Safety Data Sheet

SECTION 1: IDENTIFICATION

SDS Number: 522, version 6/12/2018

(a) Product identifier
Gans Item ID: UV16320

Gans Description: Vinylcure Reducer P65 Free

(b) Other means of identification
General description: UV-cure lithographic ink additive

(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: Not classified as hazardous
Health hazards:
   ○ Skin Irritation – Category 2
   ○ Eye Damage/Irritation – Category 2A
   ○ Sensitization, Skin – Category 1A
Environmental hazards:
   ○ Hazardous to the Aquatic Environment, Chronic – Category 2
(b) Label elements

Signal Word: Warning

Hazard Statements: Causes skin irritation; Causes serious eye irritation; May cause an allergic skin reaction; Toxic to aquatic life with long lasting effects;

Precautionary Statements:

Prevention: Wear protective gloves/eye protection/face protection. Avoid breathing fume/mist/vapors/spray. Wash contaminated areas thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment.

Response: IF ON SKIN OR HAIR: Wash with plenty of water and mild soap. If skin irritation or rash 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.

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>Multifunctional Acrylate</td>
<td>84170-74-1</td>
<td>34.0%</td>
<td>46.0%</td>
</tr>
<tr>
<td>Pentaerythritol, ethoxylated, esters with acrylic acid</td>
<td>51728-26-8</td>
<td>33.9%</td>
<td>45.9%</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: 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 or rash 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.

(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; 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 burning, pain, or irritation to 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: May form explosive mixture with air at very high concentration. Thermal decomposition or combustion products may include toxic and corrosive gases or vapors.

(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.

(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. Avoid release to the environment. Do not allow flow into storm drains or water ways, or into the natural environment.

Follow facility emergency spill and clean up procedure.

(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:
Wear protective gloves/eye protection/face protection. Avoid breathing fume/mist/ vapors/spray. 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 in tightly-closed, original container in a dry and cool place. Protect from freezing and direct sunlight. Recommend storage temperature: 32-95 °F (0-35 °C)

Incompatibilities: Strong acids; Strong alkalis; Amines; Organic peroxides/hydroperoxides.

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>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: Avoid breathing fume/mist/ vapors/spray. Where fume/mist/ vapors/spray is present, an organic vapor full facepiece respirator is recommended (to protect eyes and face as well).

Skin Contact: Wear protective gloves. Contaminated work clothing must not be allowed out of the workplace. Neoprene or nitrile gloves are recommended. PVC gloves are not compatible. Always wear long sleeves and where exposure potential is high, a neoprene or other chemical resistant apron 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): Clear, yellowish liquid
(b) Odor: Acrylate
(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: ~324 °F (162 °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): ~1.08
(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.): 14.4
VOC: 1.29 lbs./gal; 156 g/L

SECTION 10: STABILITY AND REACTIVITY INFORMATION

(a) Reactivity: The reactivity data for this product will be typical of those for the following class of materials: Strong acids. Strong alkalis. Oxidizing agents.
(b) Chemical stability: Stable at normal ambient temperatures and when used as recommended.
(c) Possibility of hazardous reactions: May polymerize.
(d) Conditions to avoid: Avoid radical forming substances (metal-ions, peroxides).
(e) Incompatible materials: Strong acids; Strong alkalis; Amines; Organic peroxides/hydroperoxides.
(f) Hazardous decomposition product: Data not available

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 skin irritation; May cause an allergic skin reaction;
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; May cause an allergic skin reaction; 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>Multifunctional Acrylate</td>
<td>84170-74-1</td>
<td>LD50 5000 mg/kg bw (rat)</td>
<td>LC50 (4 h) 2 mg/L air (rat)</td>
<td>LD50 2000 mg/kg bw (rat)</td>
</tr>
<tr>
<td>Pentaerythritol, ethoxylated, esters with acrylic acid</td>
<td>51728-26-8</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:
  o Hazardous to the Aquatic Environment, Chronic – 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 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: UN3082
(b) UN Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (pentaerythritol, ethoxylated, esters with acrylic acid)
(c) Transport hazard class: 9
(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 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)
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.