



**Material Safety Data Sheet # 204.4**  
**For Printing Inks and related Materials**  
**OSHA Hazard Communication Standard, 29 CFR 1910.1200**

Date of preparation: 2/5/2013  
 MSDS#: 204.4

**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>								
	<table border="1"> <tr><td>Health</td><td>2</td></tr> <tr><td>Flammability</td><td>1</td></tr> <tr><td>Reactivity</td><td>0</td></tr> <tr><td>Personal Protection</td><td>C</td></tr> </table>	Health	2	Flammability	1	Reactivity	0	Personal Protection	C
Health	2								
Flammability	1								
Reactivity	0								
Personal Protection	C								
<b>Product Class:</b> Water- base Jet Ink, Sublimation	<b>Manufacturer's code:</b> F-9100 C,M,Y								
<b>Trade Name:</b> PyroJet Global 4 Ink Series									

**II. HAZARDOUS INGREDIENTS**

Material	CAS #	%	Exposure Limits	Units
Glycerol *200-289-5	56-81-5	35 – 40	OSHA PEL/TWA total mist 15 mg/m3 Respirable Fraction 5mg/m3 ACGIH TLV/TWA 10mg/m3 (vapor) Xn, R36, R20/21/22	
*EINECS				
<b>Relevant Phrases:</b> For the wording of risk phrases refer to Section XVI				
				
May cause allergic skin reaction		Cause Skin And Eye Irritation		

**III. HEALTH HAZARD INFORMATION**

Effects of Overexposure
<b>Inhalation:</b> Avoid inhalation of mist or vapor. May result in irritation of the nose, throat and lungs. Irritating to respiratory system. Can cause difficulty breathing with shortness of breath, nausea, headache, drowsiness, dizziness, pulmonary congestion and unconsciousness. Prolonged or repeated inhalation can cause toxic effects on blood, and liver disease.
<b>Skin Contact:</b> Avoid skin contact. A component of this product is 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 is irritating to the eyes upon direct contact. Exposure to high concentrations of vapors can cause serious eye irritation and damage to eyes.
<b>Ingestion:</b> Do not ingest. 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, kidney failure, and blood disorders. Loss of consciousness and convulsions followed by death may result. See <i>Notes to</i>

Physician section below.

#### IV. FIRST AID PROCEDURES

##### Emergency & First Aid Procedures

**Eyes:** Remove contact lenses if present and easy to do. Immediately flush eyes with large amounts of water, lifting upper lids. 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. Thoroughly launder clothing and clean shoes before reuse.

**Inhalation:** 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. If vomiting occurs, turn head to side and keep head lower than hips to prevent aspiration. Seek immediate medical attention. Never give anything by mouth 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

<b>Flash Point °F:</b> > 230 °F (110 °C)	<b>Auto-ignition Temperature °F:</b> No Data	
<b>Flammable Limits in Air (% Volume)</b>	<b>Lower Limit:</b> No Data	<b>Upper Limit:</b> No Data
<b>Extinguishing Media:</b> Use water fog or spray, Alcohol resistant foam, CO <sub>2</sub> , or dry chemical extinguishing media.		
<b>Special Fire Fighting Procedures:</b> Firefighters use protective clothing and self contained breathing apparatus. Fight large fires with foam. Move containers from fire if it can be done safely, without risk. Water may be used to cool containers exposed to heat or flame. Collect contaminated fire water separately. Do not allow to enter sewers.		
<b>Unusual Fire &amp; Explosion Hazard:</b> Formation of toxic or corrosive gases is possible during heating in fire, and can cause irritation. A mixture of vapor and air can be explosive at above a certain ignition point. Vapor or gas can spread instantly after being ignited from a distance. Vapor is heavier than air. Halogen gas can be produced when it contacts metal. 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:** Ventilate area. Stay upwind. Wear protective equipment, clothing and gloves. Keep all unnecessary personnel away. Eliminate all ignition sources. Absorb with dry earth, sand or vermiculite. Scrape up with trowel or scoop and place in a suitable container for disposal. For large spills, dike area. Clean up with a suitable solvent. Dispose of in accordance with local, state and Federal regulations. Do Not allow product to enter drains, waterways or sewers.

#### VII. HANDLING AND STORAGE

**Handling and Storage:** Store in containers in a cool, well-ventilated area. Wear protective gloves, apron, and eye protection when handling. Avoid inhalation. Keep containers closed when not in use. Keep away from all ignition sources, open flame, sparks, static electricity. Do not cut, weld, solder near product. Keep all equipment grounded. Use spark- proof tools and equipment. Avoid contact with halogen or halogen compounds and other incompatible substances. Consumption of food and beverages should be avoided in work areas. Always wash hands and face with soap and water before eating, drinking, and smoking.

**Other Precautions:** For industrial use only. Do not ingest. Empty containers can contain residue which can be dangerous. Avoid prolonged contact with skin, contact with eyes, and breathing of mist or vapor.

### VIII. EXPOSURE CONTROLS AND PERSONAL PROTECTION

<p><b>Ventilation Requirements:</b>  <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.</p>
<p><b>Personal Protective Equipment</b></p>
<p><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.</p>
<p><b>Skin:</b> Use impervious chemical resistant protective gloves when handling product. Wear protective work clothing or apron over parts of body subject to exposure. Always wash hands and face with soap and water after handling product. Safety showers are recommended.</p>
<p><b>Eye:</b> Eye protection is required under conditions of normal use. If material is handled such that it could be splashed into eyes, wear plastic face shield or splash-proof safety goggles. Eye wash stations are recommended.</p>

### IX. PHYSICAL AND CHEMICAL DATA

<b>Boiling Range °F:</b> > 212 °F (100 °C)	<b>Vapor Density (Air = 1):</b> > 1
<b>Relative Density (H<sub>2</sub>O = 1):</b> 1.06	<b>Vapor Pressure (mm Hg @ 68°F):</b> No Data
<b>Material Density Lbs./Gal:</b> 8.83	<b>Solubility in Water:</b> Miscible
<b>% Volatile Organic Compounds (VOC) by Weight:</b> 0	<b>Viscosity:</b> 2.9 –4.1 cP <b>pH:</b> 7.6 – 9.2
<b>VOC: lbs/gal:</b> 0 <b>g/L:</b> 0	<b>Appearance/Odor:</b> Colored Liquid / Mild odor

### X. STABILITY AND REACTIVITY INFORMATION

<b>Stability (Thermal, Light, etc.):</b> Stable under recommended storage and handling conditions.	<b>Conditions to avoid:</b> Excessive heat, open flame, sources of ignition and excessive cold. Store in temperatures 50 – 90 °F. Protect from direct sunlight
<b>Hazardous Polymerization:</b> Will not occur.	<b>Materials to avoid:</b> Contact with strong oxidizers, acids, bases, peroxides, metallic oxides, reducing agents, halogens, mineral salt, and inflammable materials.
<b>Hazardous Decomposition Products:</b> CO <sub>2</sub> , CO, sulfur, nitrogen and other oxides, cyanide compounds, ammonia, peroxides may be generated as products of combustion.	

### XI. TOXICOLOGICAL INFORMATION

<b>CARCINOGEN:</b> 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).	
<b>Mutagen:</b>	No Data
<b>Teratogen:</b>	No Data
<b>Reproductive Toxicity:</b>	No Data
Derma (Rabbit) I: Irritation to skin	
Oral (Rabbit): Irritation to eyes: can develop temporary corneal opacity with pain to humans.	

### XII. ECOLOGICAL INFORMATION

No Data available at this time. As with all chemicals and products, do Not allow to enter drains, waterways or sewers.
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### 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

<b>Flammability Classification:</b>	Combustible
<b>OSHA:</b>	Class III B
<b>DOT Hazard Name:</b>	Not Regulated
<b>DOT Shipping Name (ground):</b>	Not Regulated
<b>HMDG Hazard Classification (ocean):</b>	Not Regulated
<b>IMO/ IMDG Marine Pollutant:</b>	No
<b>ICAO/ IATA Hazard Classification (air):</b>	Not Regulated

### XV. REGULATORY INFORMATION

**SARA Title III Section 313:**

This material does not contain chemicals subject to the reporting requirements of the SARA Superfund Amendment Act.

**Section 302 - Extremely Hazardous Substances (EHS):**

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

**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 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

**Relevant Phrases:**

R 20/21/22: Harmful by inhalation, contact with skin and if swallowed  
Xn; Harmful

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.

C

Safety Glasses  
Gloves  
Apron

