Safety Data Sheet

SECTION 1: IDENTIFICATION

SDS Number: 642, version 11/9/2018

(a) Product identifier
Gans Item ID: X102452, X102822, X102839, X102840, L-3049

Gans Description: SB Screen, Solvent Screen Thinner

(b) Other means of identification
General description: Silk screen 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 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

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

Physical hazards:
- Flammable Liquid Category 3

Health hazards:
- Acute Toxicity, Inhalation – Category 4
- Skin Irritation – Category 2
- Eye Damage/Irritation – Category 2A
- Sensitization, Skin – Category 1A
- Germ Cell Mutagenicity – Category 1B
- Carcinogenicity – Category 1B
- Toxic to Reproduction – Category 1B
Environmental Hazards:
  - Hazardous to the Aquatic Environment, Chronic – Category 3

(b) Label elements
Signal Word: Danger

Hazard Statements: Flammable liquid and vapor;

Harmful if inhaled; Causes skin irritation; Causes serious eye irritation; May cause an allergic skin reaction; May cause genetic defects; May cause cancer; May damage fertility or the unborn child;

Harmful to aquatic life with long lasting effects;

Precautionary Statements:
Prevention:
Keep away from heat/sparks/open flames/hot surfaces.– No smoking. Keep container tightly closed.
Ground/Bond container and receiving equipment. Use explosion-proof electrical/ventilating/ lighting/ equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

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.

Avoid release to the environment.

Response:
IN CASE OF FIRE: Use Carbon dioxide (CO₂), dry chemical, or alcohol resistant foam to extinguish.
IF EXPOSED OR CONCERNED: Get medical advice/attention.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF ON SKIN OR HAIR: Take off immediately all contaminated clothing. Rinse skin with water/shower. 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. Store in a well-ventilated place. Keep cool.

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>Ethyl 3-ethoxypropionate</td>
<td>763-69-9</td>
<td>29.8%</td>
<td>57.9%</td>
</tr>
<tr>
<td>Cyclohexanone</td>
<td>108-94-1</td>
<td>6.9%</td>
<td>12.9%</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), light arom.</td>
<td>64742-95-6</td>
<td>2.0%</td>
<td>13.0%</td>
</tr>
<tr>
<td>1,2,4-trimethylbenzene</td>
<td>95-63-6</td>
<td>1.7%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Dicyclohexyl phthalate</td>
<td>84-61-7</td>
<td>0.8%</td>
<td>4.1%</td>
</tr>
</tbody>
</table>

### SECTION 4: FIRST AID MEASURES

(a) **Description of first aid measures:**
- **Ingestion:** If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician.
- **Inhalation:** Remove person to fresh air and keep comfortable for breathing.
- **Skin contact:** Take off immediately all contaminated clothing. Rinse skin with water/shower. 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; May damage 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 Carbon dioxide (CO₂), dry chemical, or alcohol resistant foam to extinguish.
- **Unsuitable extinguishing media:** Do not use a solid water stream as it may scatter and spread fire. Water stream or spray is OK to cool unopened containers only.

(b) **Special hazards arising from the substance or mixture:** Combustion may produce hazardous gases: Carbon oxides (CO₂) hydrogen chloride, nitrogen oxides (NOₓ).

(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. Use explosion proof equipment. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

(a.ii) Protective equipment: See Section 8

(a.iii) Emergency procedures: Follow your company emergency response procedure. Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Avoid release to the 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. Avoid release to the environment.

SECTION 7: HANDLING AND STORAGE

(a) Precautions for safe handling:
Keep away from heat/sparks/open flames/hot surfaces. No smoking. Ground/Bond container and receiving equipment. Use explosion-proof electrical/ventilating/ lighting/ equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

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. Contaminated work clothing must not be allowed out of the workplace.

Avoid release to the environment.

(b) Conditions for safe storage:
Keep away from sparks, open flames – No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical, lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Store locked up. Store in a well-ventilated place. Keep cool.

Incompatibilities: Strong oxidizing agents, strong acids, and strong bases.

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) STEL (C) Ceiling</td>
</tr>
<tr>
<td>Cyclohexanone</td>
<td>108-94-1</td>
<td>50</td>
<td>200</td>
<td>25 ppm</td>
</tr>
</tbody>
</table>

No other hazardous ingredients in this mixture appear on OSHA Annotated Tables Z-1, Z-2, or Z-3.
(b) Appropriate engineering controls:

Ventilation requirements: Use only outdoors or in a well-ventilated area. 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. Ansell Chemical Resistance Guide, 8th Edition recommends the following glove materials for cyclohexanone and aromatic solvents: Barrier, laminate film; PVA, supported polyvinyl alcohol.


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 liquid, clear to slightly opaque
(b) Odor: Organic solvent
(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: 109 °F (43°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): ~1.03
(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.): 68.6
VOC: 5.88 lbs./gal; 707 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 oxidizing agents, strong acids, and strong bases.
(f) **Hazardous decomposition product:** Combustion may produce hazardous gases: Carbon oxides (COₓ) hydrogen chloride, nitrogen oxides (NOₓ).

### 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:** Data not available

**Inhalation:** Harmful if inhaled;

**Ingestion:** May cause genetic defects; May cause cancer; May damage fertility or the unborn child;

(c) **Delayed and immediate effects, and chronic effects from long-term exposure**

May cause genetic defects; May cause cancer; May damage 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>Ethyl 3-ethoxypropionate</td>
<td>763-69-9</td>
<td>LD50 4309 - 5000 mg/kg bw (rat)</td>
<td>LC50 (6 h) 998 ppm (rat)</td>
<td>LD50 4080 - 4680 mg/kg bw (rabbit)</td>
</tr>
<tr>
<td>Cyclohexanone</td>
<td>108-94-1</td>
<td>LD50 1620 mg/kg bw (rat)</td>
<td>LC50 (4 h) 6.2 mg/L air (rat)</td>
<td>Data not available</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), light arom.</td>
<td>64742-95-6</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>1,2,4-trimethylbenzene</td>
<td>95-63-6</td>
<td>LD50 6000 mg/kg bw (rat)</td>
<td>LC50 (4 h) 10.2 mg/L air (rat)</td>
<td>Data not available</td>
</tr>
<tr>
<td>Dicyclohexyl phthalate</td>
<td>84-61-7</td>
<td>LD50 2000 mg/kg bw (rat)</td>
<td>Data not available</td>
<td>LD50 2000 mg/kg bw (rat)</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 3

(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.

RCRA Codes
- Cyclohexanone CAS 108-94-1: U057

SECTION 14: TRANSPORT INFORMATION

US DOT (Ground):
(a) UN number: UN1210
(b) UN Proper Shipping Name: Printing ink, flammable
(c) Transport hazard class: 3
(d) Packing Group: PG III
(e) Environmental hazards: No data available
(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 in this mixture are listed on the TSCA Chemical Inventory, or are not required to be listed.

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

CERCLA Hazardous Substances:
- Cyclohexanone CAS 108-94-1: RQ = 5000
  : RQ = 100
  : RQ = 1000

EPCRA Section 313 Toxic Chemicals:
- 1,2,4-Trimethylbenzene 95-63-6

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.

New Jersey Right to Know
- Cyclohexanone CAS 108-94-1
- 1,2,4-Trimethylbenzene 95-63-6

Oregon DEQ List of Air Toxic Contaminants:
- 1,2,4-Trimethylbenzene 95-63-6
- Dicyclohexyl phthalate 84-61-7

Pennsylvania Right to Know
- Cyclohexanone CAS 108-94-1
- 1,2,4-Trimethylbenzene 95-63-6
**Canadian Environmental Protection Act:**
**WHMIS Classification:** No data available

**European Chemical Agency (ECHA)**
**Candidate List of Substances of Very High Concern (SoVHC), including 27 June 2018 update:** This mixture does not contain listed materials.

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**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.