



GANS INK
& SUPPLY CO.

Safety Data Sheet

In compliance with OSHA Hazard Communication Standard (29 CFR 1910.1200)

SECTION 1: IDENTIFICATION

SDS Number: 519, version 4/26/2018

(a) Product identifier

Gans Item ID: UV16173, UV16174, UV16175, UV16176, UV16177, UV16178, UV16179, UV16180

Gans Description: UV Atlas XL

(b) Other means of identification

General description: UV-cure lithographic 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

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

Physical hazards: Not classified as hazardous

Health hazards:

- Skin Corrosion – Category 1B
- Eye Damage/Irritation – Category 1
- Sensitization, Skin – Category 1
- Toxic to Reproduction – Category 1B
- Specific Target Organ Toxicity, Single Exposure , Respiratory Tract– Category 3
- Hazardous to the Aquatic Environment, Chronic – Category 2

(b) Label elements

Signal Word: Danger

Hazard Statements: Causes severe skin burns and eye damage; Causes serious eye damage; May cause an allergic skin reaction
May damage fertility or the unborn child; May cause respiratory irritation; Toxic to the environment with long lasting effects

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.

Do not breathe dusts or mists. Avoid breathing fume/ gas/ vapors. 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:

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. If exposed or concerned: Get medical advice/attention.

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.

If in eyes: Immediately call a poison center/doctor/...

Collect spillage

Storage: Store in a well-ventilated place. Keep container tightly closed. 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)

Substance	CAS # (TS = trade secret)	Conc. min. (wt. %)	Conc. max. (wt. %)
Acrylate oligomer	TS	9.8%	14.4%
Esterification product of poly[oxy(methyl-1,2-ethanediyl)], .alpha.,.alpha.'-(2,2-dimethyl-1,3-propanediyl)bis[.omega.-hydroxy- and prop-2-enoic acid	84170-74-1	3.5%	10.9%
Polyester acrylate UVO-1077	TS	9.1%	10.2%
2-[[2,2-bis[[[(1-oxoallyl)oxy)methyl]butoxy)methyl]-2-ethyl-1,3-propanediyl diacrylate	94108-97-1	9.1%	10.2%
Vinylester Resin	TS	7.5%	10.0%
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, esters with acrylic acid	55818-57-0	4.2%	7.9%
2-ethyl-2-[[[(1-oxoallyl)oxy)methyl]-1,3-propanediyl diacrylate	15625-89-5	5.0%	6.3%
Acrylated resin	TS	2.7%	4.3%
Gans Photoinitiator UVP-2002	TS	1.5%	3.0%
Gans Photoinitiator UVP-2007	TS	3.0%	3.0%
Gans Photoinitiator UVP-2011	TS	0.0%	2.0%
Monomer	TS	5.6%	1.2%
Gans Photoinitiator UVP-2035	TS	1.0%	1.0%
Polyester acrylate	TS	2.8%	0.6%
Epoxy acrylate oligomer	TS	0.1%	0.2%
Glycerol, propoxylated, esters with acrylic acid	52408-84-1	0.1%	0.1%
2-Ethylhexanoic Acid	149-57-5	0.4%	0.1%

SECTION 4: FIRST AID MEASURES

(a) Description of first aid measures:

Ingestion: Rinse mouth. Do NOT induce vomiting. If exposed or concerned: Get medical advice/attention.

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. If in eyes: Immediately call a poison center/doctor/

(b) Most important symptoms and effects, both acute and delayed:

Ingestion: May damage fertility or the unborn child.

Inhalation: May cause respiratory irritation

Skin contact: Causes severe skin burns and eye damage. May cause an allergic skin reaction

Eye contact: 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: 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. Wear protective gloves/protective clothing/eye protection/face protection.

Do not breathe dusts or mists. Avoid breathing fume/ gas/ vapors.. Wash contaminated areas thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment

(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.

(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. Collect all spillage.

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 dusts or mists. Avoid breathing fume/ gas/ vapors. 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.

(b) Conditions for safe storage:

Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store at 4 - 40 °C, 39.2 - 104 °F

Incompatibilities: Avoid contact with peroxides, strong alkalis, amines, copper, copper alloys, carbon steel, iron and rust. Avoid free radical producing initiators (they will produce an exothermic polymerization reaction with the product)

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

(a) Permissible exposure limits		OSHA PEL		Cal/OSHA PEL	NIOSH REL	ACGIH 2015 TVL
Substance	CAS #	ppm	mg/m ³	8-hour TWA (ST) STEL (C) Ceiling	Up to 10-hour TWA (ST) STEL (C) Ceiling	8-hour TWA (ST) STEL (C) Ceiling
No hazardous ingredients in this mixture appear on OSHA Annotated Tables Z-1, Z-2, or Z-3.						

(b) Appropriate engineering controls:

Ventilation requirements: Handle only in a place equipped with local exhaust (or other appropriate exhaust). 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: Do not breathe dusts or mists. Avoid breathing fume/ gas/ vapors. 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. Neoprene or nitrile gloves are recommended. PVC gloves are not compatible.

Eye Contact: Wear eye protection, and face protection. Eye and face protective devices must comply with ANSI Z87.1-1989. Recommended eye protection: full face shield.

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, various colors

(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: >212 °F (100 °C)

(g) Flashpoint: > 200 °F (93.3 °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): 1.21

(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.): < 1.0

VOC: .10 (lbs./gal) 12.1 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: Hazardous, uncontrolled polymerization may occur. See *Conditions to Avoid* and *Incompatible Materials*, below. Uncontrolled polymerization may cause rapid evolution of heat and increase in pressure that could result in violent rupture of sealed storage vessels or containers. Hazardous polymerization can occur when exposed to direct sunlight.

Hazardous exothermic polymerization can occur when heated. Avoid contact with bases or amines. Avoid contact with strong oxidizing agents. Avoid contact with free radical initiators.

(d) Conditions to avoid: Avoid direct exposure to sunlight. Avoid temperatures above 40°C (104°F). Avoid exposure to strong UV sources. Avoid direct contact with heat sources.

(e) Incompatible materials: Avoid contact with peroxides, strong alkalis, amines, copper, copper alloys, carbon steel, iron and rust. Avoid free radical producing initiators (they will produce an exothermic polymerization reaction with the product)

(f) Hazardous decomposition product: Thermal decomposition may yield carbon dioxide and/or carbon monoxide.

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: May cause respiratory irritation.

Ingestion: May damage fertility or the unborn child.

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

May cause genetic defects.

(d) Numerical measures of toxicity, acute:

Substance	CAS # (TS= trade secret)	Oral	Inhalation	Dermal
Acrylate oligomer	TS	Data not available	Data not available	Data not available
Esterification product	84170-74-1	LD50 5000 mg/kg bw (rat)	LC50 (4 h) 2 mg/L air (rat)	LD50 2000 mg/kg bw (rat)
Polyester acrylate UVO-1077	TS	Data not available	Data not available	Data not available
propanediyl diacrylate	94108-97-1	LD50 5000 mg/kg bw (rat)	Data not available	Data not available
Vinylester Resin oligomeric reaction products	TS 55818-57-0	Data not available LD0 2000 mg/kg bw (rat)	Data not available	Data not available LD0 2000 mg/kg bw (rat)
propanediyl diacrylate	15625-89-5	LD50 5000 mg/kg bw (rat)	LC50 (6 h) 550 mg/m ³ air (rat)	LD50 4.7 mL/kg bw (rabbit)
Acrylated resin	TS	Data not available	Data not available	Data not available
Gans Photoinitiator UVP-2002	TS	LD50 1340 - 2756 mg/kg bw (rat)	Data not available	LD50 2 000 mg/kg bw (rat)
Gans Photoinitiator UVP-2007	TS	LD50 1694 mg/kg bw (rat)	Data not available	LD50 6929 mg/kg bw (rat)
Gans Photoinitiator UVP-2011	TS	LD50 5000 mg/kg bw (rat)	Data not available	LD50 2000 mg/kg bw (rat)

Substance	CAS # (TS= trade secret)	Oral	Inhalation	Dermal
Monomer	TS	Data not available	Data not available	Data not available
Gans Photoinitiator UVP-2035	TS	LD50 5000 mg/kg bw (rat)	Data not available	LD50 2000 mg/kg bw (rat)
Polyester acrylate	TS	Data not available	Data not available	Data not available
Epoxy acrylate oligomer	TS	Data not available	Data not available	Data not available
Glycerol, propoxylated, esters	52408-84-1	LD50 2000 mg/kg bw (rat)	Data not available	LD50 2000 mg/kg bw (rabbit)
2-Ethylhexanoic Acid	149-57-5	LD50 2043 mg/kg bw (rat)	LC0 (8 h) 110 mg/m ³ air (rat)	LD50 2000 mg/kg bw (rat)

(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 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): Not regulated

(a) UN number: Not regulated

(b) UN Proper Shipping Name: Not regulated

(c) Transport hazard class: Not regulated

(d) Packing Group: Not regulated

(e) Environmental hazards: Not regulated

(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

- 2-Ethylhexanoic Acid CAS 149-57-5

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

Canadian Environmental Protection Act:

WHMIS Classification: No data available

European Chemical Agency (ECHA): No data available

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.