Safety Data Sheet

SECTION 1: IDENTIFICATION

SDS Number: 643, version 6/1/2018

(a) Product identifier
Gans Item ID: S-1041, S-1072

Gans Description: Unit 2-Sqze Btl Cobalt Drier, Tu-Way Drier

(b) Other means of identification
General description: Lithographic ink drier additive (oxidation catalyst mixture)

(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:
  o Flammable Liquids – Category 4
Health hazards:
  o Acute Toxicity, Oral – Category 4
  o Skin Corrosion – Category 1A
  o Eye Damage/Irritation – Category 1
  o Sensitization, Skin – Category 1B
  o Germ Cell Mutagenicity – Category 1B
- Carcinogenicity – Category 1B
- Toxic to Reproduction – Category 2
- Hazardous to the Aquatic Environment, Chronic – Category 4

(b) Label elements

**Signal Word:** Danger

**Hazard Statements:** Combustible liquid; Harmful if swallowed; Causes severe skin burns and eye damage; Causes serious eye damage; May cause an allergic skin reaction; May cause genetic defects; May cause cancer; Suspected of damaging fertility or the unborn child; May cause long lasting harmful effects to aquatic life.

**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.

Keep away from flames and hot surfaces. – No smoking.
Do not breathe mists/ vapors/spray. Do not eat, drink or smoke when using this product. Wash contaminated areas thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment.

**Response:** If exposed or concerned: Get medical advice/attention.
IN CASE OF FIRE: Use CO₂, dry chemical, fire-fighting foam, or water fog to extinguish.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a poison center/doctor if you feel unwell.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor.
IF ON SKIN OR HAIR: Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with plenty of water and mild soap. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.

**Storage:** Store in a well-ventilated place. Keep cool. 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 / Description</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>30.0%</td>
<td>57.4%</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated middle</td>
<td>64742-46-7</td>
<td>7.5%</td>
<td>20.5%</td>
</tr>
<tr>
<td>Residual oils (petroleum), solvent-dewaxed</td>
<td>64742-62-7</td>
<td>5.0%</td>
<td>12.3%</td>
</tr>
<tr>
<td>Naphtha (petroleum), hydrotreated heavy</td>
<td>64742-48-9</td>
<td>0.0%</td>
<td>6.5%</td>
</tr>
<tr>
<td>Neodecanoic acid, cobalt salt</td>
<td>27253-31-2</td>
<td>0.0%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Residual oils (petroleum,) solvent-refined</td>
<td>64742-01-4</td>
<td>0.0%</td>
<td>1.7%</td>
</tr>
<tr>
<td>2-(2-methoxyethoxy)ethanol</td>
<td>111-77-3</td>
<td>0.0%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Calcium bis(2-ethylhexanoate)</td>
<td>136-51-6</td>
<td>0.0%</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

SECTION 4: FIRST AID MEASURES

(a) Description of first aid measures:
Ingestion: Rinse mouth. Do NOT induce vomiting. Call a poison center/doctor if you feel unwell.
Inhalation: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor.
Skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with plenty of water and mild soap. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.

(b) Most important symptoms and effects, both acute and delayed:
Ingestion: Harmful if swallowed; May cause genetic defects; May cause cancer; Suspected of damaging fertility or the unborn child;
Inhalation: No data available; not classified as hazardous.
Skin contact: Causes severe skin burns and eye damage; May cause an allergic skin reaction.
Eye contact: Causes severe skin burns and eye damage; Causes serious eye damage;

(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: The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. During fire, gases hazardous to health may be formed.

(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. Do not breathe mists/ vapors/spray. Avoid contact with skin, eye or clothing.

(a.ii) Protective equipment: Wear protective gloves/protective clothing/eye protection/face protection. For details, see Section 8

(a.iii) Emergency procedures: If dangerous conditions exist, contact emergency response personnel, follow emergency procedures, and contact emergency response authorities. Avoid release to the environment. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

Follow your company’s emergency response plan.

(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.

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

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

Incompatibilities: Keep away from strong oxidizing agents.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

(a) Permissible exposure limits

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS #</th>
<th>ppm</th>
<th>mg/m³</th>
<th>8-hour TWA (ST)</th>
<th>STEL (C) Ceiling</th>
<th>Up to 10-hour TWA (ST)</th>
<th>STEL (C) Ceiling</th>
<th>8-hour TWA (ST)</th>
<th>STEL (C) Ceiling</th>
</tr>
</thead>
<tbody>
<tr>
<td>No hazardous ingredients in this mixture appear on OSHA Annotated Tables Z-1, Z-2, or Z-3.</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

OSHA PEL Cal/OSHA PEL NIOSH REL ACGIH 2015 TVL
(b) Appropriate engineering controls:
Ventilation requirements: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions.

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

(c) Personal protective equipment:
Inhalation: Do not breathe mists/ vapors/spray. Where mists/ vapors/spray 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 rubber gloves and protective clothing 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): Liquid, dark brown or purple color
(b) Odor: Data not available
(c) Odor threshold: Data not available
(d) pH: NA
(e) Melting point/ freezing point: Data not available
(f) Initial Boiling point / Range: Data not available
(g) Flashpoint: > 141.8 °F (> 61.0 °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): ~ 0.98
(n) Solubility: Data not available
(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.): 17.1
VOC: 1.39 lbs./gal; 168 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, hot surfaces and sources of ignition.
(e) Incompatible materials: Strong oxidizers.
(f) Hazardous decomposition product: No hazardous decomposition products are known.

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: Causes severe skin burns and eye damage; May cause an allergic skin reaction;
Eye contact: Causes serious eye damage.
Inhalation: No data available; not classified as hazardous.
Ingestion: Harmful if swallowed; 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>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>Neodecanoic acid, cobalt salt</td>
<td>27253-31-2</td>
<td>approx. LD50 1098 mg/kg bw (rat)</td>
<td>Data not available</td>
<td>LD50 2000 mg/kg bw (rat)</td>
</tr>
<tr>
<td>Residual oils (petroleum,) solvent-refined</td>
<td>64742-01-4</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>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 9404 mg/kg bw (rabbit)</td>
</tr>
<tr>
<td>Calcium bis(2-ethylhexanoate)</td>
<td>136-51-6</td>
<td>LD50 2043 mg/kg bw (rat)</td>
<td>LC0 (8 h) 110 mg/m³ air (rat)</td>
<td>Data not available</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:
- Hazardous to the Aquatic Environment, Chronic – Category 4

(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):

(a) UN number: UN1263
(b) UN Proper Shipping Name: Paint Related Material
(c) Transport hazard class: 3
(d) Packing Group: PG III
(e) Environmental hazards: Yes; Subordinate classification: UN3082 Environmentally Hazardous Substance, Liquid, NOS (Fatty Acids, Tall-oil, Cobalt Salts), Marine Pollutant, transport hazard class 9, PG III
(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: This mixture does not contain listed materials.

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

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

Hazardous Air Pollutants (HAP):

U.S. State Regulations

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

New Jersey Right to Know: This mixture does not contain listed materials.

Oregon DEQ List of Air Toxic Contaminants: This mixture does not contain listed materials.
- 2-(2-methoxyethoxy)ethanol CAS 111-77-3

Pennsylvania Right to Know
- 2-(2-methoxyethoxy)ethanol CAS 111-77-3
Canadian Environmental Protection Act:
WHMIS Classification: No data available

European Chemical Agency (ECHA)
Candidate List of Substances of Very High Concern (SoVHC): 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.