

**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 1  Flammability 1  Reactivity 0
<b>Product Class:</b> Lithographic Printing Ink	<b>Manufacturer's code:</b> X101350, X101406, et al
<b>Trade Name:</b> OS Pen Reactive Ink	

**II. HAZARDOUS INGREDIENTS**

Material	CAS #	%	Exposure Limits	Units
Technical White Oils	8042-47-5	20-25	OSHA PEL ACGIH TLV	No Limit No Limit

**III. PHYSICAL DATA**

<b>Boiling Range °F:</b> 350-700	<b>Vapor Density (Air = 1):</b> 4.9
<b>Relative Density (H<sub>2</sub>O = 1):</b> 1.03	<b>Vapor Pressure (mm Hg @ 70°F):</b> 0.1
<b>Material Density Lbs./Gal:</b> 8.60	<b>Solubility in Water:</b> Insoluble
<b>% Volatiles by Weight:</b> 20-25	
<b>VOC lbs/gal:</b> 2.15 max. <b>g/L:</b> 258	<b>Appearance/Odor:</b> Paste

**IV. FIRE AND EXPLOSION DATA**

<b>Flash Point °F:</b> 240	<b>Auto-ignition Temperature °F:</b> 428 ASTM E-659
<b>Flammable Limits in Air</b>	<b>Lower Limit:</b> 1.1 <b>Upper Limit:</b> 6.0
<b>Extinguishing Media:</b> Use water fog, foam, CO <sub>2</sub> , or dry chemical extinguishing media.	
<b>Special Fire Fighting Procedures:</b> Water may be ineffective, but can be used to cool containers exposed to heat or flame.	
<b>Unusual Fire &amp; Explosion Hazard:</b> Dense smoke may be generated while burning, carbon dioxide, carbon monoxide, and other oxides may be generated as products of combustion.	

**V. HEALTH HAZARD INFORMATION**

<b>Effects of Overexposure</b>
<b>Inhalation:</b> 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/M <sup>3</sup> . Exposures below 5 mg/M <sup>3</sup> 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.
<b>Skin Contact:</b> Avoid skin contact. This product is non-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.
<b>Eye Contact:</b> 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.
<b>Ingestion:</b> 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 Notes to Physician section below.

<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 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.
<b>Ingestion:</b> Do not induce vomiting. Seek immediate medical attention.
<b>Notes to Physician:</b> 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

<b>Stability (Thermal, Light, etc.):</b> Stable	<b>Conditions to avoid:</b> Excessive heat and strong oxidizers.
<b>Hazardous Polymerization:</b> Will not occur	<b>Conditions to avoid:</b> None
<b>Hazardous Decomposition Products:</b> CO <sub>2</sub> , CO, and other oxides may be generated as products of combustion.	

#### VII. ENVIRONMENTAL PRECAUTIONS

<b>Steps to be taken in event of spill or release:</b> Scrape up with trowel or scoop and place in a suitable container. Clean up with a suitable solvent.
<b>Waste Disposal Method:</b> 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.

#### VIII. SPECIAL PROTECTION INFORMATION

<b>Ventilation Requirements:</b> 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.
<b>Personal Protective Equipment</b>
<b>Respirator:</b> 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.
<b>Skin:</b> 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.
<b>Eye:</b> 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

<b>Handling and Storage:</b> 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.
<b>Other Precautions:</b> For industrial use only. Do not ingest. Avoid prolonged contact with skin, contact with eyes, and breathing of mist or vapor.

#### X. SHIPPING DATA

<b>Flammability Classification:</b> <b>OSHA:</b> Class III B <b>DOT:</b> Not Regulated
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#### XI. ADDITIONAL NOTES

<b>SARA Title III Section 313:</b> 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.
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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.