Safety Data Sheet

SECTION 1: IDENTIFICATION

SDS Number: 646, version 6/29/2018

(a) Product identifier
Gans Item ID: X103550

Gans Description: OS Desensitizing OP Varnish

(b) Other means of identification
General description: Offset/litho specialty overprint varnish

(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

Physical hazards: NA
Health hazards:
  o Skin Irritation – Category 2
  o Eye Damage/Irritation – Category 2A

(b) Label elements
Signal Word: Warning

Hazard Statements: Causes skin irritation; Causes serious eye irritation;
Precautionary Statements: Wash contaminated areas thoroughly after handling. Wear protective gloves. Wear eye protection/face protection.

Response:
IF ON SKIN OR HAIR: Wash with plenty of water and mild soap. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it 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: 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: 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>1H-Azepine-1-propanoic acid, hexahydro-, 2,2-bis[[1-oxo-2-propen-1-yl]oxy]methyl]butyl ester</td>
<td>73003-78-8</td>
<td>57.1%</td>
<td>85.6%</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated light naphthenic</td>
<td>64742-53-6</td>
<td>4.4%</td>
<td>6.6%</td>
</tr>
</tbody>
</table>

SECTION 4: FIRST AID MEASURES

(a) Description of first aid measures:
Inhalation: If breathing is difficult, remove person to fresh air and keep at rest in a position comfortable for breathing.
Skin contact: Wash with plenty of water and mild soap. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it 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: 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: Data not available. Not classified as hazardous
Inhalation: Data not available. Not classified as hazardous
Skin contact: Causes skin irritation
Eye contact: Causes serious eye irritation

(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 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: Wear protective gloves. Wear 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: Do not ingest. Wash hands after handling. Take off contaminated clothing and wash it before reuse.

(b) Conditions for safe storage: Store in original container. Protect from direct sunlight in dry, cool area, away from incompatible materials and food or drink.

Incompatibilities: Strong oxidizing agents, sources of ignition, and excessive heat.

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

(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: Use protective equipment appropriate for the general industrial environment.
Skin Contact: Wear protective gloves. Nitrile gloves are 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, tan color
(b) Odor: Mild oleo-resinous odor
(c) Odor threshold: Data not available
(d) pH: Data not available
(e) Melting point/ freezing point: Data not available
(f) Initial Boiling point / Range: 435 °F (224 °C)
(g) Flashpoint: 263 °F (128 °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): ≤ 1.0
(n) Solubility: 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.): 29.5
VOC: 2.45 (lbs./gal); 295 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 sources of ignition.
(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: Causes skin irritation
Eye contact: Causes serious eye irritation
Inhalation: Data not available. Not classified as Hazardous
Ingestion: Data not available. Not classified as Hazardous
(c) Delayed and immediate effects, and chronic effects from long-term exposure

Causes skin irritation; Causes serious eye irritation

(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>1H-Azepine-1-propanoic acid, …</td>
<td>73003-78-8</td>
<td>Data not available</td>
<td>Data not available</td>
<td>Data not available</td>
</tr>
<tr>
<td>Distillates (petroleum), …</td>
<td>64742-53-6</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>
</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: 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

(e) 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: This mixture does not contain listed materials.
EPCRA Section 313 Toxic Chemicals: This mixture does not contain listed materials.
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: This mixture does not contain listed materials.
Oregon DEQ List of Air Toxic Contaminants: This mixture does not contain listed materials.
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.