Material Safety Data Sheet

Date of preparation: 04/05
Updated: 12/10/12

For Printing Inks and related Materials

MSDS # 293

I. PRODUCT IDENTIFICATION

Manufacturer: Gans Ink and Supply Co, Inc.
Address: 1441 Boyd Street
Los Angeles, CA 90033

Emergency phone: (323) 264-2200

HMIS HAZARD IDENTIFICATION

<table>
<thead>
<tr>
<th>Health</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
<tr>
<td>Personal Protection</td>
<td>B</td>
</tr>
</tbody>
</table>

Product Class: Lithographic Printing Ink

Manufacturer’s code: A102434, X100774, X101859, X100665, X103021, X103051, etc.

Trade Name: Numbering Black, Red Stain; Numbering Red, Red Stain

II. HAZARDOUS INGREDIENTS

This product does not contain known hazardous ingredients

III. HEALTH HAZARD INFORMATION

Effects of Overexposure

Inhalation: Remove to fresh air. Consult a physician.

Skin Contact: No adverse effects expected. This product is non-irritating to the skin upon direct contact. Prolonged or repeated contact may result in contact dermatitis which is characterized by dryness, chapping, and reddening. This condition may make the skin more susceptible to other irritants, sensitizers, and disease. Pre-existing skin conditions may make the skin more susceptible and facilitate uptake by this route.

Eye Contact: May cause irritation. This product may be slightly irritating to the eyes upon direct contact.

Ingestion: Do not ingest. Ingestion of small quantities is usually nonfatal unless aspiration occurs.

IV. FIRST AID PROCEDURES

Emergency & First Aid Procedures

Eyes: Immediately flush eyes with large amounts of water and continue flushing for 15 minutes until irritation subsides. If irritation persists, seek medical attention.

Skin: Remove contaminated clothing. Wash contaminated area thoroughly with soap and water. If redness or irritation occurs, seek medical attention.

Inhalation: This material has a low vapor pressure and is not expected to present an inhalation exposure at ambient conditions. If mist or exposure is generated when the material is heated or handled, remove victim from exposure. If breathing has stopped or is irregular, administer artificial respiration and supply oxygen if it is available. If victim is unconscious, remove to fresh air and seek medical attention.

Ingestion: Do not induce vomiting. Only induce vomiting at the instruction of medical personnel. If conscious, give several glasses of water. Never give anything by mouth to an unconscious person.

Notes to Physician: Aspiration may lead to chemical pneumonitis which is characterized by pulmonary edema and hemorrhage, and may be fatal. Signs of lung involvement include increased respiration rate, increased heart rate, and a bluish discoloration of the skin. Coughing, choking, and gagging are often noted at the time if aspiration. Gastrointestinal discomfort may develop, followed by vomiting, with risk of aspiration.
V. FIRE AND EXPLOSION DATA

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point °F</td>
<td>250 F</td>
</tr>
<tr>
<td>Auto-ignition Temperature °F</td>
<td>428</td>
</tr>
<tr>
<td>Flammable Limits in Air</td>
<td></td>
</tr>
<tr>
<td>Lower Limit:</td>
<td>1.1</td>
</tr>
<tr>
<td>Upper Limit:</td>
<td>6.0</td>
</tr>
<tr>
<td>Extinguishing Media</td>
<td></td>
</tr>
<tr>
<td>Use water fog, foam, CO&lt;sub&gt;2&lt;/sub&gt;, or dry chemical extinguishing media, sand.</td>
<td></td>
</tr>
<tr>
<td>Special Fire Fighting Procedures:</td>
<td>Confine with sand. Water may be ineffective, but can be used to cool containers exposed to heat or flame.</td>
</tr>
<tr>
<td>Unusual Fire &amp; Explosion Hazard:</td>
<td>Dense smoke may be generated while burning; carbon dioxide, carbon monoxide, and other oxides may be generated as products of combustion.</td>
</tr>
</tbody>
</table>

VI. ACCIDENTAL RELEASE

Steps to be taken in event of spill or release: Confine with sand or other inert media. Return to containers. Dispose of in accordance with Local, State and Federal Regulations.

VII. HANDLING AND STORAGE

Handling and Storage: Store in containers in a cool, well-ventilated area. Consumption of food and beverages should be avoided in work areas where hydrocarbons are present. Always wash hands and face with soap and water before eating, drinking, and smoking.

Other Precautions: For industrial use only. Do not ingest. Avoid prolonged contact with skin, contact with eyes, and breathing of mist or vapor.

VIII. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Ventilation Requirements: If vapor or mist is generated when the material is heated or handled, adequate ventilation in accordance with good engineering practice must be provided to maintain concentrations below the specific exposure or flammable limits.

Personal Protective Equipment

Respirator: Respiratory protection is not required under conditions of normal use. If vapor or mist in generated when the material is heated or handled, use an organic vapor respirator with a dust and mist filter. All respirators must be NIOSH certified. Do not use compressed oxygen in hydrocarbon atmospheres.

Skin: No skin protection is required for single, short duration exposures. For prolonged exposures, use impervious synthetic rubber clothing (boots, gloves, etc.) over parts of the body subject to exposure.

Eye: Eye protection is not required under conditions of normal use. If material is handled such that it could be splashed into eyes, wear plastic face or splash-proof safety goggles.

IX PHYSICAL AND CHEMICAL DATA

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Range °F</td>
<td>400 - 500</td>
</tr>
<tr>
<td>Relative Density (H&lt;sub&gt;2&lt;/sub&gt;O = 1):</td>
<td>1.08</td>
</tr>
<tr>
<td>Material Density Lbs./Gal</td>
<td>9.00</td>
</tr>
<tr>
<td>% Volatiles by Weight</td>
<td>12 - 15</td>
</tr>
<tr>
<td>VOC: Lbs/Gal</td>
<td>1.1 – 1.4</td>
</tr>
<tr>
<td>Vapor Density (Air = 1):</td>
<td>1.08</td>
</tr>
<tr>
<td>Vapor Pressure (mm Hg @ 70°F)</td>
<td>0.1</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Insoluble</td>
</tr>
<tr>
<td>% Solids by Weight</td>
<td>85 - 88</td>
</tr>
<tr>
<td>Appearance/Odor</td>
<td>Colored paste</td>
</tr>
</tbody>
</table>

X. STABILITY AND REACTIVITY INFORMATION

Stability (Thermal, Light, etc.): Stable

Conditions to avoid: Excessive heat and contact with strong oxidizers.

Hazardous Polymerization: Will not occur.

Conditions to avoid: Caustic Amines, Alkanolamines, inorganic acids.

Hazardous Decomposition Products: CO<sub>2</sub>, CO, and other oxides may be generated as products of combustion.

XI. TOXICOLOGICAL INFORMATION

CARCINOGEN: This product has not been identified as a carcinogen by OSHA or the National Toxicology program (NTP), or the International Agency for Research Cancer (IARC).

Mutagen: No Data

Teratogen: No Data

Reproductive Toxicity: No Data
XII. ECOLOGICAL INFORMATION
This product has not been evaluated at this time.

XIII. DISPOSAL INFORMATION
Waste Disposal Method: If recycling as ink is not possible, material may be incinerated or land filled at a licensed facility in accordance with local, state, and federal regulations.

XIV. TRANSPORT INFORMATION
Flammability Classification: Combustible
OSHA: Class III B
DOT: Not Regulated

XV. REGULATORY INFORMATION
SARA Title III Section 313:
This product does not contain any component(s) listed on the Section 313 Toxic Chemical List. (40 CFR 372.65)

TSCA Section 8(b) Inventory Status:
All component(s) of this product are either exempt or listed on the TSCA Inventory.
U.S. State Regulations

California Proposition 65:
This product does not intentionally contain chemicals known by the state of California to cause cancer and/or reproductive harm.

XVI OTHER INFORMATION
The information herein is presented in good faith, based on the data available to us and is believed to be correct as of the date hereof. However, Gans Ink and Supply Co., Inc. make no warranty, expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Gans Ink and Supply Co., Inc. assume no responsibility for any damages of any nature directly or indirectly resulting from the use of or reliance upon the information contained herein. Users must make their own determination as to the suitability of the product for their purpose prior to use. In accordance with good practices of personal cleanliness and hygiene, handle with due care and avoid unnecessary contact with this product.