

I. PRODUCT IDENTIFICATION

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| Manufacturer: Gans Ink and Supply Co, Inc. Address: 1441 Boyd Street Los Angeles, CA 90033 Emergency phone: (323) 264-2200 | HMIS HAZARD IDENTIFICATION | | | | | | | | |
| | <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>B</td></tr> </table> | Health | 2 | Flammability | 1 | Reactivity | 0 | Personal Protection | B |
| Health | 2 | | | | | | | | |
| Flammability | 1 | | | | | | | | |
| Reactivity | 0 | | | | | | | | |
| Personal Protection | B | | | | | | | | |
| Product Class: Lithographic Fountain Concentrate | Manufacturer's code: S-1809 | | | | | | | | |
| Trade Name: Universal F.S. | | | | | | | | | |

II COMPOSITION / INGREDIENTS

| Material | CAS # | % | Exposure Limits | Units |
|-----------------|----------|--------|------------------|---------|
| Butyl Oxitol | 111-76-2 | 7 - 13 | ACGIH TWA /TLV | 25 ppm |
| | | | ACGIH STEL /TLV | 75 ppm |
| | | | OSHA TWA / PEL | 25 ppm |
| Ethylene Glycol | 107-21-1 | 5 - 10 | ACGIH CEIL / TLV | 50 ppm |
| | | | OSHA PEL | 50 ppm |
| Isopropanol | 67-63-0 | 5 - 10 | ACGIH STEL /TLV | 500 ppm |
| | | | OSHA TWA | 400 ppm |

III. HEALTH HAZARD INFORMATION

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| Effects of Overexposure |
| Inhalation: Inhalation of excessive concentrations of vapors or mists may cause irritation of nose and throat, drowsiness, loss of coordination, headaches and fatigue. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage (sometimes referred to as Solvent or Painters Syndrome). Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. |
| Skin Contact: Avoid skin contact. This product may cause skin irritation. One or more components of this material is a skin irritant. Prolonged or repeated exposure to this product may cause redness, burning and drying of skin. This product may be absorbed through the skin. Prolonged or repeated contact may result in contact dermatitis which is characterized by dryness, chapping, and reddening. Pre-existing skin conditions may make the skin more susceptible and facilitate uptake by this route. |
| Eye Contact: Avoid eye contact. One or more components of this product may cause eye irritation. Direct contact with the liquid or exposure to vapors or mists may cause stinging, tearing, and swelling. |
| Ingestion: Do not ingest. One or more components of this product are toxic by ingestion. Symptoms of toxicity include; abdominal pain, nausea, vomiting, drowsiness, dizziness malaise, and loss of coordination, fatigue, possible blood disorders, and kidney and liver damage. One or more components is an aspiration hazard and can enter the lungs during swallowing or vomiting, and cause lung inflammation and damage. May aggravate existing kidney disease. See Notes to Physician section below. |

IV. FIRST AID PROCEDURES

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| Emergency & First Aid Procedures |
| Eyes: Immediately flush eyes with large amounts of water and continue flushing for 15 minutes. Seek immediate medical attention. |
| Skin: Remove contaminated clothing. Immediately wash contaminated area thoroughly with soap and water. If skin is damaged, apply dressing and immediately seek medical attention. |

Inhalation: Inhalation of excessive concentrations of vapors or mists may cause irritation of nose and throat, drowsiness, loss of coordination, headaches and fatigue. If any of these symptoms occur, remove victim from exposure. If breathing has stopped or is irregular, administer artificial respiration and supply oxygen if it is available and seek immediate medical attention.

Ingestion: Do not induce vomiting. Seek immediate medical attention. If patient is fully conscious, give him two glasses of water.

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

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| Flash Point °F: > 200 F | Auto-ignition Temperature °F: No Data | |
| Flammable Limits in Air | Lower Limit: No Data | Upper Limit: No Data |
| Extinguishing Media: Use water fog, foam, CO ₂ , or dry chemical extinguishing media. This product will not burn. | | |
| Special Fire Fighting Procedures: Water may be ineffective, but can be used to cool containers exposed to heat or flame. | | |
| Unusual Fire & Explosion Hazard: This material will not burn; the flashpoint is above 200 F. | | |

VI. ACCIDENTAL RELEASE

Steps to be taken in event of spill or release: Stop and contain discharge. Ventilate spill area. Cover with absorbent material. Scrape up with trowel or scoop and place in a suitable container. Keep out of waterways, sewers and drains.

VII. HANDLING AND STORAGE

Handling and Storage: Store in containers in a cool, well-ventilated area. Keep closed when not in use. Do not store in areas where excessive hot or cold temperatures. 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.

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 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: The use of gloves which are impermeable to the specific material handled is advised to prevent skin irritation and absorption.

Eye: Use approved eye protection to safeguard against potential eye contact, irritation, and injury, 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

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| Boiling Point °F: 212 F | Vapor Density (Air = 1): > 1 |
| Relative Density (H₂O = 1): 1.03 | Vapor Pressure (mm Hg @ 70°F): 0.1 |
| Material Density Lbs./Gal: 8.60 | Solubility in Water: Insoluble |
| %Volatiles by Weight: 19.8 | pH: 3.6 |
| VOC: as packaged Lbs/Gal: 1.7 Method 24 g/L : 204 This product must be diluted before application | Appearance/Odor: Glycolic / Blue Liquid |

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| Please see the product label for instructions. | |
| VOC as applied to image plate: <ul style="list-style-type: none"> • At 4 oz. S-1809 / gal. water: VOC= 6.2 g/L • At 6 oz. S-1909 / gal. water: VOC= 9.1 g/L | |

X. STABILITY AND REACTIVITY INFORMATION

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| Stability (Thermal, Light, etc.): Stable | Conditions to avoid: Excessive heat. |
| Hazardous Polymerization: Will not occur. | Materials to avoid: Strong acids |
| Hazardous Decomposition Products: CO ₂ , CO, and other oxides may be generated as products of combustion. | |

XI. TOXICOLOGICAL INFORMATION

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| 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

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| This product has not been evaluated at this time. |
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XIII. DISPOSAL INFORMATION

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| 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. Keep out of sewers, drains and waterways. |
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XIV. TRANSPORT INFORMATION

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| Flammability Classification: | |
| OSHA: | Class III B |
| DOT Shipping Name: | Aqueous Liquid |
| DOT Hazard Classification: | Non Hazardous Liquid |
| IMDG / IATA Shipping Name: | Non Hazardous Liquid |
| IMDG Hazard Classification: | Non Hazardous |
| IATA Hazard Classification: | Non Hazardous |

XV. REGULATORY INFORMATION

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| SARA Title III Section 313: | | |
| This material contains chemicals subject to the reporting requirements of the Superfund Amendments and Reauthorization ACT (SARA). | | |
| <u>Chemical</u> | <u>CAS #</u> | <u>%</u> |
| Butyl Oxitol | 111-76-2 | 7 – 13 |
| Ethylene Glycol | 107-21-1 | 5 - 10 |
| 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 intentionally 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. assume 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.