
CERCLA Superfund 40CFR 117.302 .......... Contains no reportable materials
SARA Title III ........................................ None
FDA ..................................................... This printing ink is not a food additive and would not have approval for direct or indirect contact with food.
EINECS (European Economic Community) ...... All ingredients listed.
California Proposition 65 ................................ None
CONEG Legislation ........................................ Meets all current State and Heavy Metal limitations.
Canadian WHMIS ....................................... Controlled product
Vegetable Ink Printing Act of 1994 .................. Meets the 20% minimum requirement of vegetable oil in sheet fed inks.

This information is furnished without warranty, expressed or implied, except that it is accurate to the best of the knowledge of Van Son Holland Ink Corporation of America. The data on this sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. The hazards covered are believed to be those most likely to occur in the reasonable or ordinary use of these materials. Van Son Holland Ink Corporation of America assumes no legal responsibility for use or reliance on this data.

Prepared by Wim De Boer Date 5/6/2003