Safety Data Sheet

SECTION 1: IDENTIFICATION

SDS Number: 624, version 7/20/2018

(a) Product identifier
Gans Item ID: I011608

Hard Dry Pantone Reference Color: Where # is any whole number from 0 to 9
HDP###
HDP####
HDPCG##
HDPWG##

Gans Description:
OS HD Pantone, OS Hard Dry Pantone, Hard Dry custom match colors

(b) Other means of identification
General description: Lithographic/offset printing inks

(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 numbers:
Chemical spill or physical hazard: Contact the Local Emergency Response Agency 9-1-1, or the Local Fire Department
Ingestion or health hazard: Contact the National Capital Poison Center, Poison Control: 800 222-1222; Poison.org

SECTION 2: HAZARD(S) IDENTIFICATION

Physical hazards: NA
Health hazards:
  o  Sensitization, Skin – Category I
(b) Label elements
Signal Word: Danger

Hazard Statements: May cause an allergic skin reaction; May cause genetic defects; May cause cancer.

Precautionary Statements: Avoid breathing mist/vapors/spray. Contaminated work clothing must not be allowed out of the workplace. 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.

Response: 
If exposed or concerned: Get medical advice/attention.
IF ON SKIN OR HAIR: Wash with plenty of water and 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.
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>Fatty acids, tall-oil, cobalt salts</td>
<td>61789-52-4</td>
<td>1.2%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated middle</td>
<td>64742-46-7</td>
<td>0.3%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Residual oils (petroleum), solvent-dewaxed</td>
<td>64742-62-7</td>
<td>0.2%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Naphtha (petroleum), hydrotreated heavy</td>
<td>64742-48-9</td>
<td>0.1%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Tert-Butylhydroquinone</td>
<td>1948-33-0</td>
<td>0.0%</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

SECTION 4: FIRST AID MEASURES

(a) Description of first aid measures: 
If exposed or concerned: Get medical advice/attention.
Inhalation: If breathing is difficult, remove person to fresh air and keep at rest in a position comfortable for breathing.
Skin contact: Gently wash with plenty of water and 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.
Ingestion: If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician.
(b) Most important symptoms and effects, both acute and delayed:
Ingestion: May cause genetic defects. May cause cancer. 
Inhalation: Data not available.
Skin contact: May cause an allergic skin reaction.
Eye contact: Data not available.

(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 CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Unsuitable extinguishing media: Water with full jet.

(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 for general industrial environment.
(a.ii) Protective equipment: See Section 8 for details. Use personal protective equipment that is appropriate for the general industrial environment.
(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: Do not ingest. Wash hands after handling. Take off contaminated clothing and wash it before reuse.

(b) Conditions for safe storage: Keep cool. Do not freeze. Ideal storage temperature is 50-90 °F (10-32 °C).

Incompatibilities: Keep away from oxidizing agents. Keep away from high heat, and freezing.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS #</th>
<th>ppm</th>
<th>mg/m³</th>
<th>8-hour TWA (ST) Ceiling</th>
<th>Up to 10-hour TWA (ST) Ceiling</th>
<th>8-hour TWA (ST) STEL (C) Ceiling</th>
</tr>
</thead>
</table>

No hazardous ingredients in this mixture appear on OSHA Annotated Tables Z-1, Z-2, or Z-3.
(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: Avoid breathing mist/vapors/spray. Where mist/vapors/spray is present, an organic vapor respirator is recommended.
Skin Contact: Wear protective gloves/protective clothing. Nitrile rubber gloves are compatible with ink chemistry.
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): Paste, various colors
(b) Odor: Oleoresinous
(c) Odor threshold: Data not available
(d) pH: Not applicable
(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): 1.04 - 1.14 (68 °F (20 °C))
(n) Solubility: Minimally soluble 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.): 1 – 13, 7.0 average
VOC: .09 – 1.23 lbs./gal, .66 lbs./gal average; 10.4 – 148 g/L, 79.3 g/L average

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, 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: Data not available.
Inhalation: Data not available.
Ingestion: May cause genetic defects. May cause cancer.

d) Delayed and immediate effects, and chronic effects from long-term exposure
May cause genetic defects. May cause cancer

(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>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>Distillates (petroleum), hydrotreated middle</td>
<td>64742-46-7</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>Residual oils (petroleum), solvent-dewaxed</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), hydrotreated heavy</td>
<td>64742-48-9</td>
<td>LD50 5000 mg/kg bw (rat)</td>
<td>Data not available</td>
<td>LD50 2000 mg/kg bw (rabbit)</td>
</tr>
<tr>
<td>Tert-Butylhydroquinone</td>
<td>1948-33-0</td>
<td>LD50 951 - 1131 mg/kg bw (rat)</td>
<td>LCLo (4 h) 2.9 mg/L air (rat)</td>
<td>LD50 1000 mg/kg bw (guinea pig)</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): 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: Not regulated as a dangerous good
(b) UN Proper Shipping Name: Not regulated as a dangerous good
(c) Transport hazard class: Not regulated as a dangerous good
(d) Packing Group: Not regulated as a dangerous good
(e) Environmental hazards: Not regulated as a dangerous good

(f) Transport in bulk
   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:
   - Cobalt compound N096, 1.4%; no RQ
   - Manganese compound N450, 0.8%; no RQ

EPCRA Section 313 Toxic Chemicals:
   - Barium Compounds N040; Pantone Warm Red, and colors made with Pantone Warm Red contain Pigment Red 53:1, CAS 5160-02-1 (21% maximum)
   - Cobalt compound N096, 1.4%
   - Manganese compound N450, 0.8%

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

Hazardous Air Pollutants (HAP):
   - Cobalt compound N096, 1.4%; no TQ
   - Manganese compound N450, 0.8%; no TQ

U.S. State Regulations

California Proposition 65:

⚠️ WARNING: This product can expose you to chemicals including Pigment Red 53:1 (D&C Red No. 9)*, which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov. Complete list:
   - Pigment Red 53:1 (D&C Red No. 9) CAS 5160-02-1
* Pantone Warm Red, and colors made with Pantone Warm Red contain Pigment Red 53:1, CAS 5160-02-1 (21% maximum)

New Jersey Right to Know: Data not available

Oregon DEQ Air Toxic Contaminant:
   - Cobalt compound N096, 1.4%
   - Manganese compound N450, 0.8%

Pennsylvania Right to Know: 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.