

Material Safety Data Sheet # 268
For Printing Inks and related Materials
OSHA Hazard Communication Standard, 29 CFR 1910.1200

Date of preparation: 3/4/09
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 MSDS #: 268

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>1</td> </tr> <tr> <td>Flammability</td> <td>1</td> </tr> <tr> <td>Reactivity</td> <td>1</td> </tr> <tr> <td>Personal Protection</td> <td>B</td> </tr> </table>	Health	1	Flammability	1	Reactivity	1	Personal Protection	B
Health	1								
Flammability	1								
Reactivity	1								
Personal Protection	B								
Product Class: Lithographic Sublimation Ink	Manufacturer's code: Various, including G018689, G018674, C018343- 46, C018608- 11, A137132, G019184								
Trade Name: OS LO-VOC Pyroscrip Ink									

II. COMPOSITION / INGREDIENTS

Material	CAS #	%	Exposure Limits	Units
4-Piperidinol,1,2,2,6,6,-pentamethyl-	2403-89-6	0.2 0	Not Established	
bis(1,2,2,6,6,-Pentamethyl-4-piperidinyl) sebacate	41556-26-7	1.6	Not Established	
Methyl (1,2,2,6,6-pentamethyl-4 Piperidinyl) sebacate	82919-37-7	0.40	Not Established	
Above items are of one ingredient in various inks.				

III. HEALTH HAZARD INFORMATION

<p>Effects of Overexposure</p>
<p>Inhalation: This product has a low vapor pressure and is not expected to present an inhalation hazard at ambient conditions. Caution should be taken to prevent aerosolization or misting of this product. The threshold limit value (TLV) for this product as oil mist is 5 mg/M³. Exposures below 5 mg/M³ appear to be without significant health risk. Acute overexposure may result in irritation of the throat and lungs. 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.</p>
<p>Skin Contact: Avoid skin contact. This product is slightly irritating to the skin upon direct contact. 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.</p>
<p>Eye Contact: Avoid eye contact. This product may be slightly irritating to the eyes upon direct contact. This product has a low vapor pressure and is not expected to present a hazard to the eyes at ambient conditions. Exposure to high concentrations of vapors may be irritating to the eyes.</p>
<p>Ingestion: Do not ingest. Ingestion of small quantities is usually nonfatal unless aspiration occurs. 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 followed by death may result. See <i>Notes to Physician</i> section below.</p>

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 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. Seek immediate medical attention. Never give anything to an unconscious person.
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: > 220 F	Auto-ignition Temperature °F: No Data	
Flammable Limits in Air (% Volume)	Lower Limit: 1.1	Upper Limit: No Data
Extinguishing Media: Use water fog, foam, CO ₂ , or dry chemical extinguishing media.		
Special Fire Fighting Procedures: Water may be ineffective, but can be used to cool containers exposed to heat or flame. Self contained breathing apparatus is recommended for fire fighters.		
Unusual Fire & Explosion Hazard: Dense smoke may be generated while burning; carbon dioxide, carbon monoxide, and other oxides may be generated as products of combustion.		

VI. ACCIDENTAL RELEASE

Steps to be taken in event of spill or release: Cover with an absorbent material, vermiculite, sand etc. Scrape up with trowel or scoop and place in a suitable container. Clean up with a suitable solvent. Keep out of waterways

VII. HANDLING AND STORAGE

Handling and Storage: Store in containers in a cool, well-ventilated area. Keep away from sources of ignition and open flame. Keep containers closed when not in use. Avoid prolonged contact with skin, contact with eyes, and breathing of mist or vapor. Always wash hands and face with soap and water before eating, drinking, and smoking.
Other Precautions: For industrial use only. Do not ingest. Consumption of food and beverages should be avoided in work areas where hydrocarbons are present.

VIII. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Ventilation Requirements: <u>During application or printing:</u> 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. Consult Federal and State regulations, and ASHRAE standards for guidance. <u>During sublimation transfer:</u> Vapor mist (mostly water vapor) will be present and adequate industrial ventilation is recommended and may be required by Federal and State regulations.
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: No skin protection is required for single, short duration exposures. For prolonged exposures, use impervious synthetic or chemical resistant gloves.

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: 550 – 700 F	Vapor Density (Air = 1): > 1
Relative Density (H₂O = 1): 1.0 – 1.09	Vapor Pressure (mm Hg @ 70°F): 0.1
Material Density Lbs./Gal: 8.35 – 9.10	Solubility in Water: Insoluble
%Volatiles by Weight: 1 - 4	% Solids by Weight: 96 - 99
VOC: lbs/gal: .36 g/L: 43.6	Appearance/Odor: Colored paste

X. STABILITY AND REACTIVITY INFORMATION

Stability (Thermal, Light, etc.): Stable	Conditions to avoid: Excessive heat, open flame, sources of ignition.
Hazardous Polymerization: Will not occur.	Materials to avoid: Contact with strong oxidizers.
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

Toxicological Information for ingredient listed in Section II.

Acute Oral Toxicity: LD50 3125 mg/kg (Rats)

Skin Sensitization: Maximization test: Strong sensitizer (20/20 positive): Guinea pig

XII. ECOLOGICAL INFORMATION

This product has not been evaluated at this time; however one component of this product is hazardous to the environment. See Section II. This makes up a very small fraction of the ingredients.

Toxicity to Fish: LC50: 0.97 mg/L 96 hour (Bluegill)
LC50 7.9 ppm 96- hour, Rainbow trout)

Toxicity to Invertebrates: EC50: 20 ppm 24 hour (Daphnia magna)

Releases to the environment are to be avoided. Keep out of waterways.

XIII. DISPOSAL INFORMATION

Waste Disposal Method: If recycling as ink is not possible, material may be incinerated or land filled at a licensed facility in accordance with local, state, and federal regulations.

XIV. TRANSPORT INFORMATION

Flammability Classification:

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 product does not contain any substance in quantities which must be reported under the supplier notification requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372).

SARA Section 302 - Extremely Hazardous Substances (EHS):

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

TSCA Section 8(b) Inventory Status:

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

Clean Air Act Amendment (HAPs)

This product does not contain any substances which are defined as Hazardous Air Pollutants under Title III of the Clean Air Act Amendments of 1990.

FDA:

This product is not registered with the FDA.

U.S. State Regulations

California Proposition 65:

This product does not 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.