

Material Safety Data Sheet # 300
For Printing Inks and related Materials
OSHA Hazard Communication Standard, 29 CFR 1910.1200

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I. PRODUCT IDENTIFICATION

Manufacturer: Gans Ink and Supply Co, Inc. Address: 1441 Boyd Street Los Angeles, CA 90033 Emergency phone: (323) 264-2200	<p align="center">HMIS HAZARD IDENTIFICATION</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								
Product Class: UV Silkscreen Thermochromic Printing Ink	Manufacturer's code: Various, X102409,								
Trade Name: UV Silkscreen Plstc. Thermochromic Ink									

II. COMPOSITION / INGREDIENTS

Material	CAS #	%	Exposure Limits	Units
Tetrahydrofurfuryl Acrylate Ester 2-Methyl-1[4-(methylthio) phenyl]	2399-48-6	7-10	Not Established	
-2-(4-morpholinyl)-1-propanone	71868-10-5	9-11	Not Established	
Formaldehyde	50-00-0	0 - 0.015	OSHA PEL / TWA mg/m3 ACGIH TLV/ STEL	8 HR C 0.3 ppm
4,4' Isopropylidenediphenol	80-05-7	1- 3	Not Established	
oxybis(methyl-2,1-ethanediyl) Acrylate	57472-68-1	5.0	Not Established	

III. HEALTH HAZARD INFORMATION

Effects of Overexposure
Inhalation: Caution, avoid inhalation. Inhalation of mist or vapor may cause irritation of respiratory tract.
Skin Contact: Avoid contact with skin. May cause irritation of skin. Suspect skin sensitization hazard. Contains materials that might be slightly toxic.
Eye Contact: Moderate irritant. Can cause burning sensation, tearing, swelling, and redness. Injury may persist for several days.
Ingestion: Harmful if swallowed. May irritate the mouth, throat, and gastrointestinal tract. Ingestion may cause nausea and vomiting.

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.
Skin: Remove contaminated clothing. Wash contaminated area thoroughly with soap and water. If redness or irritation occurs, seek medical attention.
Inhalation: If breathing has stopped or is irregular, administer artificial respiration and supply oxygen if it is available. Seek medical attention. If victim is unconscious, remove to fresh air and seek medical attention.
Ingestion: Do not induce vomiting. If swallowed seek medical advise immediately. 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: Not Determined
Flammable Limits in Air (% Volume)	Lower Limit: N/A	Upper Limit: N/A
<p>Extinguishing Media: Use water fog, foam, CO₂, or dry chemical extinguishing media.. DO NOT use High volume water jet.</p> <p>Special Fire Fighting Procedures: Remove all ignition sources. Wear self-contained apparatus and complete personal protective equipment when entering confined areas. Do not use a solid water stream as it may scatter and spread the fire.</p> <p>Unusual Fire & Explosion Hazard: High temperatures and fire conditions may cause rapid and uncontrolled polymerization which can result in explosions and the violent rupture of storage vessels. Closed containers may rupture or explode during runaway polymerization</p>		

VI. ACCIDENTAL RELEASE

Steps to be taken in event of spill or release: Remove all ignition sources and ventilate area, as spilled material may polymerize. Move leaking containers to a ventilated area. Stop the discharge if it can be performed safely and contain the material. Soak up small spills with inert solids such as vermiculite, clay or sand. Place the material in a suitable container for disposal. DO NOT flush to the sewer!

VII. HANDLING AND STORAGE

<p>Handling and Storage: Store in containers in a cool, well-ventilated area. Keep away from sources of ignition, heat, flame, sparks, strong oxidizers, radiation, and other initiators. Prevent contamination by foreign materials. Store away from sunlight and ultraviolet lights. To ensure optimal product stability, store between 40°F and 122°F.</p> <p>Other Precautions: For industrial use only. Do not ingest. 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. Avoid prolonged contact with skin, contact with eyes, and breathing of mist or vapor</p>

VIII. EXPOSURE CONTROLS AND PERSONAL PROTECTION

<p>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.</p>
<p>Personal Protective Equipment</p>
<p>Respirator: 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>Skin: Use impervious synthetic rubber clothing (boots, gloves, etc.) over parts of the body subject to exposure. Wash hands before eating, drinking, smoking or using toilet facilities.</p>
<p>Eye: Eye protection, such as chemical splash goggles and or face shield must be worn when possibility exists for eye contact due to splashing or spraying liquid, vapor or airborne particles.</p>

IX. PHYSICAL AND CHEMICAL DATA

Boiling Range °F: > 200	Vapor Density (Air = 1): < 1
Relative Density (H₂O = 1): 1.10	Vapor Pressure (mm Hg @ 70°F): Slower than Butyl Acetate
Material Density Lbs./Gal: 9.18	Solubility in Water: Insoluble
%Volatiles by Weight: <1	% Solids by Weight: >99
VOC: lbs/gal < 0.09 g/L: <11.0	Appearance/Odor: Colored dispersion / acrylic odor

X. STABILITY AND REACTIVITY INFORMATION

Stability (Thermal, Light, etc.): Stable	Conditions to avoid: Storage >122°F, exposure to light, loss of dissolved air, loss of polymerization inhibitor, contamination with incompatible materials. Sources of ignition, heats, sparks, open flame.
Hazardous Polymerization: High temperatures (greater than 122°F) and an oxygen deficient atmosphere reduce the inhibitor's effectiveness and may cause polymerization, thus raising the temperature and pressure, which may cause the container to rupture. DO NOT blanket or mix with nitrogen or any other inert gas as this renders the inhibitor ineffective.	Materials to avoid: Strong oxidizers, initiators, strong peroxides, strong alkalies or reactive metals to prevent exothermic polymerization.
Hazardous Decomposition Products: CO ₂ , 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

<p>Waste Disposal Method: 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 from the following options which are listed in order of environmental acceptability:</p> <ol style="list-style-type: none">1) Recycle or rework the material if at all possible.2) Incinerate at an authorized facility.3) Treat at an acceptable waste treatment facility <p>If this product is fully polymerized into a solid, it may be considered inert and disposed of as a non-hazardous material.</p>

XIV. TRANSPORT INFORMATION

Flammability Classification: OSHA: Class III B DOT: Not Regulated
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XV. REGULATORY INFORMATION

SARA Title III Section 313: This material may contain a chemical subject to the reporting requirements of the SARA Superfund Amendments and Reauthorization Act.			
<u>Chemical</u>	<u>CAS#</u>		
Formaldehyde	50-00-0	0 – 0.015 %	Trace Amounts
4,4'-Isopropylidenediphenol	80-05-7	1 - 3 %	
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 contains a chemical known by the state of California to cause cancer and/or reproductive harm.

<u>Chemical</u>	<u>CAS#</u>	
Toluene	108-88-3	Trace Amounts
Formaldehyde	50-00-0	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.