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

| Health | 2 |
| Flammability | 1 |
| Reactivity | 1 |
| Personal Protection | B |

Product Class: UV-Cure Screen Printing Inks
Manufacturer’s code: Various, G017557, UV14867, UV14866, UV15456, UV15456X, etc.

Trade Name: UV Uni-Screen Inks (including 6000, 6001, 6010 blending bases)

II. HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>Material</th>
<th>CAS #</th>
<th>%</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Hydroxycyclohexyl phenyl Trimethylbenzoyl diphenylphosphine oxide</td>
<td>947-19-3, 75980-60-8</td>
<td>4.0</td>
<td>Not Established</td>
</tr>
<tr>
<td>Dimethyldichloro silane (EINECS 278-355-8)</td>
<td>68611-44-9</td>
<td>3.0</td>
<td>No Established</td>
</tr>
<tr>
<td>Phosphine oxide,phenylbis (2,4,6-Trimethyl benzoyl)</td>
<td>162881-26-7</td>
<td>0.50</td>
<td>Not Established</td>
</tr>
<tr>
<td>2-Methyl-1-phenyl-2-1-propanone</td>
<td>71868-10-5</td>
<td>&lt; 0.50</td>
<td>Not Established</td>
</tr>
</tbody>
</table>

* Ink Vehicle: Not available

The specific chemical identity (including CAS No.) and / or specific concentrations of the constituents contained in this vehicle are regarded as “Trade Secret” information.

III. HEALTH HAZARD INFORMATION

Effects of Overexposure

**Inhalation:** Moderately irritating if inhaled. Avoid prolonged or repeated breathing of vapor. May cause respiratory tract irritation. Pre-existing respiratory conditions may be aggravated.

**Skin Contact:** Avoid skin contact. This product is highly 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. Delayed removal from the skin, especially when it is present in contaminated clothing or shoes may lead to blistering of the skin, even if no irritation is noted. May cause allergic skin reaction.

**Eye Contact:** Avoid eye contact. This product is highly irritating to the eyes. Individuals with pre-existing eye disorders can be at greater risk.

**Ingestion:** Do not ingest. May irritate throat, mouth and gastrointestinal tract. Ingestion of small quantities is usually nonfatal unless aspiration occurs. No more than slightly toxic if swallowed. Severe oral
intoxication will lead to intense burning of the throat and may result in drowsiness, dullness, numbness, and headache followed by dizziness, weakness, and nausea. Loss of consciousness and convulsions followed by death may result. See Notes to Physician section below.

IV. FIRST AID PROCEDURES

**Emergency & First Aid Procedures**

**Eyes:** Immediately flush eyes with large amounts of water and continue flushing for 15 minutes. Seek medical attention. Remove contacts if in use.

**Skin:** Remove contaminated clothing. Wash contaminated area thoroughly with soap and water. Seek medical attention. Wash clothing and clean shoes thoroughly before reuse.

**Inhalation:** 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. Clean mouth with water and give plenty of water to drink. Seek immediate medical attention. Never give anything 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 of aspiration. Gastrointestinal discomfort may develop, followed by vomiting, with risk of aspiration.

V. FIRE AND EXPLOSION DATA

<table>
<thead>
<tr>
<th>Flash Point °F:</th>
<th>212 °F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto-ignition Temperature °F:</td>
<td>No Data</td>
</tr>
</tbody>
</table>

**Extinguishing Media:** Use water spray, foam, CO₂, or dry chemical extinguishing media.

**Special Fire Fighting Procedures:** Remove all ignition sources. Wear self-contained breathing apparatus and complete personal protective equipment when entering confined areas. Do not use high volume water stream, as it may scatter and spread fire.

**Unusual Fire & Explosion Hazard:** There is a possibility of pressure build-up in containers when heated. High temperatures and fire conditions may cause rapid and uncontrollable polymerization which can result in explosions and the violent rupture of storage vessels. Cool containers exposed to fire with water to prevent polymerization.

VI. ACCIDENTAL RELEASE

**Steps to be taken in event of spill or release:** Remove all ignition sources, as spilled material may polymerize. Move leaking containers to ventilated area. Stop discharge, if it can be performed safely, and contain material. Absorb small spills with an inert material (sand, silica gel, sawdust) and then place in a suitable container for disposal. Contain large spills with dikes and transfer the material to appropriate containers for reclamation or disposal. Keep out of drains and watercourses. Do NOT flush to sewer.

VII. HANDLING AND STORAGE

**Handling and Storage:** Store in containers in a cool, well-ventilated area. The storage temperature should not exceed 100 °F. Avoid exposure to sunlight, heat and sources of ignition. Store in tightly sealed containers. Avoid prolonged contact with skin, contact with eyes, and breathing of mist or vapor. Always wash hands thoroughly after handling.

**Other Precautions:** For industrial use only. Do not ingest. Consumption of food and beverages should be avoided in work areas. Wash hands and face with soap and water before eating, drinking, and smoking.

VIII. EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Ventilation Requirements:** Provide natural or mechanical ventilation to minimize exposure. If practical, use local mechanical exhaust ventilation at sources of air contamination. If vapor or mist is generated, 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. Use approved respiratory protection equipment when airborne exposure is excessive. If vapor or mist in generated wear suitable personal protective respirator and protective suit with a dust and mist filter. All respirators must be NIOSH certified. Do not use compressed oxygen in hydrocarbon atmospheres.

**Skin:** Wear full protective clothing if exposed to splashes. Wear chemical resistant gloves. 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. Have eye wash facilities available at any location where eye contact can occur.

### IX. PHYSICAL AND CHEMICAL DATA

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Range °F</td>
<td>212 °F</td>
</tr>
<tr>
<td>Vapor Density (Air = 1)</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Relative Density (H₂O = 1)</td>
<td>1.06 - 1.14</td>
</tr>
<tr>
<td>Vapor Pressure (mm Hg @ 70°F)</td>
<td>0.1</td>
</tr>
<tr>
<td>Material Density Lbs./Gal</td>
<td>8.85 - 9.51</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Insoluble</td>
</tr>
<tr>
<td>% Volatile Organic Compounds (VOC) by Weight</td>
<td>13.4 average</td>
</tr>
<tr>
<td>(ASTM D5403-93 for UV-cure, Non-Thin-Film Coating)</td>
<td></td>
</tr>
<tr>
<td>% Solids by Weight</td>
<td></td>
</tr>
<tr>
<td>VOC: Lbs/Gal</td>
<td>1.3</td>
</tr>
<tr>
<td>g/L: 153</td>
<td></td>
</tr>
<tr>
<td>Appearance/Odor</td>
<td>Colored paste</td>
</tr>
</tbody>
</table>

### X. STABILITY AND REACTIVITY INFORMATION

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability (Thermal, Light, etc.):</td>
<td>Stable</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>Excessive heat, Storage &gt; 100 °F Exposure to ultraviolet light, sunlight.</td>
</tr>
<tr>
<td>Hazardous Polymerization:</td>
<td>Hazardous polymerization may occur. Uncontrolled polymerization may cause rapid high temperatures and increase in pressure that could result in violent rupture of container. Do not blanket or mix with nitrogen or other inert gases as this renders the inhibitors ineffective.</td>
</tr>
<tr>
<td>Material to avoid</td>
<td>Polymerization initiators including peroxides, strong oxidizing agents, alkalis. Reactive metals such as copper, copper alloys, carbon steel, iron, rust and strong bases to prevent exothermic polymerization.</td>
</tr>
<tr>
<td>Hazardous Decomposition Products:</td>
<td>CO₂, CO, and other oxides may be generated as products of combustion. Hydrocarbons</td>
</tr>
</tbody>
</table>

### XI. TOXICOLOGICAL INFORMATION

This product has not been evaluated at this time.

The information is derived from the properties of the individual components.

Local Effects:
- Moderately irritating if inhaled.
- Highly irritating to eyes and skin; (rabbit) Repeated skin exposure produced irritation in animal studies.
- Produced dermal sensitization (guinea pig)

### 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.

**RCRA Hazardous waste:** If discarded in its original unused form, this product does NOT exhibit characteristics of a RCRA hazardous waste as defined under 40CFR261.

### XIV. TRANSPORT INFORMATION

**Flammability Classification:** Combustible Liquid
OSHA: Class III B
DOT: Not Regulated
Canadian TDG: Not Regulated
IATA: Not Regulated
IMO: Not Regulated

Not classified as dangerous in the meaning of transport regulations.

XV. REGULATORY INFORMATION

SARA Title III Section 313:
This product contains no chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-know Act.

Section 302 – This product does not contain any components regulated under the Section 302 (40 CFR 355) as Extremely Hazardous Substances.

Section 311/312 – Hazard Categories: Pursuant to Section 311/312 of SARA Title III, the physical and health hazard categories for this product are identified below:
- Fire Hazard – NO
- Sudden Release of Pressure Hazard – NO
- Reactivity Hazard – YES
- Immediate (Acute) Health Hazard – YES
- Delayed (Chronic) Health Hazard – YES.

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

International Inventory Status:
Unless otherwise noted, all components of this product are in compliance with the inventory listings of the countries shown below:
- Europe (EINECS) Listed/registered
- Australia (AICS) Listed/registered
- Japan (MITI) Listed/registered
- Canada (DSL) Listed/registered

U.S. State Regulations
California Proposition 65:
This product does not intentionally contain any chemicals known by the state of California to cause cancer and/or reproductive harm. Moreover, Gans Ink and Supply Co., Inc. does not routinely analyze its products for impurities which may be such chemicals.

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. makes 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. assumes 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.

Safety Glasses
Gloves