1. PRODUCT AND COMPANY INFORMATION

<table>
<thead>
<tr>
<th>Product Name:</th>
<th>Thermal Black Dye Ink (PN 01-0228-001)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical family/Product type:</td>
<td>Ink jet ink; water based; non-flammable</td>
</tr>
<tr>
<td>Manufacturer:</td>
<td>Spectracorp</td>
</tr>
<tr>
<td>Address:</td>
<td>118 South Pecos Street</td>
</tr>
<tr>
<td></td>
<td>Denver, Colorado, 80223</td>
</tr>
<tr>
<td>Emergency Phone Number:</td>
<td>303-371-6979</td>
</tr>
<tr>
<td>CAS Number:</td>
<td>Mixture/ Trade Secret</td>
</tr>
<tr>
<td>Revision Date:</td>
<td>1/10/2010</td>
</tr>
</tbody>
</table>

2. HAZARDS IDENTIFICATION

**Route of Entry:** May come in contact with skin and eyes, may accidentally be ingested or possible inhalation.

**Procedure if material comes in contact with the following:**

**Skin:** May cause irritation. Wash exposed area with soap and water and get medical attention if irritation develops.

**Eyes:** Flush eyes with water immediately. Use eye wash station or large amounts of clean preferably warm water for a minimum of 15 minutes or until any particles are removed. If irritation persists seek medical attention.

**Respiratory System:** Inhalation is unlikely due to low vapor pressure of product. If somehow inhalation occurs move to area where fresh air is available and seek medical attention if irritation to respiratory system develops.

**Internal organs through Ingestion:** Ingestion of material may cause diarrhea or gastrointestinal irritation. Seek medical attention ingestion occurs.

**Target Organs:** None known.

HMIS II – RATINGS (SCALE 0-4)

Health = 1
Fire = 0
Reactivity = 0

HMIS III – RATINGS (SCALE 0-4)

Health = 1
Fire = 0
Physical Hazard = 0

NFPA – RATINGS (SCALE 0-4)

Health = 1
Fire = 0
Reactivity = 0
3. COMPOSITION INFORMATION

<table>
<thead>
<tr>
<th>Hazards Identification</th>
<th>Weight %</th>
<th>Toxicity Data</th>
<th>Oral Rat LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>55 - 90</td>
<td>ACGIH TLV Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Diethylene Glycol</td>
<td>5 - 30</td>
<td>ACGIH TLV Not Established</td>
<td>Oral Rat LD50 20,000 mg/kg</td>
</tr>
<tr>
<td>Black Dye</td>
<td>2 - 10</td>
<td>ACGIH TLV Not Established</td>
<td>Oral Rat LD50</td>
</tr>
</tbody>
</table>

4. FIRST AID

Skin: Wash with soap and water and rinse thoroughly. Seek medical attention if irritation persists.

Eyes: Flush eyes and under eyelids for 15 minutes with water. Seek medical attention if irritation or redness persists.

Inhalation: Move to fresh air. Seek medical attention if irritation persists.

Ingestion: Do not induce vomiting. Give water to dilute and get medical attention.
5. FIRE FIGHTING MEASURES

Extinguishing Media: Water Spray, carbon dioxide, dry chemical.

Hazardous Combustion Products: Material may burn in fire conditions releasing Products which may be toxic (SO₂, CO, CO₂, and volatile organics).

Fire Fighting Procedures: Wear approved MSHA/NIOSH breathing apparatus and full protective clothing.

Sulfur Oxides.

6. ACCIDENTAL RELEASE

Spill Response: Collect spilled material and wash area with water.

Neutralizing Chemicals: None Required

Waste Disposal: Follow all federal, state and local Regulations

7. EXPOSURE CONTROLS/PERSONAL PROTECTION

In accordance with good industrial practices, handle with care and avoid personal contact.

Wear protective gloves, safety goggles, and other protective clothing.

Avoid contact with skin, eyes, and clothing.

Is a mild irritant so treat accordingly.

Keep container tightly closed.

Keep in a temperature regulated environment. Keep from extreme heat and keep from freezing.
MATERIAL SAFETY DATA SHEET
THERMAL BLACK INK

8. REACTIVITY DATA

Stability: Stable
Incompatibility: Strong Oxidizing agents, Strong Acids
Hazardous Decomposition Products: Carbon monoxide, Carbon Dioxide

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Black Colored Liquid
Solubility in Water: Miscible
Freezing Point: < 32° F
Boiling Point: > 212° F
PH (100%): 7.0 – 10.0
Specific Gravity, 25 C: 1.01 - 1.08
Viscosity, cps @ 25 C: 2 - 5
Flash Point, C: > 360° F

11. TOXICOLOGICAL INFORMATION

The ink has not been tested for toxicological effects.

12. ECOLOGICAL INFORMATION

The ink has not been tested for ecological effects.

CALIFORNIA PROPOSITION 65: This product contains no chemicals known to the state California to cause cancer, birth defects, or other reproductive harm.

EEC SYMBOLS AND INDICATIONS OF DANGER: None

R-PHRASES: R36/38 – Irritating to eyes and skin.

S-PHRASES: S24/25 – AVOID CONTACT WITH SKIN AND EYES.

WHMIS HAZARD SYMBOLS: None
11. TRANSPORTATION INFORMATION

DOT Proper Shipping Name: None required but can use: BLACK INK

Non-Hazardous for Transport: This substance is considered to be nonhazardous
For transport and not regulated under DOT, IATA, ADR, or RID. No labels required to ship.

12. OTHER

The above information is believed to be correct but does not purport to be all-inclusive and shall only be used as a guide. Spectracorp offers this information as a service to our customers and shall not be held liable for any damage resulting from handling or from contact with the above product.

END OF MSDS