

**Material Safety Data Sheet # 203.13**  
**For Printing Inks and related Materials**  
**OSHA Hazard Communication Standard, 29 CFR 1910.1200**

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 MSDS #: 203.13

**I. PRODUCT IDENTIFICATION**

|   |  |        |   |              |   |            |   |                     |   |
|---|--|--------|---|--------------|---|------------|---|---------------------|---|
| Manufacturer: Gans Ink and Supply Co, Inc.<br>Address: 1441 Boyd Street<br>Los Angeles, CA 90033<br><br>Emergency phone: (323) 264-2200 | <p align="center"><b>HMIS HAZARD IDENTIFICATION</b></p> <table border="1"> <tr> <td>Health</td> <td>2</td> </tr> <tr> <td>Flammability</td> <td>1</td> </tr> <tr> <td>Reactivity</td> <td>2</td> </tr> <tr> <td>Personal Protection</td> <td>B</td> </tr> </table> | Health | 2 | Flammability | 1 | Reactivity | 2 | Personal Protection | B |
| Health  | 2  |        |   |              |   |            |   |                     |   |
| Flammability  | 1  |        |   |              |   |            |   |                     |   |
| Reactivity  | 2  |        |   |              |   |            |   |                     |   |
| Personal Protection   | B  |        |   |              |   |            |   |                     |   |
| <b>Product Class:</b> UV-Cure Screen Printing Ink   | <b>Manufacturer's code:</b> UV12054,UVSCR011, UV13295,UV13319, UV13728, UV00-6000, UV13812,UV14131, UV14186, UV14209,UV14889 etc.  |        |   |              |   |            |   |                     |   |
| <b>Trade Name:</b> UV Uni-Screen Opaque White   |  |        |   |              |   |            |   |                     |   |

**II. COMPOSITION / INGREDIENTS**

| Material  | CAS #         | %         | Exposure Limits                              | Units |
|---|---------------|-----------|--|-------|
| Acrylic ester mixture                           | Proprietary   | 16 - 26   | Not Established                              |       |
| siloxanes & silicones, de Me, reaction products | 67762-90-7    | .045      | Not Established                              |       |
| urethane acry. Olig.                            | Proprietary   | 4.5       | Not Established                              |       |
| Pentaerthritol tetraacrylate                    | 4986-89-4     | 4.5       | Not Established                              |       |
| pentaerythritol triacrylate                     | 3524-68-3     | 3.0       | Not Established                              |       |
| 2-Methoxymethylethoxy propanol (DPM)            | 34590-94-8    | .015      | Not Established                              |       |
| TriMeBenzoyl diphenylphosphine oxide            | 75980-60-8    | 2.2       | Not Established                              |       |
| hexamethylene diacrylate                        | 13048-33-4    | 3.0       | Not Established                              |       |
| Phosphine oxide phenylbis                       | 162881-26-7   | 1-2       | Not Established                              |       |
| 2-[[[(butylamino) carbonyl]oxy] ethyl acrylat   | 63225-53-6    | 5.0       | Not Established                              |       |
| Polyol Acrylate                                 | Proprietary   | .004 – 10 | Not Established                              |       |
| Photoinitiators, mixtures                       | Not available | 3 - 4     | ACGIH / PEL 5 mg/ M <sup>3</sup> air 8hr TWA |       |

Hazard Description: Skin, eye or inhalation irritant Xi, R 36/ 38-43

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:** Not expected to be a hazard due to low volatility under standard conditions. Inhalation of mist or vapor may cause irritation of respiratory tract. Chronic exposure to high concentrations of aerosols or mists to laboratory animals has resulted in non-specific symptoms related to the nervous system, gastrointestinal tract, and lungs. Excess inhalation of mist or vapor may cause dizziness, nausea, or irritation of nasal and respiratory passages

**Skin Contact:** Avoid skin contact. This product is irritating to the skin upon direct contact. Prolonged contact may cause blister formations (burns). Since irritation may not occur immediately, contact can go unnoticed. 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. Those known to be sensitized to acrylates should avoid all exposure to this product.  
Target Organs: skin.

**Eye Contact:** Moderate irritant. Can cause burning sensation, tearing, swelling, and redness. Injury may persist for several days. Exposure to high concentrations of vapors can be irritating to the eyes. Direct contact may cause irritation. Target Organs: Eyes.

**Ingestion:** May irritate the mouth, throat, and gastrointestinal tract. 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. See *Notes to Physician* section below.

### IV. FIRST AID PROCEDURES

#### Emergency & First Aid Procedures

**Eyes:** Rinse immediately with plenty of water, retract eyelids often. for at least 15 minutes. Seek immediate medical attention.

**Skin:** Remove contaminated clothing. Wash contaminated area thoroughly with soap and water. If redness or irritation occurs, seek medical attention. Wash skin with mild non abrasive soap. Pay particular attention to hair, nose, ears and other areas not easily cleaned. Do not use solvents for cleaning hands or skin because solvents may increase penetration of the product into the skin. Seek medical attention.

Laundry contaminated clothing with an alkaline detergent before reusing. Discard all contaminated shoes, belts or other leather goods. Avoid contact with UV- and sunlight.

**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. Do not induce vomiting as aspiration risk exceeds poisoning risk. If a person swallows Acrylate products, give lukewarm water (1 pint) **only if person is completely conscious and alert**. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

**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

Flash Point °F: 212 F

Auto-ignition Temperature °F: No Data

|  |                             |                             |
|--|-----------------------------|-----------------------------|
| <b>Flammable Limits in Air</b>   | <b>Lower Limit:</b> No Data | <b>Upper Limit:</b> No Data |
| <p><b>Extinguishing Media:</b> Use water fog, foam, CO<sub>2</sub>, or dry chemical extinguishing media.</p> <p><b>Special Fire Fighting Procedures:</b> Do not enter fire area without proper protection. Fight fire from a safe distance. Remove all ignition sources. Wear self contained breathing apparatus and complete personal protective gear when entering confined places. Water may be ineffective in firefighting due to low solubility. Use water spray or fog for cooling.</p> <p><b>Unusual Fire &amp; Explosion Hazard:</b> High temperatures and fire conditions may cause rapid and uncontrollable polymerization which can result in explosions and the violent rupture of storage vessels. Avoid the use of a stream of water to control fires since frothing can occur.</p> <p>Dense smoke may be generated while burning; carbon dioxide, carbon monoxide, and other oxides may be generated as products of combustion.</p> |                             |                             |

#### VI. ACCIDENTAL RELEASE

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| <p><b>Steps to be taken in event of spill or release:</b> Remove all ignition sources, as spilled material may polymerize. Move leaking containers to ventilated area. Wear protective equipment during clean-up. Stop discharge, if it can be performed safely, and contain material. Cover spills with an inert absorbent material (e.g. vermiculite, sand, silica gel, acid binder, universal binder, sawdust) and place in a suitable container for disposal. Wash spill area with a strong detergent and water solution; rinse with water, contain and minimize water use during clean-up. Do not discharge in waterways or sewer systems.</p> |
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#### VII. HANDLING AND STORAGE

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| <p><b>Handling and Storage:</b> Wear proper protective clothing and gloves when handling. Store containers in a cool, well-ventilated area. Do Not store above 38 °C/ 100 °F or excessive cold temperatures, 0 °C/ 32 F. Store in tightly closed containers away from heat, sparks, open flame, sources of ignition. Avoid exposure to ultraviolet light and/or sunlight. Avoid prolonged contact with skin, contact with eyes, and breathing of mist or vapor. Always wash hands and face with soap and water after handling. Do not use solvents for cleaning hands or skin, as solvents may increase the penetration of the product into the skin.</p> |
| <p><b>Other Precautions:</b> For industrial use only. Food, beverages and tobacco products should not be carried, stored, or consumed in work areas. Always wash hands and face with soap and water before eating, drinking, and smoking.</p>   |

#### VIII. EXPOSURE CONTROLS AND PERSONAL PROTECTION

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| <p><b>Ventilation Requirements:</b> 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.</p>  |
| <p><b>Personal Protective Equipment</b></p>   |
| <p><b>Respirator:</b> Respiratory protection is not required under conditions of normal use. If vapor or mist is 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.</p>   |
| <p><b>Skin:</b> Avoid skin contact. Wear impermeable gloves and suitable protective clothing. Barrier creams may be used in conjunction with the gloves to provide additional skin protection. A barrier cream is recommended to be applied on clean hands <u>before</u> applying gloves, not after exposure. A barrier cream alone is not recommended; as it is not impervious to chemicals. Safety showers are recommended.</p> |
| <p><b>Eye:</b> Eye protection is required under conditions of normal use. Wear plastic face shield or splash-proof safety glasses or goggles. Eye wash stations are recommended.</p>  |

#### IX. PHYSICAL AND CHEMICAL DATA

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|---|---|
| <b>Boiling Range °F:</b> 212 F                            | <b>Vapor Density (Air = 1):</b> > 1           |
| <b>Relative Density (H<sub>2</sub>O = 1):</b> 2.04 – 2.62 | <b>Vapor Pressure (mm Hg @ 68°F):</b> No Data |
| <b>Material Density Lbs./Gal:</b> 16.99- 21.82            | <b>Solubility in Water:</b> Insoluble         |
| <b>% Volatile Organic Compounds (VOC) by Weight:</b> < 1  | <b>% Solids by Weight:</b> 99                 |
| <b>VOC: lbs/gal:</b> < 0.22 g/L: < 26.2                   | <b>pH:</b> No Data                            |
|   | <b>Appearance/Odor:</b> White paste           |

### X. STABILITY AND REACTIVITY INFORMATION

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| <p><b>Stability (Thermal, Light, etc.):</b> Stable under normal circumstances and conditions of proper storage.</p>   | <p><b>Conditions to avoid:</b> Excessive heat, 38 °C/ 100 F or cold 0 °C/ 32 F. Sources of ignition. Loss of dissolved air or loss of polymerization inhibitor. Avoid exposure to sunlight and / or ultraviolet light.</p>     |
| <p><b>Hazardous Polymerization:</b> High temperatures (&gt;100°F) and oxygen deficient atmosphere reduce inhibitor effectiveness and may cause polymerization, raising the temperature and pressure, possible rupturing the container. Do NOT blanket or mix with nitrogen or other inert gases as this renders the inhibitor ineffective</p> | <p><b>Materials to avoid:</b> Contamination of incompatible materials.. Avoid initiators including peroxides; avoid strong oxidizing agents, copper, copper alloys, carbon steel, iron, rust, nickel, cobalt, strong bases</p> |
| <p><b>Hazardous Decomposition Products:</b> CO<sub>2</sub>, CO, and other oxides may be generated as products of combustion.</p>  |  |

### XI. TOXICOLOGICAL INFORMATION

|   |         |
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| <p><b>CARCINOGEN:</b> This product HAS NOT been identified as a carcinogen by OSHA, ACGIH or the National Toxicology Program (NTP) or the International Agency for Research Cancer (IARC) as carcinogens:</p> |         |
| <b>Mutagen:</b>   | No Data |
| <b>Teratogen:</b>   | No Data |
| <b>Reproductive Toxicity:</b>   | No Data |
| <p><b>Toxicological information on the regulated components of this product as follows:</b></p>   |         |
| <p>Hexamethylene diacrylate 13048-33-4<br/>           Oral (Rat) LD50 &gt; 5000 mg/kg<br/>           Dermal (Rabbit) LD50 &gt; 3000 mg/kg</p>   |         |
| <p>Acrylated resin<br/>           Oral (Rat) LD50 &gt; 2000 mg/kg<br/>           Dermal (Rabbit) &gt; 2000 mg/kg</p>  |         |
| <p>2-[[[(butylamino) carbonyl]oxy] ethyl acrylat 63225-53-6<br/>           Oral (Rat) LD50 &gt; 2000 mg/kg</p>  |         |
| <p>Acrylated Polyol<br/>           Acute Oral (Rat) LD50 6,800 mg/kg<br/>           Acute Dermal (Rabbit) &gt; 2,000 mg/kg</p>  |         |

### XII. ECOLOGICAL INFORMATION

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| <p>This product has not been evaluated at this time.<br/>           Some components of this product are toxic for fish. As with all chemicals and products, <b>Do Not</b> allow to enter waterways, sewers, drains etc.</p> |
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### XIII. DISPOSAL INFORMATION

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| <p><b>Waste Disposal Method:</b> If discarded in its original unused form, this product does NOT exhibit the characteristics of a RCRA hazardous waste as defined under 40CFR261. Waste materials should be dumped or buried in an approved landfill, or incinerated in a suitable combustion chamber. Disposal must comply with all local, state, and federal regulations. Of the methods of disposal currently available, it is recommended that an alternative be selected according to the following order of preference, based upon environmental acceptability:</p> |
|---|

- 1) Recycle or rework if at all feasible
- 2) Incinerate at an authorized facility
- 3) Treat at an acceptable waste treatment facility.

**XIV. TRANSPORT INFORMATION**

**Flammability Classification:** Combustible  
**OSHA:** Class III B  
**DOT:** Not Regulated  
**IMO/ IMDG:** Not Regulated  
**IATA/ ICAO:** Not Regulated

**Not classified as dangerous in the meaning of transport regulations**

**XV. REGULATORY INFORMATION**

**SARA Title III Section 313:**

This material Does Not contain chemicals subject to the reporting requirements of the SARA Superfund Amendments and Reauthorization Act.

**SARA Section 302 - Extremely Hazardous Substances (EHS):**

This product DOES NOT contain any components regulated under Section 302 (40 CFR 355) as EHS.

**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.

**SARA Section 304 – CERCLA (Comprehensive Environmental Response, Compensation and Liability Act):**

This product DOES NOT contain any components that are reportable materials.

**TSCA Section 8(b) Inventory Status:**

All component(s) of this product are either exempt or listed on the TSCA Inventory.

**International Regulations**

**Reduction of Hazardous Substances (RoHS) Compliance:**

Directive 2002/95/EC of the European Parliament and of the Council of the European Union - Reduction of Hazardous Substances (RoHS) Compliance.

This product is compliant with the RoHS Directive

Canada (DSL) All components of this product are included on the Domestic Substance List or are not required to be listed on the DSL.

**U.S. State Regulations**

**California Proposition 65:**


This product contains chemicals known by the state of California to cause birth defects and/or other reproductive harm.

|                 |              |          |
|-----------------|--------------|----------|
| <u>Chemical</u> | <u>CAS #</u> | <u>%</u> |
|-----------------|--------------|----------|

|         |          |               |
|---------|----------|---------------|
| Toluene | 108-88-3 | Trace amounts |
|---------|----------|---------------|

**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.

|          |                |   |
|----------|----------------|---|
| <b>B</b> | Safety Glasses |  |
|          | Gloves         |   |