

Material Safety Data Sheet # 174
For Printing Inks and related Materials
OSHA Hazard Communication Standard, 29 CFR 1910.1200

Date of preparation: 5/7/97
 Updated: 3/24/2011
 Supersedes 1/28/09
 MSDS #: 174

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>0</td> </tr> <tr> <td>Personal Protection</td> <td>C</td> </tr> </table>	Health	1	Flammability	1	Reactivity	0	Personal Protection	C
Health	1								
Flammability	1								
Reactivity	0								
Personal Protection	C								
Product Class: W.B. Silkscreen Additive	Manufacturer's code: S-1317, V-5150, 00-300, S-1335								
Trade Name: Waterbased Silkscreen Extender									

II. COMPOSITION / INGREDIENTS

Material	CAS #	%	Exposure Limits	Units
2-(Dimethylamino) Ethanol-	108-01-0	1 -5	OSHA PEL ACGIH/ TWA TLV	Not Established Not Established
Petroleum distillate	64742-54-7	1 -5	OSHA/ STEL OSHA / PEL ACGIH / TLV	10 mg/m3 5mg/m3 5mg/m3
Triethylamine	121-44-8	1 – 5	OSHA PEL/TWA STEL ACGIH TLV/TWA	10 ppmTWA:40mg/m3 15 ppm : 60 mg/m3 TWA25 ppm: 100 mg/m3 1ppn skin STEL: 3 ppm

III. HEALTH HAZARD INFORMATION

<p>Effects of Overexposure</p>
<p>Inhalation: Inhalation may cause respiratory tract irritation, throat pain and cough. Inhalation of high vapors may cause symptoms like headaches, dizziness and fatigue, nausea and vomiting. Reports have associated repeated and prolonged occupation exposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.</p>
<p>Skin Contact: Avoid skin contact. This product may cause irritation and / or dermatitis. Prolonged or repeated contact with liquid may cause defatting resulting in dryness, chapping, blistering and redness. Persons with pre-existing skin or lung disorders may be more susceptible to the effects of this material. Repeated and prolonged overexposure and/or individual sensitivity may increase the potential for and degree of adverse health effects.</p>
<p>Eye Contact: Avoid eye contact. This product may cause irritation including burning, tearing, swelling, and redness.</p>
<p>Ingestion: Do not ingest. Harmful or fatal if swallowed. Ingestion may cause gastrointestinal tract irritation, nausea, vomiting, and diarrhea</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 wearing contact lenses, remove and continue flushing for at least 15 minutes. If irritation persists, have eyes examined by medical personnel, seek medical attention.
Skin: Remove contaminated clothing. Wash contaminated area thoroughly with soap and water. Use a mild soap if available. If redness or irritation occurs, seek medical attention.
Inhalation: 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 immediate medical attention.
Ingestion: DO NOT induce vomiting. Seek immediate medical attention. Never give anything by mouth to an unconscious person.

V. FIRE AND EXPLOSION DATA

Flash Point °F: > 200 (PMCC) (93C)	Auto-ignition Temperature °F: No Data	
Flammable Limits in Air (% Volume)	Lower Limit: No Data	Upper Limit: No Data
Extinguishing Media: Use water spray, foam, CO ₂ , or dry chemical extinguishing media. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.		
Special Fire Fighting Procedures: Fire fighters wear self contained breathing apparatus pressure- demand and full protective gear. Water may be used to cool containers exposed to heat or flame.		
Unusual Fire & Explosion Hazard: Isolate from heat, electrical equipment, sparks, and open flame. Keep containers tightly closed. Fire or intense heat may cause violent rupture of containers. Fumes released on burning are toxic and dangerous. Vapors may be heavier than air and can travel to a source of ignition then flash back.		
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: Remove all sources of ignition. Ventilate area. Avoid breathing vapors. Harmful or fatal if swallowed. Contain release with inert absorbent material such as sand, earth, or vermiculite. Transfer to a container for disposal according to state, local or national regulations. Use non-sparking tools to place material in appropriate container for disposal. Smoke in designated areas only. Do not allow to enter sewers, drains or waterways.
--

VII. HANDLING AND STORAGE

Handling and Storage: Avoid prolonged contact with skin, contact with eyes, and breathing of mist or vapor. Harmful or fatal if swallowed. Store in tightly closed containers in a cool, well-ventilated area. Remove and wash contaminated clothing before reuse. Discard contaminated shoes. When using Do Not smoke. Keep away or remove from all sources of ignition, open flame, heat. Avoid prolonged overexposure to excessive cold. Protect from freezing. Take notice of labels and material safety data sheets for the working chemicals.
Other Precautions: For industrial use only. Do not ingest. 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. Smoke in designated areas only.

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: Use neoprene, nitrile or other protective gloves and aprons resistant to solvents listed in section II. Safety showers are recommended. Prevent prolonged skin contact with contaminated clothing.
Eye: Avoid contact with eyes. Use splash proof goggles, face shield or safety glasses. Eyewash stations are recommended.

IX. PHYSICAL AND CHEMICAL DATA

Boiling Range °F: > 212 °F / > 100 °C	Vapor Density (Air = 1): > 1 pH: 4- 9
Relative Density (H₂O = 1): 1.07 – 1.13	Vapor Pressure (mm Hg @ 68°F): No Data
Material Density Lbs./Gal: 8.92 – 9.41	Solubility in Water: Soluble
% Volatiles by Weight: 23.4	Evaporation Rate: Slower than ether. Freezing Point: 0 °C/ 32 °F
VOC: lbs/gal: 2.20 Max g/L: 264.4	Appearance/Odor: Viscous Liquid Photochemically Reactive: No

X. STABILITY AND REACTIVITY INFORMATION

Stability (Thermal, Light, etc.): Stable under normal conditions.	Conditions to avoid: Excessive heat, flames, sparks and ignition sources. Avoid prolonged exposure to excessive heat or cold. Do Not freeze.
Hazardous Polymerization: Will not occur.	Materials to avoid: Strong acids, bases, oxidizing agents, reducing agents, and reactive chemicals.
Hazardous Decomposition Products: Thermal decomposition can lead to release of irritating gases and vapors. 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 Effects:	No Data
Teratogenicity:	No Data
Reproductive Toxicity:	No Data
Acute Toxicity	
2-(Dimethylamino) ethanol	
Oral LD50 (Rat) 1803 mg/m3	
Dermal LD50 (Rabbit) 1370 µL/ kg	
Inhalation: LC50 6.1 mg/L (Rat) 4 hr 1641ppm (Rat) 4h	
Petroleum Distillates	
Oral LD50 (Rat) 2000 mg/kg	
Dermal LD50 (Rabbit) 2000mg/kg	
Inhalation LC50 (Rat) 2.18 mg/L 4 hr	
Triethylamine	
Oral LD50 (Rat) 460 mg/kg	
Dermal LD50 (Rabbit) 416 mg/kg 570 µL/kg (Rabbit)	
Inhalation LC50 (Rat) 0.42 1 hr (Rat) 3496 ppm 1 hr	

XII. ECOLOGICAL INFORMATION

This product has not been evaluated at this time. As with all chemicals and products, do not allow to enter waterways, drains or sewers.
--

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: Combustible Liquid
OSHA: Class III B
DOT: Not Regulated
ICAO / IATA: Not classified as dangerous in the meaning of transport regulations
IMDG / IMO: Not classified as dangerous in the meaning of transport regulations.

XV. REGULATORY INFORMATION

SARA Title III Section 313:

This material contains a chemical subject to the reporting requirements of the SARA Superfund Amendments and Reauthorization Act.

<u>Chemical</u>	<u>CAS #</u>	<u>%</u>	<u>SARA 313 – Threshold Values</u>
Triethylamine	121-44-8	1 – 5	1.0

TSCA Section 8(b) Inventory Status:

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

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs)

This product contains the following HAPs.

<u>Chemical</u>	<u>CAS #</u>	<u>%</u>
Triethylamine	121-44-8	1 – 5

U.S. State Regulations

California Proposition 65:

This product contains a chemical(s) known by the state of California to cause cancer and/or reproductive harm.

<u>Chemical</u>	<u>CAS#</u>	<u>%</u>
Propylene oxide	75-56-9	Trace amount
Benzene	71-43-2	Trace amount
Ethylene oxide	75-21-8	Trace amount

State Right –to- Know

2-(Dimethylamino) ethanol New Jersey, Pennsylvania, Massachusetts,
Triethylamine New Jersey, Pennsylvania, Massachusetts, Rhode Island

Chemicals not listed Minnesota, Florida

Canada WHMIS Classifications of components: 2-(Dimethylamino) ethanol B3, D1B, E

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.