Material Safety Data Sheet # 288 For Printing Inks and related Materials

OSHA Hazard Communication Standard, 29 CFR 1910.1200

Date of preparation:5/18/2010MSDS #:288

I. PRODUCT IDENTIFICATION Manufacturer: Gans Ink and Supply Co, Inc. HMIS HAZARD IDENTIFICATION Address: 1441 Boyd Street Los Angeles, CA 90033 Health 1 Emergency phone: (323) 264-2200 Flammability 0 Reactivity 0 В Personal Protection Manufacturer's code: S-1879 **Product Class:** Aqueous Coating Trade Name: WB Matte Coating Pencil Receptive

II. HAZARDOUS INGREDIENTS

Material	CAS #	%	Exposure Limits	Units
Sodium Dioctysulfosuccinate	577-11-7	1 – 5	OSHA PEL ACGIH TLV/ TWA ACGIH / STEL	NE NE NE
Ammonium Hydroxide	1336-21-6	0 – 1	OSHA PEL ACGIH TLV/ TWA ACGIH / STEL	50 ppm 25 ppm 35 ppm

The amount of Ammonium Hydroxide reported in Section II is calculated to be the excess neutralizer after creation of the polymer solution.

NE: Not Established

III. HEALTH HAZARD INFORMATION

Effects of Overexposure

Inhalation: Inhalation is an unlikely route of exposure under conditions intended use. Higher temperatures may generate vapors that may cause irritation of the eyes and respiratory tract. Caution should be taken to prevent aerosolization or misting of this product. Acute overexposure may result in irritation of the throat and lungs. No chronic health hazards are associated with the components present in this product.

Skin Contact: Avoid skin contact. Skin exposure is expected to be the primary route of occupational exposure. Prolonged and / or repeated contact with skin may cause mild irritation. 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.

Eye Contact: Avoid eye contact. This product may cause mild irritation to the eyes upon direct contact. Symptoms may include stinging, tearing, redness, swelling and / or burning.

Ingestion: Do not ingest .Ingestion is an unlikely route of exposure under conditions of intended use. Deliberate ingestion of excessive quantities may be harmful.. 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.

IV. FIRST AID PROCEDURES

Emergency & First Aid Procedures

Eyes: Immediately flush eyes with large amounts of water and continue flushing for 15 minutes, lifting upper and lower lids occasionally. Seek immediate medical attention if irritation or redness persists. **Skin:** Remove contaminated clothing. Wash contaminated area thoroughly with soap and water. Solvents should not be used to clean skin because of increased penetration potential. Seek immediate medical attention if irritation persists. Wash clothing and thoroughly clean shoes before reuse.

Inhalation: If mist or exposure is generated when the material is heated or handled, remove victim from exposure. Move to fresh air. If breathing has stopped or is irregular, administer artificial respiration and supply oxygen if it is available. Seek immediate medical attention. If breathing difficulties develop. **Ingestion:** Never give anything by mouth to an unconscious person. Rinse mouth and then drink plenty of

water. Do not induce vomiting. Seek immediate medical attention.

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), no known specific antidote.

V. FIRE AND EXPLOSION DATA

Flash Point $^{\circ}$ F: > 200 F (Closed Cup)		Auto-ignition Temperature °F: No Data	
Flammable Limits in Air (%	Lower Limit: No Data		Upper Limit: No Data
Volume)			
Extinguishing Media: Use water spray, foam, or dry chemical extinguishing media.			
Special Fire Fighting Procedures: The use of self- contained breathing apparatus is recommended for fire			
fighters. Cool containers and use caution when approaching or handling fire exposed containers.			
Unusual Fire & Explosion Hazard: The container may burn and leak in the heat of a fire. 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: Keep unnecessary personnel away from spill area. Ventilate area of spill. Use appropriate personal protective equipment, such as gloves, chemical resistant apron and face shield. Soak up small spill with inert material such as sand, clay, vermiculite etc. If large spills dike area. Pick up bulk of spill and and place in a suitable container for recovery or disposal. Wash spill area with strong detergent and water. Keep all materials out of drains, sewers or waterways.

VII. HANDLING AND STORAGE

Handling and Storage: Use and store containers in a cool, well-ventilated area. It is recommended that containers of these products be stored at room temperatures between 40 F and 115 F ($4.5 \,^{\circ}C - 45 \,^{\circ}C$) Protect from freezing. Avoid sources of ignition, open flame and heat. The slight smell of ammonia can become stronger if the coating is heated higher than room temperature. Keep away from strong acids. Close container after each use. When handling product use protective personal equipment such as chemical resistant gloves, apron, face shield and / or goggles. Take precautionary measures against static discharge. Consumption of food and beverages should be avoided in work areas. Avoid prolonged contact with skin, contact with eyes, and breathing of mist or vapor.

Other Precautions: For industrial use only. Do not ingest. Always wash hands and face with soap and water before eating, drinking, and smoking.

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 intended or 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 impervious gloves and chemical resistant apron when handling. Provide readily accessible safety showers.

Eye: Wear full face shield if splashing hazard exists. Safety glasses, full face shield or chemical safety goggles are recommended to prevent eye contact. Eye protection should meet the specifications of ANSI Z87.1. Provide readily accessible eye wash stations.

IX. I III SICAL AND CHEMICAL DATA		
Boiling Range °F: 212 F	Vapor Density (Air = 1): N/A	
Relative Density ($H_2O = 1$): 1.04	Vapor Pressure (mm Hg @ 70°F): N/A	
Material Density Lbs./Gal: 8.70	Solubility in Water: Soluble	
% Volatile Organic Compounds (VOC) by	Evaporation Rate: N/A pH: 8.7	
Weight: 2.06		
VOC: lbs/gal: 0.18 g/L: 21.3	Appearance/Odor: Milky White Liquid / Slight	
	Ammonia Odor	

IX. PHYSICAL AND CHEMICAL DATA

X. STABILITY AND REACTIVITY INFORMATION			
Stability (Thermal, Light, etc.): Stable under	Conditions to avoid: Excessive heat (> 140 F) and		
normal conditions of storage and intended use.	sources of ignition. Avoid storage below 40 F (4.5 C)		
	and above 115 F (45C)		
Hazardous Polymerization: Will not occur.	Materials to avoid: Contact with strong acids		
Hazardous Decomposition Products: Smoke, CO ₂ , CO, and oxides of nitrogen may be generated as			
products of combustion.			

XI. TOXICOLOGICAL INFORMATION

CARCINOGEN: This product has not been identified as a carcinogen by OSHA, ACGIH, the National
Toxicology Program (NTP), or the International Agency for Research Cancer (IARC).Mutagen:No DataTeratogen:No DataReproductive Toxicity:No Data

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

Sodium Dioctylsufosuccinate

Oral:	LD50: 1900 mg/kg (rat)
Draize Test, Skin:	10 mg/24 H Moderate (rabbit)
Draize Test, Eye:	1 % Severe (rabbit)
Inhalation:	No information available
Ammonium Hydroxide	
Oral:	LD50: 350 mg/kg (rat)
Skin Irritant:	Severe irritant (rabbit)
Eye Irritant:	Severe irritant (rabbit)
Carcinogenicity:	Not Listed by ACGIH, IARC, NIOSH, NTP, or OSHA

XII. ECOLOGICAL INFORMATION

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

interpretation by your Hazard Communication Department is recommended.

Sodium Dioctylsulfosuccinate

No information available

Ammonium Hydroxide

Fish: Rainbow Trout:	LC50: 0.008 mg/L; 24 hr
Fish: Fathead Minnow:	LC50: 8.2 mg/L; 24 hr
Water Flea: Daphnia:	EC50: 0.66 mg/ L; 48 hr

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.

Do not allow this product to enter waterways, drains or public sewer systems

Flammability Classification:	
OSHA:	Class III B
US DOT Proper Shipping Name (ground):	Resin compounds, liquid
Class	Not applicable
UN ID	Not applicable
Packing Group	Not applicable
IMDG Proper Shipping Name (ocean):	Resin compounds, liquid
Class	Not applicable
UN ID	Not applicable
Packing Group	Not applicable
ICAO / IATA Proper Shipping Name (air):	Resin compounds, liquid
Class	Not applicable
UN ID	Not applicable
Packing Group	Not applicable
TDG Proper Shipping Name (ground):	Resin compounds, liquid
Class	Not applicable
UN ID	Not applicable
Packing Group	Not applicable

XIV. TRANSPORT INFORMATION

XV. REGULATORY INFORMATION

SARA Title III Section 313(40 CFR 372) Component (s) above 'de minimus' level: This product contains a chemical subject to the reporting requirements of the SARA Superfund Amendments and Reauthorization Act.

Chemical]	Name	CAS#
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Ammonium Hydroxide 1336-21-6

CERCLA Reportable Quantities:

Components present which could require reporting under CERCLA 40 CFR 302.4

Chemical Name	CAS#	CERCLA RQ
Ammonium Hydroxide	1336-21-6	
Clean Air Amendment (H. This product Does Not conta III of the Clean Air Act Ame	in any chemicals which	h are defined as Hazardous Air pollutants under the Title
TSCA Section 8(b) Invento All chemical component(s) & Substance Inventory List (40)	of this product are eith	er exempt or listed on the Section 8 (B) Chemical
U.S. State Regulations		
	loreover, Gans Ink and	emicals known by the state of California to cause cancer Supply Co., Inc. does not routinely analyze its products
Coalition of Northeast Gov This product is certified to b packaging components.		gislation: ith CONEG Model Toxics Legislation for packaging and
International Inventory St	atus:	
WHMIS (Workplace Haza Components present listed in		rmation System) Ingredient Disclosure List: us ingredient disclosure list
<u>Chemical Name</u> Ammonium Hydroxide	<u>CAS</u> # 1336-21-6	

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.