

**I. PRODUCT IDENTIFICATION**

Manufacturer: Gans Ink and Supply Co, Inc. Address: 1441 Boyd Street Los Angeles, CA 90033  Emergency phone: (323) 264-2200	<b>HMIS HAZARD IDENTIFICATION</b>  Health 2  Flammability 1  Reactivity 2
<b>Product Class:</b> UV Silkscreen Thermochromic Printing Ink	<b>Manufacturer's code:</b> Various
<b>Trade Name:</b>	

**II. HAZARDOUS INGREDIENTS**

Material	CAS #	%	Exposure Limits	Units
Acrylate mixtures	Proprietary	52-56	Not Established	
Tetrahydrofurfuryl Acrylate Ester	2399-48-6	7-10	Not Established	
2-Methyl-1[4-(methylthio) phenyl]-2-(4-morpholinyl)-1-propanone	71868-10-5	9-11	Not Established	

**III. PHYSICAL DATA**

<b>Boiling Range °F:</b> >200	<b>Vapor Density (Air = 1):</b> <1
<b>Relative Density (H<sub>2</sub>O = 1):</b> 1.10	<b>Vapor Pressure (mm Hg @ 70°F):</b> Slower than Butyl Acetate
<b>Material Density Lbs./Gal:</b> 9.18	<b>Solubility in Water:</b> Insoluble
<b>% Volatiles by Weight:</b> <1	<b>% Solids by Weight:</b> >99
<b>VOC Lbs/Gal:</b> < 0.09; <b>g/L:</b> <11.0	<b>Appearance/Odor:</b> Colored dispersion / acrylic odor

**IV. FIRE AND EXPLOSION DATA**

<b>Flash Point °F:</b> >200°F	<b>Auto-ignition Temperature °F:</b> Not determined
<b>Flammable Limits in Air</b>	<b>Lower Limit:</b> N/A <b>Upper Limit:</b> N/A
<b>Extinguishing Media:</b> Use water fog, foam, CO <sub>2</sub> , or dry chemical extinguishing media.	
<b>Special Fire Fighting Procedures:</b> Remove all ignition sources. Wear self-contained apparatus and complete personal protective equipment when entering confined areas.	
<b>Unusual Fire &amp; Explosion Hazard:</b> 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.	

**V. HEALTH HAZARD INFORMATION**

<b>Effects of Overexposure</b>
<b>Inhalation:</b> Not expected to be a hazard due to low volatility under standard conditions. Inhalation of mist or vapor may cause irritation of respiratory tract.
<b>Skin Contact:</b> No specific information available. Contains materials that might be slightly toxic.
<b>Eye Contact:</b> Moderate irritant. Can cause burning sensation, tearing, swelling, and redness. Injury may persist for several days.
<b>Ingestion:</b> May irritate the mouth, throat, and gastrointestinal tract.
<b>Emergency &amp; First Aid Procedures</b>
<b>Eyes:</b> Immediately flush eyes with large amounts of water and continue flushing for 15 minutes until irritation subsides. If irritation persists, seek medical attention.
<b>Skin:</b> Remove contaminated clothing. Wash contaminated area thoroughly with soap and water. If redness or irritation occurs, seek medical attention.
<b>Inhalation:</b> 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 of aspiration. Gastrointestinal discomfort may develop, followed by vomiting, with risk of aspiration.

#### VI. 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 (greater than 140°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.

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

#### VII. ENVIRONMENTAL PRECAUTIONS

**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!

**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:

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

If this product is fully polymerized into a solid, it may be considered inert and disposed of as a non-hazardous material.

#### VIII. SPECIAL PROTECTION INFORMATION

**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. SPECIAL PRECAUTIONS

**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.

#### X. SHIPPING DATA

##### Flammability Classification:

**OSHA:** Class III B

**DOT:** Not Regulated

#### XI. ADDITIONAL NOTES

##### 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.

The data on this MSDS are based on the information furnished by our raw material suppliers; consequently, Gans Ink and Supply Co, Inc. cannot guarantee its accuracy, nor assume liability of any kind.