Safety Data Sheet

SECTION 1: IDENTIFICATION

SDS Number: 638, version 4/3/2018

(a) Product identifier
Gans Item ID: P801, P802, P803, P803QS, P803HD, P804, P805, P806, P807, P808, P809, P810, P811, P812, P813, P814, X102412, X103010

Gans Description: OS P### Fluorescent, Numbering HB Red W/Fluor Ornge, OS Solvent React #1 Orange

(b) Other means of identification
General description: Lithographic printing ink

(c) Recommended use
Product Use: Industrial use only
Restrictions on use: Not for residential use.

(d) Supplier’s details
Manufacturer: Gans Ink and Supply Co, Inc.
Address: 1441 Boyd Street
Los Angeles, CA 90033
Contact Person: Marco Ramos
Telephone: 323-264-2200 x139
Email: MSDS@gansink.com

(e) Emergency telephone number:
Available only during business hours.
(323) 264-2200 Monday- Friday 7:00 A.M.– 9:00 P.M.
24 Hours Response: Los Angeles County Fire Department / HazMat. Department

SECTION 2: HAZARD(S) IDENTIFICATION

(a) Classification
This mixture is hazardous according to OSHA Hazard Communication Standard (29 CFR 1910.1200).

Physical hazards: Not classified as hazardous

Health hazards:
- Acute Toxicity, Inhalation – Category 4
- Eye Damage/Irritation – Category 2A
- Sensitization, Skin – Category 1B
- Germ Cell Mutagenicity – Category 1B
- Carcinogenicity – Category 1B
- Toxic to Reproduction – Category 2
(b) Label elements

**Signal Word:** Danger

**Hazard Statements:** Harmful if inhaled; Causes serious eye irritation; May cause an allergic skin reaction; May cause genetic defects; May cause cancer; Suspected of damaging fertility or the unborn child

**Precautionary Statements:**
**Prevention:**
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.

Avoid breathing fume/mist/vapors/spray. Use only outdoors or in a well-ventilated area.
Wash contaminated areas thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

**Response:**
IF SWALLOWED: If exposed or concerned: Get medical advice/attention.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.
IF ON SKIN OR HAIR: Wash with plenty of water and mild soap. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

Storage: Store locked up.

Disposal: Dispose of contents/container to disposal recycling center. Waste management should be in full compliance with federal, state and local laws.

**Hazard Pictograms:**

(c) Hazards not otherwise classified
None known

(d) Ingredients of unknown acute toxicity
None known
SECTION 3: COMPOSITION/ INFORMATION ON INGREDIENTS

Substance / Mixture: Mixture
TS = Trade Secret (as specified by substance manufacturer)

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS # (TS = trade secret)</th>
<th>Conc. min. (wt. %)</th>
<th>Conc. max. (wt. %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rosin Adduct Ester</td>
<td>TS</td>
<td>0.0%</td>
<td>5.5%</td>
</tr>
<tr>
<td>3,6-bis(ethylamino)-9-[2-(methoxycarbonyl)phenyl]-2,7-dimethylxanthylum chloride</td>
<td>3068-39-1</td>
<td>0.0%</td>
<td>5.0%</td>
</tr>
<tr>
<td>3,6-bis(diethylamino)-9-[2-(methoxycarbonyl)phenyl]xanthylum tetrachlorozincate</td>
<td>73398-89-7</td>
<td>0.0%</td>
<td>5.0%</td>
</tr>
<tr>
<td>3,6-bis(ethylamino)-9-[2-(methoxycarbonyl)phenyl]-2,7-dimethylxanthylum chloride</td>
<td>3068-39-1</td>
<td>0.0%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Fatty acids, tall-oil, cobalt salts</td>
<td>61789-52-4</td>
<td>0.0%</td>
<td>1.4%</td>
</tr>
<tr>
<td>2-ethylhexanoic acid, manganese salt</td>
<td>15956-58-8</td>
<td>0.0%</td>
<td>1.0%</td>
</tr>
<tr>
<td>2-ethylhexanoic acid</td>
<td>149-57-5</td>
<td>0.0%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated middle</td>
<td>64742-46-7</td>
<td>0.0%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Residual oils (petroleum), solvent-dewaxed</td>
<td>64742-62-7</td>
<td>0.0%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Naphtha (petroleum), hydrotreated heavy</td>
<td>64742-48-9</td>
<td>0.0%</td>
<td>0.3%</td>
</tr>
<tr>
<td>2-(2-methoxyethoxy)ethanol</td>
<td>111-77-3</td>
<td>0.0%</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

SECTION 4: FIRST AID MEASURES

(a) Description of first aid measures:
Ingestion: If exposed or concerned: Get medical advice/attention.

Inhalation: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.

Skin contact: Wash with plenty of water and mild soap. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

(b) Most important symptoms and effects, both acute and delayed:
Ingestion: May cause genetic defects; May cause cancer; Suspected of damaging fertility or the unborn child
Inhalation: Harmful if inhaled.
Skin contact: May cause an allergic skin reaction;
Eye contact: Causes serious eye irritation.

(c) Indication of any immediate medical attention and special treatment needed:
Symptoms such as loss of breath, and burning, pain, or irritation to lungs, eyes, or skin may indicate exposure and the need for first aid.

SECTION 5: FIRE – FIGHTING MEASURES

(a) Extinguishing Media:
Suitable extinguishing media: Use CO₂, dry chemical, fire-fighting foam, or water fog extinguishing media
Unsuitable extinguishing media: Do not use water stream. Water stream or spray is OK to cool unopened containers only.
(b) Special hazards arising from the substance or mixture: None known

(c) Special protective equipment and precautions for fire-fighters: Wear NIOSH approved self-contained respiratory protective device, and fully protective fire-fighting suit.

SECTION 6: ACCIDENTAL RELEASE MEASURES

(a.i) Personal precautions: Ensure adequate ventilation. Use personal protective equipment. Avoid breathing vapor. Avoid contact with skin, eye or clothing.

(a.ii) Protective equipment: See Section 8

(a.iii) Emergency procedures: Follow emergency procedures that are appropriate for the general industrial environment.

(b) Methods for containment and cleaning up:
Dike and contain spill. For large spills remove by mechanical means and place in containers. Absorb residue or small spills with absorbent material and remove to non-leaking containers for disposal.

SECTION 7: HANDLING AND STORAGE

(a) Precautions for safe handling:
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.

Avoid breathing fume/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wash contaminated areas thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

(b) Conditions for safe storage:
Store locked up. Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatibilities: None known

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>(a) Permissible exposure limits</th>
<th>OSHA PEL</th>
<th>Cal/OSHA PEL</th>
<th>NIOSH REL</th>
<th>ACGIH 2015 TVL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substance</td>
<td>CAS #</td>
<td>ppm</td>
<td>mg/m³</td>
<td>8-hour TWA (ST)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>STEL (C) Ceiling</td>
</tr>
<tr>
<td>No hazardous ingredients in this mixture appear on OSHA Annotated Tables Z-1, Z-2, or Z-3.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(b) Appropriate engineering controls:
Ventilation requirements: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.
General protective measures: Ensure that eye flushing /eye wash stations, and hand washing areas are accessible.
(c) Personal protective equipment:

Inhalation: Avoid breathing fume/mist/ vapors/spray. Use only outdoors or in a well-ventilated area. Where mist or aerosol is present, an organic vapor full facepiece respirator is recommended (to protect eyes and face as well).

Skin Contact: Wear protective gloves, and protective clothing. Contaminated work clothing must not be allowed out of the workplace. Nitrile gloves recommended; for example: Ansell Sol-Vex.

Eye Contact: Wear eye protection, and face protection. Eye and face protective devices must comply with ANSI Z87.1-1989. Recommended eye protection: goggles or full face shield.

Ingestion: Avoid eating, drinking, or smoking in work area and wash hands after handling this product.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES
(a) Appearance (physical state, color): Viscous paste, various colors
(b) Odor: Oleoresinous
(c) Odor threshold: Data not available
(d) pH: NA
(e) Melting point/ freezing point; Data not available
(f) Initial Boiling point / Range: 514 °F (268 °C)
(g) Flashpoint: >201 °F (> 94 °C)
(h) Evaporation Rate: Data not available
(i) Flammability (solid/ gas): Data not available
(j) Upper/ lower flammability explosion limits: Data not available
(k) Vapor Pressure (mm Hg @ 68°F): Data not available
(l) Vapor Density (Air = 1): Data not available
(m) Relative Density (H2O = 1): 1.11
(n) Solubility: Insoluble in water
(o) Partition coefficient n- Octanol/ Water: Data not available
(p) Auto-ignition temperature: Data not available
(q) Decomposition temperature: Data not available
(r) Viscosity: Data not available

Other properties
VOC % (wt.): 12.3
VOC: 1.02 (lbs./gal); 137 g/L

SECTION 10: STABILITY AND REACTIVITY INFORMATION
(a) Reactivity: Not reactive under normal storage conditions. See Section 7.
(b) Chemical stability: Mixture is chemically stable under normal storage and handling conditions, and under normal temperatures and pressures.
(c) Possibility of hazardous reactions: No data available
(d) Conditions to avoid: Keep away from open flames, sparks, and other sources of ignition.
(e) Incompatible materials: None known.
(f) Hazardous decomposition product: Thermal decomposition may yield carbon dioxide and/or carbon monoxide.

SECTION 11: TOXICOLOGICAL INFORMATION
(a) Likely routes of exposure: Skin contact, eye contact, inhalation, and ingestion.

(b) Symptoms related to physical, chemical, and toxicological characteristics:
   Skin contact: May cause an allergic skin reaction;
Eye contact: Causes serious eye irritation.
Inhalation: Harmful if inhaled.
Ingestion: May cause genetic defects; May cause cancer; Suspected of damaging fertility or the unborn child

(c) Delayed and immediate effects, and chronic effects from long-term exposure
May cause genetic defects; May cause cancer; Suspected of damaging fertility or the unborn child

(d) Numerical measures of toxicity, acute:

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS # (TS= trade secret)</th>
<th>Oral</th>
<th>Inhalation</th>
<th>Dermal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rosin Adduct Ester</td>
<td>TS</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>3,6-bis(ethylamino)... colorant</td>
<td>3068-39-1</td>
<td>LD50 410 - 453 mg/kg bw (rat)</td>
<td>LC50 (4 h) 50 - 500 mg/m³ air (rat)</td>
<td>No data available</td>
</tr>
<tr>
<td>3,6-bis(diethylamino)... colorant</td>
<td>73398-89-7</td>
<td>LD50 50 - 300 mg/kg bw (rat)</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>3,6-bis(ethylamino)... colorant</td>
<td>3068-39-1</td>
<td>LD50 410 - 453 mg/kg bw (rat)</td>
<td>LC50 (4 h) 50 - 500 mg/m³ air (rat)</td>
<td>No data available</td>
</tr>
<tr>
<td>Fatty acids, tall-oil, cobalt salts</td>
<td>61789-52-4</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>2-ethylhexanoic acid, manganese salt</td>
<td>15956-58-8</td>
<td>LD50 1470 - 2150 mg/kg bw (rat)</td>
<td>LD50 2000 mg/kg bw (rat)</td>
<td>No data available</td>
</tr>
<tr>
<td>2-ethylhexanoic acid</td>
<td>149-57-5</td>
<td>LD50 2043 mg/kg bw (rat)</td>
<td>LC0 (8 h) 110 mg/m³ air (rat)</td>
<td>LD50 2000 mg/kg bw (rat)</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated middle</td>
<td>64742-46-7</td>
<td>LD50 5000 mg/kg bw (rat)</td>
<td>LC50 (4 h) 4.6 mg/L air (rat)</td>
<td>LD50 2000 mg/kg bw (rabbit)</td>
</tr>
<tr>
<td>Residual oils (petroleum),</td>
<td>64742-62-7</td>
<td>LD50 5000 mg/kg bw (rat)</td>
<td>LC50 (4 h) 2.18 - 5.53 mg/L air (rat)</td>
<td>LD50 2000 - 5000 mg/kg bw (rabbit)</td>
</tr>
<tr>
<td>Naphtha (petroleum),</td>
<td>64742-48-9</td>
<td>LD50 5000 mg/kg bw (rat)</td>
<td>No data available</td>
<td>LD50 2000 mg/kg bw (rabbit)</td>
</tr>
<tr>
<td>2-(2-methoxyethoxy)ethanol</td>
<td>111-77-3</td>
<td>LD50 7 128 - 8188 mg/kg bw (mouse)</td>
<td>LC0 (6 h) 1.2 mg/L air (rat)</td>
<td>LD50 9404 mg/kg bw (rabbit)</td>
</tr>
</tbody>
</table>

(e) Carcinogens information:
IARC; Group 1 (Carcinogenic to humans), Group 2A (Probably carcinogenic to humans), or Group 2B (Possibly carcinogenic to humans) by IARC: This mixture does not contain listed materials.
NTP; 13th Report on Carcinogens: This mixture does not contain listed materials.
OSHA: This mixture does not contain listed materials.

SECTION 12: ECOLOGICAL INFORMATION

(a) Ecotoxicity
Classification of mixture: Not classified as hazardous
(b) Persistence and degradability: No data available
(c) Bioaccumulative potential: No data available.
(d) Mobility in soil: No data available
(e) Other adverse effects: No known adverse effects
SECTION 13: DISPOSAL CONSIDERATIONS
Dispose of contents/container in accordance with local/regional/national regulations. The hazard and precautionary statements displayed on the label also apply to any residues left in the container.

SECTION 14: TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>US DOT (Ground):</th>
<th>Not regulated as a dangerous good</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) UN number:</td>
<td>Not regulated as a dangerous good</td>
</tr>
<tr>
<td>(b) UN Proper Shipping Name:</td>
<td>Not regulated as a dangerous good</td>
</tr>
<tr>
<td>(c) Transport hazard class:</td>
<td>Not regulated as a dangerous good</td>
</tr>
<tr>
<td>(d) Packing Group:</td>
<td>Not regulated as a dangerous good</td>
</tr>
<tr>
<td>(e) Environmental hazards:</td>
<td>Not regulated as a dangerous good</td>
</tr>
<tr>
<td>(f) Transport in bulk</td>
<td></td>
</tr>
</tbody>
</table>
  MARPOL 73/78: Not regulated as a dangerous good
  IBC: Not regulated as a dangerous good. |
| (g) Special Precautions: None known |

SECTION 15: REGULATORY INFORMATION

U.S. Federal Regulations

TSCA Section 8(b) Inventory Status: All ingredients of this mixture are listed on the TSCA Inventory

EPCRA, Section 302 – Extremely hazardous substances: This mixture does not contain listed materials.

CERCLA Hazardous Substances: This mixture does not contain listed materials.

EPCRA Section 313 Toxic Chemicals: This mixture does not contain listed materials.

CAA 112(r) Regulated Chemicals for Accidental Release Prevention: This mixture does not contain listed materials.

Hazardous Air Pollutants (HAP): This mixture does not contain listed materials.

U.S. State Regulations

Pennsylvania Right to Know
  o 2-(2-methoxyethoxy)ethanol CAS 111-77-3

New Jersey Right to Know
  o 2-ethylhexanoic acid CAS 149-57-5

California Proposition 65: This mixture does not contain listed materials:

Canadian Environmental Protection Act:

WHMIS Classification: No data available

European Chemical Agency (ECHA): This mixture does not contain listed materials.

SECTION 16: 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.