Material Safety Data Sheet # 303

For Printing Inks and related Materials
OSHA Hazard Communication Standard, 29 CFR 1910.1200

Date of preparation: 04/17/06
Updated: 12/5/2011
Supersedes: 8/19/09
MSDS#: 303

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 0 Reactivity 0 Personal Protection B
Product Class: Lithographic Fountain concentrate	**Manufacturer's code:** S-1803
Trade Name: Diamond Etch WT	

II. HAZARDOUS INGREDIENTS

Material	CAS #	%	Exposure Limits	Units
Ammonium Nitrate	6484-52-2	1 – 5	OSHA / PEL	10 ppm
			ACGIH TLV / TWA	10 ppm
			ACGIH STEL / TLV	15 ppm
Acetic Acid	64-19-7	1 – 5	OSHA PEL	NE
			ACGIH TLV / TWA	NE
			ACGIH STEL / TLV	NE
Sodium Hydroxide	1310-73-2	1 – 5	OSHA / PEL	2 mg/m3
			ACGIH TLV/ TWA	2 mg/m3
			ACGIH STEL / TLV	NE

The components listed are identified as hazardous chemicals based upon the criteria of the OSHA Hazard Communication Standard (29 CFR 1910. 1200)

NE= Not Established

III. HEALTH HAZARD INFORMATION

Effects of Overexposure
Inhalation: Avoid breathing of mists or vapors. Inhalation of excessive concentrations of vapors or mist may cause irritation of nose and throat, drowsiness, loss of coordination, headaches and fatigue. Acute overexposure may result in irritation of the throat and lungs.
Skin Contact: Avoid skin contact. Skin contact is expected to be the primary route of occupational exposure. One or more components of this material are a skin irritant. 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. This product may be absorbed through the skin. No chronic health hazards are associated with the components present in this product.
Eye Contact: Avoid eye contact. . One or more components of this product is an eye irritant. Direct contact with the liquid or exposure to vapors or mists may cause stinging, tearing and swelling. Exposure to high concentrations of vapors may be irritating to the eyes.
Ingestion: Do not ingest. (Swallowing) 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 of this product 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

Emergency & First Aid Procedures
Eyes: In case of eye contact, immediately flush eyes with large amounts of water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Seek immediate medical attention.
Skin: If product comes in contact with skin, immediately flush affected area with soap, water and remove contaminated clothing. Wash clothing before future reuse. If redness or irritation occurs or skin is damaged, apply dressing and seek immediate medical attention.
Inhalation: If breathing becomes difficult, remove victim to fresh air. If breathing stops, administer artificial respiration and supply oxygen if it is available. If victim is unconscious, remove to fresh air and seek immediate medical attention.
Ingestion: Obtain medical attention immediately. If victim is fully conscious, give two glasses of water. Do not induce vomiting.
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. Treat according to symptoms (decontamination, vital functions, etc.) There is no known specific antidote.

V. FIRE AND EXPLOSION DATA

Flash Point °F: > 200 °F (Closed Cup	**Auto-ignition Temperature °F:** No Data	
Flammable Limits in Air (% Volume)	**Lower Limit:** No Data	**Upper Limit:** No Data
Extinguishing Media: Use water fog, foam, CO_2, or dry chemical extinguishing media. **Special Fire Fighting Procedures:** Firefighters use self contained breathing apparatus, may produce hazardous gases during fire conditions. This product will not burn. **Unusual Fire & Explosion Hazard: Dense** smoke may be generated while burning; carbon dioxide, carbon monoxide, and oxides of nitrogen and sulfur may be generated as products of combustion.		

VI. ACCIDENTAL RELEASE

Steps to be taken in event of spill or release: Keep unnecessary personnel away from spill area. Ventilate area of spill. Use appropriate personal protective equipment. Absorb small spills with an inert absorbent material such as vermiculite, sand, dirt, etc. If large spill, dike off area before collecting for recovery or disposal. Scrape up with trowel or scoop and place in a suitable container for disposal. Dispose in accordance with local, state and federal regulations. Clean up with a strong detergent and water.
Keep all materials out of drains, sewers, 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. Keep containers closed when not in use. Do not store in areas with excessive hot or cold temperatures. Protect from temperatures above 105 °F / 40 °C or below 10° F / -12 °C. Protect from freezing. Wear chemical safety goggles or glasses, apron and impervious gloves when handling. 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. Avoid prolonged contact with skin, contact with eyes, and breathing of mist or vapor.

VIII. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Ventilation Requirements: General room ventilation is adequate. 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 /MSHA certified. Do not use compressed oxygen in hydrocarbon atmospheres.
Skin: Use impervious gloves when handling. Use a chemical resistant apron when handling. Provide readily accessible safety showers.
Eye: Eye protection is required under conditions of normal use. Safety glasses, full face shield or chemical safety goggles are recommended to prevent eye contact. Eye protection should meet specifications of ANSI Z87. Provide readily accessible eye wash stations.

IX. PHYSICAL AND CHEMICAL DATA

Boiling Range °F: 212 °F	**Vapor Density (Air = 1):** > 1
Relative Density (H_2O = 1): 1.06	**Evaporation Rate:** < Water
Material Density Lbs./Gal: 8.80	**Solubility in Water:** Soluble
% Volatile Organic Compounds (VOC) by Weight: 2.3	**pH:** 4.1 ± 0.2 **Vapor Pressure:** No Data
VOC as packaged: **VOC Lbs/Gal:** 0.20 **g/L:** 24.1 This product must be diluted before application. Please see the product label for instructions. VOC as applied to image plate: • At 3 oz. S – 1803 / gal. water**: VOC**= .05% At 4 oz. S – 1803 / gal. water: **VOC=** .07%	**Appearance/Odor:** Glycolic / Green Clear Liquid

X. STABILITY AND REACTIVITY INFORMATION

Stability (Thermal, Light, etc.): Stable under conditions of storage and intended use.	**Conditions to avoid:** Avoid excessive heat, > 105°F (40°C) and sources of ignition. Avoid storage below 40 °F (4.5 °C).
Hazardous Polymerization: Will not occur if used and stored as directed.	**Materials to avoid:** Keep away from strong acids, oxidizers, and strong bases. This product contains an ammonia compound, keep away from household bleach or industrial bleach products. Toxic gases can occur.
Hazardous Decomposition Products: Oxides of sulfur, oxides of carbon; oxides of nitrogen and ammonia may be generated as products of combustion	

XI. TOXICOLOGICAL INFORMATION

CARCINOGEN: This product contains no listed carcinogens according to OSHA, ACGIH, the National Toxicology Program (NTP), or the International Agency for Research Cancer (IARC) in concentrations of 0.1 % or greater.

Mutagen: No Data
Teratogen: No Data
Reproductive Toxicity: No Data

Information pertaining to the health effects and toxicity of the "pure" form of the hazardous components identified in Section 2 is presented below. This information reflects the known hazards associated with the

components and may not reflect that of the purchased material due to concentration (dilution) effects. Review and interpretation by your Hazard Communication Department is recommended.

	LD50 (Oral Rat)	LC50 (Species)	LD50 (Species)
Acetic Acid	3310 mg/kg	5620 ppm / hr (Mouse)	Not Available
Ammonium Nitrate	2217 mg/kg	Not Available	Not Available
Sodium Hydroxide	0.24 g/kg	Not Available	Not Available

XII. ECOLOGICAL INFORMATION

Information pertaining to the ecological fate of the "pure" form of the hazardous components identified in Section 2 is presented below. This information reflects the known hazards associated with the components and may not reflect that of the purchased material due to concentration (dilution) effects. Review and interpretation by your Hazard Communication Department is recommended

Ecotoxicity Data: No information available
Chemical Fate Data: No information available.

Do not allow to enter waterways, drains, sewers or lakes.

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.

Since emptied containers may retain product residues, all hazard precautions given in this data sheet should be observed

XIV. TRANSPORT INFORMATION

Flammability Classification:	Combustible
OSHA:	Class III B
DOT Proper Shipping Name (ground):	Not Regulated
Class:	Not applicable
UN ID:	Not applicable
Packing Group:	Not applicable
IMDG Proper Shipping Name (Sea)	Not Regulated
Class:	Not applicable
UN ID:	Not applicable
Packing Group:	Not applicable
ICAO/ IATA Shipping Name (air):	Not Regulated
Class:	Not applicable
UN ID:	Not applicable
Packing Group:	Not applicable
TDG Proper Ship Name (Canada):	Not Regulated
Class (Ground):	Not applicable
UN ID:	Not applicable
Packing Group:	Not applicable

XV. REGULATORY INFORMATION

"Note" Ingredient information listed in this section is provided for reporting requirements as directed by USEPA, state and local regulation. If ingredients are listed in Section 2 but not in this section then the concentration is below "de minimus" (less than 0.1%).

US Federal Regulations

313 = SARA Title III Section 313(40 CFR 372- Toxic Release Inventory)
355= SARA Section Title III Section 302 (40 CFR 355- Extremely Hazardous Substance)
302= SARA Section Title III Section 304 (40 CFR 302- Hazardous Substance List)
CWA= Clean Water Act Priority Pollutants List
CAA= Clean Air Act 1990Hazardous Air Contaminants
HAP= Clean Air Act, Hazardous Air Pollutants (HAPs)

Chemicals	CAS#	313	355	302	CWA	CAA	HAP
Acetic Acid	64-19-7	No	No	Yes	Yes	Yes	No
Ammonium Nitrate	6484-52-2	Yes	Yes	Yes	No	No	No
Sodium Hydroxide	1310-73-2	No	No	No	Yes	No	No

TSCA Section 8(b) Inventory Status:
All component(s) of this product are either exempt or listed on the TSCA Inventory List (40 CFR 710).

U.S. State Regulations

Chemicals	CAS#	PA	NJ	MN	MI	MA	FL
Acetic Acid	64-19-7	Yes	Yes	Yes	No	Yes	Yes
Ammonium Nitrate	6484-52-2	Yes	Yes	Yes	No	Yes	Yes
Sodium Hydroxide	1310-73-2	Yes	No	Yes	No	Yes	Yes
Gum Arabic	9000-01-5	No	Yes	No	No	No	No

FL= Florida Hazardous Substance List
MI- Michigan Critical Materials List
NJ= New Jersey Right- To- Know List
MA= Massachusetts Right- To –Know List
MN= Minnesota Hazardous Substance List
PA= Pennsylvania Right-To-Know List

CERCLA Reportable Quantities
Components present which could require reporting under CERCLA 40 CFR 302.4

Chemical	CAS#	CERCLA RQ
Acetic Acid	64-19-7	5,000 lbs.
Sodium Hydroxide	1310-73-2	1,000 lbs.

Coalition of Northeast Governors (CONEG) Legislation:
This product is certified to be in full compliance with CONEG Model Toxics Legislation for packaging and packaging components.

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.

Canadian WHMIS Classification

Components present listed in the WHMIS hazardous ingredient disclosure list.

Chemical	**CAS#**
Acetic Acid	64-19-7
Citric Acid	77-92-9
Sodium Hydroxide	1310-73-2
Succinic Acid	110-15-6

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