



**Material Safety Data Sheet # 281**  
**For Printing Inks and related Materials**  
**OSHA Hazard Communication Standard, 29 CFR 1910.1200**

Date of preparation: 1/7/2010  
 Updated: 2/7/2013  
 MSDS #: 281

**I. PRODUCT IDENTIFICATION**

|   |   |        |   |              |   |            |   |                     |   |
|---|---|--------|---|--------------|---|------------|---|---------------------|---|
| Manufacturer: Gans Ink and Supply Co, Inc.<br>Address: 1441 Boyd Street<br>Los Angeles, CA 90033<br><br>Emergency phone: (323) 264-2200 | <p align="center"><b>HMIS HAZARD IDENTIFICATION</b></p> <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 based Sublimation Inks  | <b>Manufacturer's code:</b> Various, including 56-304, 56-305, 58-303, 62-302, 62-303, 76-306, 76-308, 76-309, 38-304, 43-309, 43-310, 38-305, 38-303, 99-304, 99-305, 99-306, 99-307, G017623-24, G017642-43, G017788, G019769, G019796, A116746, A139521 to A139524, etc. |        |   |              |   |            |   |                     |   |
| <b>Trade Name:</b> Vibraflex, Pyroflexo, P-flexo WB Sublimation Bases, Process Colors & Blending Colors                                 |   |        |   |              |   |            |   |                     |   |

**II. HAZARDOUS INGREDIENTS**

| Material  | CAS #  | %       | Exposure Limits                                  | Units                              |
|---|--|---------|--|------------------------------------|
| Propane-1,2-diol  | 57-55-6  | 10 – 25 | OSHA / PEL<br>ACGIH / TLV<br>WEEL 10 mg/m3       | Not Established<br>Not Established |
| Modified Acrylic polymer  | proprietary  | 2.5 – 5 | X, ,Xi, R 36/ 38                                 | Warning 3.2/2, 3.3/2A              |
| Alkylated Naphthalene Sulfonate Sodium Salt   | 68425-94-5   | 1 – 2.5 | Xi, R 36/ 38                                     | Warning: 3.2/2, 3.3/2A             |
| Monoazo Dye<br>3.4.S/1, 4.1. C/4  |  | 10 – 25 | Xn, Xi, R 11-36- 43- 48 /22 -53<br>Danger; 2.7/1 | Warning: 3.9/2: 3.3/2A,            |
| <b>Relevant Phrases:</b> For the wording of risk phrases refer to Section XVI       |  |         |  |                                    |
|  |  |         |  |                                    |
| H317 May cause allergic skin reaction   | Cause Skin And Eye Irritation  |         |  |                                    |

**III. HEALTH HAZARD INFORMATION**

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| <b>Effects of Overexposure</b>   |
| <b>Inhalation:</b> Avoid inhalation of fumes, spray, gasses, or vapor. May be harmful if inhaled. May cause damage to organs through prolonged or repeated exposure. |
| <b>Skin Contact:</b> Avoid skin contact. May cause an allergic skin reaction   |

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| <b>Eye Contact:</b> Avoid eye contact. Causes serious eye irritation   |
| <b>Ingestion:</b> Do not ingest. May be harmful if swallowed. May cause damage to organs through prolonged or repeated exposure. |

#### IV. FIRST AID PROCEDURES

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| <b>Emergency &amp; First Aid Procedures</b>  |
| <b>Eyes:</b> Immediately flush eyes with large amounts of water and continue flushing for 15 minutes holding eyelids apart. Remove contact lenses if present and easy to do. If irritation persists, seek medical attention.   |
| <b>Skin:</b> Do not use solvents or thinners. Wash contaminated area thoroughly with soap and water. Remove contaminated clothing. If redness or irritation occurs, seek medical attention. Launder clothing before reuse.   |
| <b>Inhalation:</b> 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. |
| <b>Ingestion:</b> Do not induce vomiting. Seek immediate medical attention. Do not give anything by mouth to an unconscious person. Place individual on the left side with the head down. Do not leave individual unattended.  |
| <b>Notes to Physician:</b> NA  |

#### V. FIRE AND EXPLOSION DATA

|  |  |                                     |
|--|--|-------------------------------------|
| <b>Flash Point °F:</b> > 212 °F (100 °C)   | <b>Auto-ignition Temperature °F:</b> > 662°F |                                     |
| <b>Flammable Limits in Air (% Volume)</b>  | <b>Lower Limit:</b> Not applicable.          | <b>Upper Limit:</b> Not applicable. |
| <b>Extinguishing Media:</b> Use water spray, alcohol-resistant foam, CO <sub>2</sub> , or dry chemical extinguishing media.  |  |                                     |
| <b>Special Fire Fighting Procedures:</b> Firefighters use self contained breathing apparatus. Protective clothing is recommended. Fight large fires with water spray or alcohol resistant foam. Cool endangered receptacles with water spray. Do Not use full water jet on burning product. Collect contaminated fire water separately. Do not allow to enter sewers, drains or waterways. |  |                                     |
| <b>Unusual Fire &amp; Explosion Hazard:</b> Formation of toxic gases is possible during heating or in case of fire.  |  |                                     |

#### VI. ACCIDENTAL RELEASE

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| <b>Steps to be taken in event of spill or release:</b> Ventilate area. Use, protective clothing, safety glasses, and impervious gloves during removal of spillages. Stop spill at source. Keep away from all sources of ignition. Absorb with an absorbent material such as diatomite, sand or sawdust. Scrape up with trowel or scoop and place in a suitable container for disposal. Wash spill site with large amounts of water. Avoid use of solvents. Dispose of in accordance to state, local and Federal regulations. Wash contaminated clothing before reuse. Do not allow to enter sewers, drains or waterways. |
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#### VII. HANDLING AND STORAGE

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| <b>Handling and Storage:</b> Store in containers in a cool, dry, well-ventilated area. Wear protective clothing and gloves when handling product. Keep away from all sources of heat, ignition and direct sunlight. Keep containers tightly closed when not in use. Use only containers specifically designed for this product. Ideal storage temperature; 50 – 90 °F. Do not allow to dry out. Keep away from oxidizing agents. |
| <b>Other Precautions:</b> For industrial use only. Do not ingest. 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.   |

#### VIII. EXPOSURE CONTROLS AND PERSONAL PROTECTION

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| <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.   |
| <b>Personal Protective Equipment</b>   |

**Respirator:** 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:** For exposures, use impervious synthetic rubber clothing (boots, aprons, gloves etc.) over parts of the body subject to exposure. Always wash hands and face thoroughly with soap and water after handling product. Avoid close or long term contact with skin. Do not eat or drink while working. Safety showers are recommended.

**Eye:** 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 glasses or goggles. Eye wash stations are recommended.

#### IX. PHYSICAL AND CHEMICAL DATA

|   |   |
|---|---|
| <b>Boiling Point °F:</b> 212 °F                             | <b>Vapor Density (Air = 1):</b> No data available                           |
| <b>Relative Density (H<sub>2</sub>O = 1):</b> 1.1 – 1.20    | <b>Vapor Pressure (mm Hg @ 68°F):</b> 17.0                                  |
| <b>Material Density Lbs./Gal:</b> 9.16– 9.99                | <b>Solubility in Water:</b> Dispersible                                     |
| <b>% Volatiles Organic Compounds (VOC) by Weight:</b> < 0.5 | <b>Viscosity (68°F):</b> 20- 50 s ( DIN53211/4)<br><b>pH (68 °F):</b> 5 - 8 |
| <b>VOC: lbs/gal:</b> < .05 <b>g/L:</b> 6.00                 | <b>Appearance/Odor:</b> Colored Liquid / slight odor                        |

#### X. STABILITY AND REACTIVITY INFORMATION

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| <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 direct sunlight. |
| <b>Hazardous Polymerization:</b> Will not occur.   | <b>Materials to avoid:</b> Contact with strong oxidizers.  |
| <b>Hazardous Decomposition Products:</b> Carbon and nitrogen oxides are the main gas 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:** No Data

**Teratogen:** No Data

**Reproductive Toxicity:** No Data

##### Toxicological Information on components of this product:

Harmful if swallowed

Acute Toxicity: Sensitization possible through skin contact

Propane-1,2-diol 57-55-6

Ingestion: LD 50 Rat: 20,000 - 34,000 mg/ kg

Skin: LD50 Rabbit: > 20,000 mg/ kg

#### XII. ECOLOGICAL INFORMATION

This product has not been evaluated at this time. Do not allow to enter waterways, sewers or drains.

#### XIII. DISPOSAL INFORMATION

**Waste Disposal Method:** If recycling as ink is not possible, dispose of material may in accordance with local, state, and federal regulations. Do not allow to enter waterways, sewers or drains etc.

#### XIV. TRANSPORT INFORMATION

|                                     |                    |
|-------------------------------------|--------------------|
| <b>Flammability Classification:</b> | Combustible Liquid |
| <b>OSHA:</b>                        | Class III B        |
| <b>DOT:</b>                         | Not Regulated      |
| <b>Proper Shipping Name:</b>        | Not Regulated      |

|  |                |
|--|----------------|
| <b>UN Number:</b>                      | None           |
| <b>Hazard Classification (ground):</b> | None           |
| <b>ICAO/ IATA (Air):</b>               | Not Restricted |
| <b>Proper Shipping Name:</b>           | Not Regulated  |
| <b>UN / ID Number:</b>                 | None           |
| <b>Hazard Classification:</b>          | None           |
| <b>IMDG / IMO (Sea):</b>               | Not Restricted |
| <b>Proper Shipping Name:</b>           | Not Regulated  |
| <b>UN / ID Number:</b>                 | None           |
| <b>Hazard Classification:</b>          | None           |
| <b>Marine Pollutant:</b>               | No             |
| <b>International Transport:</b>        |                |
| <b>ADR / RID (ground):</b>             | Not Restricted |
| <b>Canada TDG:</b>                     | Not Regulated  |

**Not classified as dangerous in the meaning of transport regulations.**

#### XV. REGULATORY INFORMATION

##### U.S. Federal Regulations

**SARA Title III Section 313:**

This material does Not contain a chemical(s) that is subject to the reporting requirements of the SARA Superfund Amendments and Reauthorization Act.

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

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

**SARA Section 304 – CERCLA (Comprehensive Environmental Response, Compensation and Liability Act):** This product does not contain any components regulated under Section 304 (40 CFR 302) as hazardous chemicals for emergency release notification (“CERCLA” List).

**TSCA Section 8(b) Inventory Status:**

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

**Clean Air Act - Hazardous Air Pollutants (HAP):**

This product does Not contain any chemicals listed as HAP under the U.S. Clean Air Act Section 112 (40 CFR 61)

##### U.S. State Regulations

**California Proposition 65:**

This product does Not contain any chemical(s) known by the state of California to cause cancer and/or reproductive harm.

#### XVI. OTHER INFORMATION

##### **Relevant S & R Phrases**

Xi; Irritant, R 36/38; Irritating to eyes and skin  
 Xn; Harmful, R 48/ 22; Harmful by prolonged exposure if swallowed.  
 R 43; May cause skin sensitization.  
 R 53; May cause long term adverse effects in the aquatic environment.

R11: Highly flammable

Warning:

3.9/2: May cause damage to organs through prolonged or repeated exposure.

3.3/2A: Causes serious eye irritation

3.4/1: May cause allergic skin reaction.

S 37: Wear suitable gloves.

S 23: Do not breathe vapors

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

