Safety Data Sheet

SECTION 1: IDENTIFICATION

SDS Number: 613, version 11/29/2017
(a) Product identifier
Gans Item ID:  P877, C950ND, 88998, M018050, 1011968

Pantone Premium Metallics: P10101 to P10399 listed on Page 8

Gans Description: OS P877C Silver, OS No Drier Silver, OS Low Paste Silver, OS Metallic (Pantone Metallic Blends of Silver), OS Metallic (Pantone Metallic Blends of Silver, and Silver and P874 Gold), OS Metallic (Pantone Premium Metallics), OS Stronger Pantone Black #7

(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:
Physical hazards: NA
  o Acute Toxicity, Oral – Category 4
  o Eye Damage/Irritation – Category 2A
  o Sensitization, Skin – Category 1A
  o Carcinogenicity – Category 1B
  o Toxic to Reproduction – Category 2
  o Specific Target Organ Toxicity, Repeat Exposure (liver, spleen) – Category 2

(b) Label elements
Signal Word: Danger

Hazard Statements: Harmful if swallowed. May cause cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs <liver, spleen> through prolonged or repeated exposure. Causes serious eye irritation. May cause an allergic skin reaction.

Precautionary Statements:
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.

Do not breathe mist/ vapors/spray. Wash contaminated areas thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace.

Response: If exposed or concerned: Get medical advice/attention.

IF INHALED: Get medical advice/attention 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.
IF SWALLOWED: Call a poison center/doctor if you feel unwell. Rinse mouth.

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:** NA

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<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>Copper*</td>
<td>7440-50-8</td>
<td>0.00%</td>
<td>38.0%</td>
</tr>
<tr>
<td>Resin, Gans V-5197</td>
<td>TS</td>
<td>0.00%</td>
<td>24.0%</td>
</tr>
<tr>
<td>Distillates (petroleum), straight-run middle</td>
<td>64741-44-2</td>
<td>0.00%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Fatty acids, tall-oil, cobalt salts</td>
<td>61789-52-4</td>
<td>0.00%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Cyclohexanone oxime</td>
<td>100-64-1</td>
<td>0.00%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Distillates (petroleum), sweetened middle</td>
<td>64741-86-2</td>
<td>0.00%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated middle</td>
<td>64742-46-7</td>
<td>0.00%</td>
<td>0.5%</td>
</tr>
<tr>
<td>2-tert-butylhydroquinone</td>
<td>1948-33-0</td>
<td>0.00%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Residual oils (petroleum), solvent-dewaxed</td>
<td>64742-62-7</td>
<td>0.00%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Naphtha (petroleum), hydrotreated heavy</td>
<td>64742-48-9</td>
<td>0.00%</td>
<td>0.3%</td>
</tr>
<tr>
<td>2-(2-methoxyethoxy)ethanol</td>
<td>111-77-3</td>
<td>0.00%</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

*This applies to colors containing Pantone 874 gold. Consult the Pantone formula guide, or your Gans Ink Company representative.

### SECTION 4: FIRST AID MEASURES

(a) **Description of first aid measures:**

**Inhalation:** Get medical advice/attention 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.

**Ingestion:** Call a poison center/doctor if you feel unwell. Rinse mouth.

(b) **Most important symptoms and effects, both acute and delayed:**

**Inhalation:** May cause damage to organs <liver, spleen> through prolonged or repeated exposure.

**Skin contact:** May cause an allergic skin reaction.

**Eye contact:** Causes serious eye irritation.

**Ingestion:** Harmful if swallowed. May cause cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs <liver, spleen> through prolonged or repeated exposure.

(c) **Indication of any immediate medical attention and special treatment needed:** Data not available.

### SECTION 5: FIRE – FIGHTING MEASURES

(a) **Extinguishing Media:**

**Suitable extinguishing media:** Use dry chemical powder: sodium chloride powder, graphite powder or Met-L-X powder

**Unsuitable extinguishing media:** Water, carbon dioxide (CO₂), halogenated hydrocarbons.

(b) **Special hazards arising from the substance or mixture:** Decomposition products may include metal oxides, carbon oxides, nitrogen oxides.

(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 for general industrial environment.

Do not breathe mist/ vapors/spray. Wash contaminated areas thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace.

(a.ii) Protective equipment: Use personal protective equipment. Wear protective gloves/protective clothing, eye protection, face protection. See Section 8 for details.

(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. Soak up with inert absorbent material.

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.

Do not breathe mist/ vapors/spray. Wash contaminated areas thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace.

(b) Conditions for safe storage: Store locked up.

Incompatibilities: Keep away from oxidizing agents.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

(a) Permissible exposure limits

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS #</th>
<th>OSHA PEL</th>
<th>Cal/OSHA PEL</th>
<th>NIOSH REL</th>
<th>ACGIH 2015 TVL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper* (dust and mist)</td>
<td>7440-50-8</td>
<td>1 ppm</td>
<td>1 mg/m³</td>
<td>1 mg/m³</td>
<td>1 mg/m³</td>
</tr>
</tbody>
</table>

No other hazardous ingredients appear on OSHA Annotated Tables Z-1, Z-2, or Z-3.

*This applies to colors containing Pantone 874 gold. Consult the Pantone formula guide, or your Gans Ink Company representative.

(b) Appropriate engineering controls:

Ventilation requirements: Ensure adequate ventilation for general industrial environment.

General protective measures: Ensure that eye flushing /eye wash stations, and hand washing areas are accessible.

(c) Personal protective equipment:

Inhalation: Do not breathe mist, vapors, spray. Where mist or aerosol is present, an organic vapor full facepiece respirator is recommended (to protect eyes and face as well).

Skin Contact: Laminate Film, Barrier; Nitrile, Solvex; Supported Polyvinyl Alcohol, PVA.. Always wear long sleeves and where exposure potential is high, a chemical resistant apron is recommended.

Eye Contact: Wear eye protection/face protection. Eye and face protective devices must comply with ANSI Z87.1-1989. Recommended eye protection: goggles, flexible fitting, hooded ventilation. A transparent face shield is recommended.

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 or liquid, metallic sheen
(b) Odor: petroleum distillate
(c) Odor threshold: Data not available
(d) pH: Data not available
(e) Melting point/ freezing point: Data not available
(f) Initial Boiling point / Range: Data not available
(g) Flashpoint: > 200 °F (> 93 °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: Data not available
(l) Vapor Density (Air = 1): Data not available
(m) Relative Density (H₂O = 1): 1.10-1.51 estimated
(n) Solubility: Not miscible with 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.): 15-24

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 high heat, and freezing.
(e) Incompatible materials: Strong oxidizers.
(f) Hazardous decomposition product: Carbon and nitrogen oxides are the main combustion gases.

SECTION 11: TOXICOLOGICAL INFORMATION

(a) Likely routes of exposure: Skin contact, eye contact, inhalation, 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: May cause damage to organs <liver, spleen> through prolonged or repeated exposure.
   Ingestion: Harmful if swallowed. May cause damage to organs <liver, spleen> through prolonged or repeated exposure. 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 damage to organs <liver, spleen> through prolonged or repeated exposure. 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>Copper*</td>
<td>7440-50-8</td>
<td>LD50 300 - 2500 mg/kg bw (rat)</td>
<td>LC50 (4 h) 5.11 mg/L air (rat)</td>
<td>LD50 2000 mg/kg bw (rat)</td>
</tr>
<tr>
<td>Resin, Gans V-5197</td>
<td>TS</td>
<td>Data not available</td>
<td>Data not available</td>
<td>Data not available</td>
</tr>
<tr>
<td>Distillates (petroleum)</td>
<td>64741-44-2</td>
<td>approx. LD50 5000 mg/kg bw (rat)</td>
<td>LC50 (4 h) 2.53 mg/L air (rat)</td>
<td>LD50 2000 mg/kg bw (rabbit)</td>
</tr>
<tr>
<td>Fatty acids, tall-oil, cobalt salts</td>
<td>61789-52-4</td>
<td>Data not available</td>
<td>Data not available</td>
<td>Data not available</td>
</tr>
<tr>
<td>Cyclohexanone oxide</td>
<td>100-64-1</td>
<td>LD50 882.82 - 1765.01 mg/kg bw (rat)</td>
<td>Data not available</td>
<td>approx. LD50 5000 mg/kg bw (rabbit)</td>
</tr>
<tr>
<td>Distillates (petroleum)</td>
<td>64741-86-2</td>
<td>LD50 5000 mg/kg bw (rat)</td>
<td>LC50 (4 h) 1.72 - 4.6 mg/L air (rat)</td>
<td>LD50 2000 mg/kg bw (rabbit)</td>
</tr>
<tr>
<td>Distillates (petroleum)</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>2-tert-butylhydroquinone</td>
<td>1948-33-0</td>
<td>LD50 951 - 1131 mg/kg bw (rat)</td>
<td>LC50 (4 h) 2.9 mg/L air (rat)</td>
<td>LD50 1000 mg/kg bw (guinea pig)</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>LC50 (4 h) 2.18 - 5.53 mg/L air (rat)</td>
<td>LD50 2000 mg/kg bw (rabbit)</td>
</tr>
<tr>
<td>2-(2-methoxyethoxy) ethanol</td>
<td>111-77-3</td>
<td>LD50 7128 - 8188 mg/kg bw (mouse)</td>
<td>LC0 (6 h) 1.2 mg/L air (rat)</td>
<td>LD50 9 404 mg/kg bw (rabbit)</td>
</tr>
</tbody>
</table>

*This applies to colors containing Pantone 874 gold. Consult the Pantone formula guide, or your Gans Ink Company representative.

## (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

US DOT (Ground): Not regulated as a dangerous good
(a) UN number: UN3082*
(b) UN Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (contains copper metal powder)*
(c) Transport hazard class: 9*
(d) Packing Group: III*
(e) Environmental hazards: Marine Pollutant*
(f) Transport in bulk
   MARPOL 73/78: No data available
   IBC: No data available
(g) Special Precautions: None known

*This classification only applies to colors containing Pantone 874 gold. Consult the Pantone formula guide, or your Gans Ink Company representative.

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:
   o Copper CAS 7440-50-8 RQ 5000*
EPCRA Section 313 Toxic Chemicals:
   o Copper CAS 7440-50-8*
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 Copper CAS 7440-50-8*
   o 2-(2-methoxyethoxy)ethanol CAS 111-77-3
New Jersey Right to Know:
   o Copper CAS 7440-50-8*
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.

*This applies to colors containing Pantone 874 gold. Consult the Pantone formula guide, or your Gans Ink Company representative

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.
Pantone Premium Metallics: