Material Safety Data Sheet # 203.16
For Printing Inks and related Materials
OSHA Hazard Communication Standard, 29 CFR 1910.1200

Date of preparation: 02/10/09
Updated: 10/14/2011
MSDS #: 203.16

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 2 Personal Protection B
Product Class: Lithographic UV Printing Ink	**Manufacturer's code:** Various, including UV14331-34, UV14428- 31, UV14446, UV14447 to UV14450, UV14521-24, UV12904-07, UV15311, UV15509
Trade Name: Smartcure Inks	

II. COMPOSITION / INGREDIENTS

Material	CAS #	%	Exposure Limits	Units
Acrylate mixtures	Not available	4-31	Not Established	
Resin mixtures	Not available	0-6	Not Established	
Photoinitiator mixtures	Not available	3-4	ACGIH PEL	5 mg/M^3

III. HEALTH HAZARD INFORMATION

Effects of Overexposure
Inhalation: Avoid inhalation. Suspect respiratory tract irritation hazard. Inhalation of mist or vapor may cause irritation of respiratory tract.
Skin Contact: Contains materials that may cause moderate skin injury (reddening and swelling) and/or sensitization. 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
Eye Contact: Severe 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. Seek medical attention.
Skin: Remove contaminated clothing. Wash contaminated area thoroughly with soap and water. If redness or irritation occurs, seek medical attention. Launder clothing before reuse.
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. 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.
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		**Auto-ignition Temperature °F:** No Data
Flammable Limits in Air	**Lower Limit:** No Data	**Upper Limit:** No Data
Extinguishing Media: Use water fog, 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. **Unusual Fire & Explosion Hazard:** 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.		

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. Wear personal protective clothing, gloves and glasses. Stop discharge, if it can be performed safely, and contain material. Place in a suitable container for disposal. **Do NOT** allow to sewer, drains or waterways.

VII. HANDLING AND STORAGE

Handling and Storage: Store in containers in a cool, well-ventilated area. Avoid prolonged contact with skin, contact with eyes, and breathing of mist or vapor. Wear impervious gloves, apron and glasses or goggles when handling.
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.

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 in 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: For exposures, use impervious synthetic rubber clothing (boots, gloves, etc.) over parts of the body subject to exposure. Individuals with pre-existing skin disorders can be at greater risk. Those known to be sensitized to Acrylate should avoid all exposure to this product. Safety showers are recommended.
Eye: If material is handled such that it could be splashed into eyes, wear plastic face shield or splash-proof safety glasses or goggles. Individuals with pre-existing eye disorders can be at greater risk. Those known to be sensitized to Acrylate should avoid all exposure to this product. Eyewash stations are recommended.

IX. PHYSICAL AND CHEMICAL DATA

Boiling Range °F: > 200 °F	**Vapor Density (Air = 1):** > 1
Relative Density (H_2O = 1): 0.95 – 1.15	**Vapor Pressure (mm Hg @ 68°F):** Slower than Butyl Acetate

Material Density Lbs./Gal: 7.91 – 9.58	**Solubility in Water:** Insoluble
%Volatiles by Weight: < 1	**% Solids by Weight:** 99 - 100
VOC: lbs/gal: < 0.09 **g/L:** 1.03	**Appearance/Odor:** Colored paste

X. STABILITY AND REACTIVITY INFORMATION

Stability (Thermal, Light, etc.): Stable under normal conditions of intended use.	**Conditions to avoid: Do Not** store above 140°F (60°C). Avoid exposure to ultra violet and /or sunlight.. Avoid sources of ignition.
Hazardous Polymerization: High temperatures (>140°F) and oxygen deficient atmosphere reduce inhibitors 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:** Initiators including peroxides, strong oxidizing agents, copper, copper alloys, carbon steel, iron, rust, nickel, cobalt and strong bases.
Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide 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. As with all chemicals, keep out of waterways, drains or sewers.

XIII. DISPOSAL INFORMATION

Waste Disposal Method: 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:
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:
OSHA: Class III B
DOT: Not Regulated
ICAO/ IATA: Not Regulated
IMDG/ IMO: Not Regulated

XV. REGULATORY INFORMATION

U.S. Federal Regulations

SARA Superfund Amendments and Reauthorization Act of 1986 Title III Section 313:
Any ingredient that is a "toxic chemical" and is in this mixture in excess of 1% (0.1% if listed as a

carcinogen) will be indicated in Section II of this MSDS.

Section 302 – Extremely hazardous substances: 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.

CONEG: Coalition of Northeast Governors: This product meets the Coalition of Northeast Governors (CONEG) Source Reduction Council limits for the sum of the levels of Lead, Cadmium, Mercury and Hexavalent Chromium of less than 100 parts per million by weight.

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.

Toluene Trace Amount.

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.

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		Safety Glasses Gloves