Safety Data Sheet

SECTION 1: IDENTIFICATION

SDS Number: 515, version 12/4/2017
(a) Product identifier
Gans Item ID: UV16080, UV16112, UV16093, UV16114

Gans Description: UVFlex LED MDI Black, UVFlex MDI Black Low Visc, UVFlex LED Extender, Vinyscreen XLT Clear

(b) Other means of identification
General description: UV-cure, flexographic and silkscreen 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 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:
Physical hazards: NA
  o Skin Irritation – Category 2
  o Eye Damage/Irritation – Category 2A
  o Sensitization, Skin – Category 1A
  o Carcinogenicity – Category 2
  o Toxic to Reproduction – Category 1B

(b) Label elements
Signal Word: Danger
**Hazard Statements:** Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. Suspected of causing cancer. May damage fertility or the unborn child.

**Precautionary Statements:** 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 mist/ vapors/spray. Wash contaminated areas thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

**Response:** If exposed or concerned: Get medical advice/attention.

IF INHALED: Not classified as hazardous.

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.

IF SWALLOWED: If exposed or concerned: Get medical advice/attention.

**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>2-propenoic acid, 2-hydroxyethyl ester, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-oxepanone and 2,2''-oxybis[ethanol]</td>
<td>72162-39-1</td>
<td>13.0%</td>
<td>40.6%</td>
</tr>
<tr>
<td>380-7 (5-ethyl-1,3-dioxan-5-yl)methyl acrylate</td>
<td>66492-51-1</td>
<td>0.0%</td>
<td>33.1%</td>
</tr>
<tr>
<td>Tetrahydrofurfuryl acrylate</td>
<td>2399-48-6</td>
<td>0.0%</td>
<td>29.6%</td>
</tr>
<tr>
<td>Esterification product of poly[oxy(methyl-1,2-ethanediyl)],.alpha...alpha.:-(2,2-dimethyl-1,3-propanediyl)bisis[.omega.-hydroxy- and prop-2-enolic acid]</td>
<td>84170-74-1</td>
<td>0.0%</td>
<td>6.6%</td>
</tr>
<tr>
<td>Substance</td>
<td>CAS # (TS = trade secret)</td>
<td>Conc. min. (wt. %)</td>
<td>Conc. max. (wt. %)</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>---------------------------</td>
<td>--------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Gans Photoinitiator UVP-2035</td>
<td>TS</td>
<td>3.5%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Gans Photoinitiator UVP-2002</td>
<td>TS</td>
<td>0.0%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Gans Photoinitiator UVP-2011</td>
<td>TS</td>
<td>1.0%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Siloxanes and Silicones</td>
<td>125455-51-8</td>
<td>0.6%</td>
<td>0.8%</td>
</tr>
<tr>
<td>1,4-butanediyl diacrylate</td>
<td>1070-70-8</td>
<td>0.0%</td>
<td>0.8%</td>
</tr>
<tr>
<td>2,2-bis(acryloyloxyethyl)butyl acrylate trimethylolpropane triacrylate</td>
<td>15625-89-5</td>
<td>0.0%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Glycerol, propoxylated, esters with acrylic acid</td>
<td>52408-84-1</td>
<td>0.3%</td>
<td>0.5%</td>
</tr>
<tr>
<td>2-hydroxyethyl acrylate</td>
<td>818-61-1</td>
<td>0.1%</td>
<td>0.2%</td>
</tr>
</tbody>
</table>

**SECTION 4: FIRST AID MEASURES**

(a) **Description of first aid measures:**
- **Inhalation:** Not classified as hazardous. Data not available.
- **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 exposed or concerned: Get medical advice/attention.

(b) **Most important symptoms and effects, both acute and delayed:**
- **Inhalation:** Not classified as hazardous. Data not available.
- **Skin contact:** Causes skin irritation. May cause an allergic skin reaction.
- **Eye contact:** Causes serious eye irritation.
- **Ingestion:** Suspected of causing cancer. May damage fertility or the unborn child.

(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, 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 containers only.

(b) **Special hazards arising from the substance or mixture:** Thermal decomposition or combustion products may include COx, and NOx. High pressure my build up in heated containers.

(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:** 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 mist/ vapors/spray. Wash contaminated areas thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.
(a.ii) **Protective equipment:** Use personal protective equipment. Wear protective gloves/protective clothing, 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:** 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 mist/ vapors/spray. Wash contaminated areas thoroughly after handling.

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

**Incompatibilities:** Keep away from oxidizing agents.

---

**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 CAS #</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>
</tbody>
</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: Do not breathe mist, vapors, spray. Where mist or aerosol is present, an organic vapor full facepiece respirator is recommended (to protect eyes and face as well).

Skin Contact: 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.

Eye Contact: Wear eye protection/face protection. Eye and face protective devices must comply with ANSI Z87.1-1989. Recommended eye protection: goggles, flexible fitting, hooded ventilation. A transparent face shield 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):** Viscous liquid or low viscosity liquid, black or colorless

(b) **Odor:** Ester-like

(c) **Odor threshold:** Data not available

(d) **pH:** Data not available
(e) Melting point/ freezing point: Data not available

(f) Initial Boiling point / Range: Data not available

(g) Flashpoint: Data not available

(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): Data not available

(n) Solubility: Not 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.): >1

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: Exposure to excess heat may cause exothermic polymerization reaction.

(d) Conditions to avoid: Avoid contact with heat (temperature > 100° F, 38° C), sources of ignition, sunlight, and strong oxidizers.

(e) Incompatible materials: Radical forming initiators, peroxides or other strong oxidizers, strong alkalies or reactive metals.

(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. May cause an allergic skin reaction.
   - Eye contact: Causes serious eye irritation.
   - Inhalation: Data not available
   - Ingestion: Suspected of causing cancer. May damage fertility or the unborn child.

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

   Suspected of causing 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>acrylate</td>
<td>66492-51-1</td>
<td>LD50 2000 mg/kg bw (rat)</td>
<td>Data not available</td>
<td>LD0 2000 mg/kg bw (rat)</td>
</tr>
<tr>
<td>acrylate</td>
<td>2399-48-6</td>
<td>LD50 882 - 1002 mg/kg bw (rat)</td>
<td>Data not available</td>
<td>Data not available</td>
</tr>
<tr>
<td>Substance</td>
<td>CAS # (TS= trade secret)</td>
<td>Oral</td>
<td>Inhalation</td>
<td>Dermal</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>---------------------------</td>
<td>-----------------------------</td>
<td>-----------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>acrylate</td>
<td>72162-39-1</td>
<td>Data not available</td>
<td>Data not available</td>
<td>Data not available</td>
</tr>
<tr>
<td>acrylate</td>
<td>84170-74-1</td>
<td>LD$_{50}$ 5000 mg/kg bw (rat)</td>
<td>LC$_{50}$ (4 h) 2 mg/L air (rat)</td>
<td>LD$_{50}$ 2000 mg/kg bw (rat)</td>
</tr>
<tr>
<td>Gans Photoinitiator UVP-2035</td>
<td>TS</td>
<td>LD$_{50}$ 5000 mg/kg bw (rat)</td>
<td>Data not available</td>
<td>LD$_{50}$ 2000 mg/kg bw (rat)</td>
</tr>
<tr>
<td>Gans Photoinitiator UVP-2002</td>
<td>TS</td>
<td>LD$_{50}$ 1 340 - 2756 mg/kg bw (rat)</td>
<td>Data not available</td>
<td>LD$_{50}$ 2000 mg/kg bw (rat)</td>
</tr>
<tr>
<td>Gans Photoinitiator UVP-2011</td>
<td>TS</td>
<td>LD$_{50}$ 5000 mg/kg bw (rat)</td>
<td>Data not available</td>
<td>LD$_{50}$ 2000 mg/kg bw (rat)</td>
</tr>
<tr>
<td>Siloxanes and Silicones</td>
<td>125455-51-8</td>
<td>Data not available</td>
<td>Data not available</td>
<td>Data not available</td>
</tr>
<tr>
<td>1,4-butanediyl diacrylate</td>
<td>1070-70-8</td>
<td>Data not available</td>
<td>Data not available</td>
<td>Data not available</td>
</tr>
<tr>
<td>acrylate</td>
<td>15625-89-5</td>
<td>LD$_{50}$ 5000 mg/kg bw (rat)</td>
<td>LC$_{50}$ (6 h) 550 mg/m$^3$ air (rat)</td>
<td>LD$_{50}$ 4.7 mL/kg bw (rabbit)</td>
</tr>
<tr>
<td>acrylate</td>
<td>52408-84-1</td>
<td>LD$_{50}$ 2000 mg/kg bw (rat)</td>
<td>Data not available</td>
<td>LD$_{50}$ 2000 mg/kg bw (rabbit)</td>
</tr>
<tr>
<td>2-hydroxyethyl acrylate</td>
<td>818-61-1</td>
<td>LD$_{50}$ 540 mg/kg bw (rat)</td>
<td>Data not available</td>
<td>LD$_{50}$ 1000 mg/kg bw (rat)</td>
</tr>
</tbody>
</table>

(c) 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) Toxicity:
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: 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:
CA 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
Pennsylvania Right to Know:
   o 2-hydroxyethyl acrylate CAS 818-61-1
New Jersey Right to Know:
   o 2-hydroxyethyl acrylate CAS 818-61-1
California Proposition 65: 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: 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.