Safety Data Sheet

SECTION 1: IDENTIFICATION

SDS Number: 606, version 8/3/2016

(a) Product identifier
Gans Item ID: P871, P872, P873, P874, P875, P876;

Sheet-Fed (SFP prefix or suffix), Hard Dry (HDP prefix or suffix), and Soy Plus (SPP prefix or suffix) versions of Pantone Metallic Blends: 8483, 8503, 8521, 8522, 8540, 8541, 8542, 8543, 8560, 8561, 8562, 8563, 8580, 8581, 8582, 8583, 8600, 8601, 8602, 8603, 8620, 8621, 8622, 8623, 8640, 8641, 8642, 8643, 8660, 8661, 8662, 8663, 8680, 8681, 8682, 8683, 8700, 8701, 8702, 8703, 8720, 8721, 8722, 8723, 8740, 8741, 8742, 8743, 8760, 8761, 8762, 8763, 8780, 8781, 8782, 8783, 8800, 8801, 8802, 8803, 8820, 8821, 8822, 8823, 8840, 8841, 8842, 8843, 8860, 8861, 8862, 8863, 8880, 8881, 8882, 8883, 8900, 8901, 8902, 8903, 8920, 8921, 8922, 8923, 8940, 8941, 8942, 8943, 8960, 8961, 8962, 8963,


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

(c) Recommended use
Product Use: Industrial use only; printing ink for use on lithographic printing press equipped with UV curing lamps.
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, oral – Category 4
- Reproductive Toxicity – Category 2
- Specific Target Organ Toxicity Repeat Exposure (STOT RE) – Category 2
- Aquatic Hazard, Acute – Category 1

(b) Label elements
Signal Word: Warning

Hazard Statements:
Harmful if swallowed. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. Very toxic to aquatic life.

Precautionary Statements:
Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.

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

If swallowed: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

If on skin: Wash with plenty of water and mild soap, and or waterless hand cleaner. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Wash contaminated clothing before reuse.

If inhaled: Get medical advice/attention if you feel unwell.

Storage: Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard Pictograms:

(c) Hazards not otherwise classified
None known
(d) Ingredients of unknown acute toxicity
NA

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.</th>
<th>Conc. max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>7440-50-8</td>
<td>25.0</td>
<td>40.0</td>
</tr>
<tr>
<td>Zinc</td>
<td>7440-66-6</td>
<td>2.5</td>
<td>20.0</td>
</tr>
<tr>
<td>Distillates, petroleum, straight-run middle</td>
<td>64741-44-2</td>
<td>2.5</td>
<td>10.0</td>
</tr>
<tr>
<td>2,2,4-trimethyl-1,3-pentanediol diisobutyrate</td>
<td>6846-50-0</td>
<td>0</td>
<td>2.5</td>
</tr>
</tbody>
</table>
SECTION 4: FIRST AID MEASURES

(a) Description of first aid measures:
If exposed or concerned: Get medical advice/attention.
Inhalation: Get medical advice/attention if you feel unwell.

Skin contact: Wash with plenty of water and mild soap, and or waterless hand cleaner. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Wash contaminated clothing before reuse.

Eye contact: 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.

Ingestion: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

(b) Most important symptoms and effects, both acute and delayed:
Ingestion: Harmful if swallowed. Suspected of damaging fertility or the unborn child.
Inhalation: May cause damage to organs through prolonged or repeated exposure.

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

SECTION 5: FIRE – FIGHTING MEASURES

(a) Extinguishing Media:
Suitable extinguishing media: DRY sand, sodium chloride powder, graphite powder or Met-L-X powder designed for metal fire. Confining and smothering metal fires is preferable rather than applying water.

Unsuitable extinguishing media: Water. Do not use water jet as an extinguisher, as this will spread the fire. Foam. Carbon dioxide (CO2).

(b) Special hazards arising from the substance or mixture: Not applicable

(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:
Do not handle until all safety precautions have been read and understood.
No smoking or other sources of ignition near spillage.
Avoid direct contact with spilled material.
Wear all Personal Protection listed in Section 8 before directly contacting spilled material

(a.ii) Protective equipment: See Section 8

(a.iii) Emergency procedures: If dangerous conditions exist, contact emergency response personnel, follow emergency procedures, and contact emergency response authorities.

(b) Methods for containment and cleaning up:
If it is safe to do so, adjust leaking containers to reduce or eliminate the continued release. Wear all Personal Protection listed in Section 8 before directly contacting spilled material. Scoop or shovel material into appropriate container for reuse, recycling, or
disposal. If spilled material is flowing, first surround and then cover spilled material with inert absorbent (vermiculite, or similar). Then scoop or shovel material into appropriate container for reuse, recycling, or disposal.

Residual material can be cleaned with blanket wash, acetone, or other press solvent. Consult your company's spill procedure for details of regulatory restrictions and recommendations. Do not allow spilled materials, or clean up materials to enter storm drains or natural water ways.

SECTION 7: HANDLING AND STORAGE

(a) Precautions for safe handling:
Wear protective gloves.
Wear eye protection and face protection.
Wear protective clothing.
Wash hands thoroughly after handling.
Avoid breathing mist/vapors/spray.

(b) Conditions for safe storage:
Store locked up.
Store in original container and keep containers covered and sealed.
Store in cool, dry, well-ventilated place.
Incompatibilities: Avoid contact with heat, sources of ignition, temperatures exceeding the flash point, and moisture.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS #</th>
<th>OSHA PEL ppm</th>
<th>Cal/OSHA PEL mg/m³</th>
<th>NIOSH REL 8-hour TWA (ST) STEL (C) Ceiling</th>
<th>ACGIH 2015 TVL 8-hour TWA (ST) STEL (C) Ceiling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>7440-50-8</td>
<td>1 mg/m³ Dust and mist</td>
<td>1 mg/m³ Dust and mist</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(b) Appropriate engineering controls:
Ventilation requirements: Adequate ventilation in accordance with good engineering practice must be provided.
General protective measures: Ensure that eye flushing /eye wash stations, and hand washing areas are accessible.

c) Personal protective equipment:
Inhalation: Avoid breathing mist/vapors/spray. Where mist or aerosol is present, an organic vapor respirator is recommended.

Skin Contact: Wear protective gloves/protection clothing. Ansell Chemical Resistance Guide, 7th Edition recommends the following gloves compatible with Kerosene (similar composition to CAS 64741-44-2): Laminate Film, Barrier; Nitrile, Solvex; Supported Polyvinyl Alcohol, PVA. **Glove types not recommended:** Natural Rubber, Canners and Handlers; and Neoprene/ Natural Rubber Blend, Chi-Pro. 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:** > 212 °F (> 100 °C) estimated
(h) **Evaporation Rate:** Data not available
(i) **Flammability (solid/ gas):** Not classified as flammable/ Not classified as flammable
(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 (H<sub>2</sub>O = 1):**
   - P871, P872, P873, P874, P875: 1.41 – 1.61
   - P876: 1.41
(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); VOC (lbs./gal):
- P871: 17%; 1.99 – 2.28 lb./gal
- P872, P873, P874, P875: 15.8%; 1.85 – 2.12 lb./gal
- P876: 18.6%; 2.18 lb./gal

**SECTION 10: STABILITY AND REACTIVITY INFORMATION**

(a) **Reactivity:** Data not available
(b) **Chemical stability:** Mixture is chemically stable under normal storage and handling conditions, and under normal temperatures and pressures.
(c) **Possibility of hazardous reactions:** Data not available
(d) **Conditions to avoid:** Heat, flames and sparks. Avoid temperatures exceeding the flash point, exposure to moisture.
(e) **Incompatible materials:** Data not available
(f) **Hazardous decomposition product:** Carbon oxides.

**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:** Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
   - **Eye contact:** Direct contact with eyes may cause temporary irritation.
   - **Inhalation:** Prolonged inhalation may be harmful.
   - **Ingestion:** Harmful if swallowed.
(c) Delayed and immediate effects, and chronic effects from long-term exposure
Irritation of eyes and mucous membranes. Irritation of nose and throat.

(d) Numerical measures of toxicity:

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS # (TS= trade secret)</th>
<th>Oral</th>
<th>Dermal</th>
<th>Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>7440-50-8</td>
<td>LD50 300 - 2500 mg/kg bw (rat)</td>
<td>LD50 2000 mg/kg bw (rat)</td>
<td>LC50 (4 h) 5.11 mg/L air (rat)</td>
</tr>
<tr>
<td>Zinc</td>
<td>7440-66-6</td>
<td>LD50 2000 mg/kg bw (rat)</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Distillates, petroleum, straight-run middle</td>
<td>64741-44-2</td>
<td>approx. LD50 5000 mg/kg bw (rat)</td>
<td>LD50 2000 mg/kg bw (rabbit)</td>
<td>LC50 (4 h) 1.72 - 1.82 mg/L air (rat)</td>
</tr>
<tr>
<td>2,2,4-trimethyl-1,3-pentanediol diisobutyrate</td>
<td>6846-50-0</td>
<td>LD50 2000 - 3200 mg/kg bw (rat)</td>
<td>LD50 20 mL/kg bw (guinea pig)</td>
<td>LCLo (6 h) 120 - 5300 mg/m³ air (rat)</td>
</tr>
<tr>
<td>Fatty acids, tall oil, cobalt salts</td>
<td>61789-52-4</td>
<td>LD50 6171 mg/kg (rat)</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

(e) Carcinogens information: No ingredients in this mixture are known to be listed by the National Toxicology Program (NTP) Report on Carcinogens, or have been found to be potential carcinogens in the International Agency for Research on Cancer (IARC), or by OSHA.

SECTION 12: ECOLOGICAL INFORMATION

(a) Ecotoxicity
Classification of mixture: Aquatic Hazard, Acute -- Category 2
(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 data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of contents/container in accordance with local/regional/national regulations. This product does NOT exhibit the characteristics of a RCRA hazardous waste as defined under 40CFR261.

SECTION 14: TRANSPORT INFORMATION

US DOT (Ground): Not regulated as dangerous goods.
(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

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 Zinc CAS 7440-66-6, RQ = 1000  
   o Copper CAS 7440-50-8, RQ = 5000

EPCRA Section 313 Toxic Chemicals:
   o Zinc (fume or dust) CAS 7440-66-6  
   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

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

Canadian Environmental Protection Act: Data not available

European Chemical Agency (ECHA):  
Substances of Very High Concern (SVHC): Data not available

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.