

Material Safety Data Sheet # 194
For Printing Inks and related Materials
OSHA Hazard Communication Standard, 29 CFR 1910.1200

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 Supersedes: 6/02

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 Thermochromic Flexo Printing Ink	Manufacturer's code: Various								
Trade Name: Thermoflex									

II. COMPOSITION / INGREDIENTS

Material	CAS #	%	Exposure Limits	Units
Acrylates, Mixtures	Not Available	4-31%	Not Established	
Resin Mixtures	Not Available	0-6	Not Established	
Photoinitiators, Mixtures	Not Available	3-4	ACGIH/ TLV	5 mg/M ³
Pigments, Mixtures	Not Available	0-14	ACGIH/ TLV OSHA / PEL	3.5 mg/M ³ 3.5 mg/M ³

- 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.
Skin Contact: No specific information available. 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: May irritate the mouth, throat, and gastrointestinal tract.

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 handle, 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. 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 if aspiration. Gastrointestinal discomfort may develop, followed by vomiting, with risk of aspiration.

V. FIRE AND EXPLOSION DATA

Flash Point °F: >200 F		Auto-ignition Temperature °F: Not Determined
Flammable Limits in Air (% Volume)	Lower Limit: No Data	Upper Limit: No Data
Extinguishing Media: Use water fog, foam, CO ₂ , or dry chemical extinguishing media.		
Special Fire Fighting Procedures: Remove all ignition sources. Wear self-contained apparatus and complete personal protective equipment when entering confined areas.		
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. Avoid the use of a stream of water to control fires since frothing can occur.		

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 a ventilated area. Stop the discharge if it can be performed safely and contain the material. Place the material in a suitable container for disposal. DO NOT flush to the sewer!

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 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.

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

Boiling Range °F: >200	Vapor Density (Air = 1): > 1
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Relative Density (H₂O = 1): 0.98-1.15	Vapor Pressure (mm Hg @ 70°F): Slower than Butyl Acetate
Material Density Lbs./Gal: 8.18 -9.60	Solubility in Water: Insoluble
% Volatiles by Weight: <1	% Solids by Weight: 99-100
VOC: lbs/gal: <0.09 g/L: 11.5	Appearance/Odor: colored paste/slight acrylic odor

X. STABILITY AND REACTIVITY INFORMATION

Stability (Thermal, Light, etc.): Stable	Conditions to avoid: Storage >140°F, exposure to light, loss of dissolved air, loss of polymerization inhibitor, contamination with incompatible materials.
Hazardous Polymerization: High temperatures (>140oF) 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.	Materials to avoid: Contamination with incompatible materials. Avoid initiators including peroxides; avoid strong oxidizing agents, copper, copper alloys, carbon steel, iron, rust, nickel, cobalt, strong bases.
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: If discarded in its original unused form, this product does NOT exhibit the characteristics of an 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 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

<p>Flammability Classification: OSHA: Class III B DOT: Not Regulated</p>

XV. REGULATORY INFORMATION

<p>SARA Title III Section 313: This material may contain chemicals subject to the reporting requirements of the Superfund Amendments and Reauthorization ACT (SARA). Please refer to Gans supplier notification letter dated 3/1/89, updated 6/13/02.</p>

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 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.