

Safety Data Sheet

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

SECTION 1: IDENTIFICATION

SDS Number: 521, version 5/24/2018

(a) Product identifier

Gans Item ID: X102476, X103124

Gans Description: UV Flexo Strong IR Upconverter Green, UVFlex Upconverter Green

(b) Other means of identification

General description: Flexographic printing ink, UV curing

(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: No classified as hazardous

Health hazards:

- o Skin Irritation Category 2
- o Eye Damage/Irritation Category 2A
- o Sensitization, Skin Category 1A

Environmental Hazards:

- o Hazardous to the Aquatic Environment, Acute Category 1
- o Hazardous to the Aquatic Environment, Chronic Category 1



(b) Label elements

Signal Word: Warning

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

Precautionary Statements:

Prevention:

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

Collect spillage.

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)

		Conc. min.	Conc. max.
Substance	CAS # (TS = trade secret)	(wt. %)	(wt. %)
Silicic acid (H4SiO4), zinc salt (1:2), manganese-	68611-47-2	18.1%	28.8%
doped			
Aromatic urethane acrylate	TS	13.3%	20.6%
2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-	15625-89-5	10.7%	17.0%
propanediyl diacrylate			



		Conc. min.	Conc. max.
Substance	CAS # (TS = trade secret)	(wt. %)	(wt. %)
2,2-bis[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl	4986-89-4	2.6%	11.6%
diacrylate			
2-hydroxy-2-methylpropiophenone	7473-98-5	4.2%	6.3%
diphenyl (2,4,6-trimethylbenzoyl) phosphine oxide	TS	4.2%	6.3%
Acrylated resin 1, UVO-1036	TS	2.0%	3.2%
Acrylated resin UVO-1040	TS	1.6%	2.8%
2-(hydroxymethyl)-2-[[(1-oxoallyl)oxy]methyl]-	3524-68-3	1.7%	2.6%
1,3-propanediyl diacrylate			
Acrylated resin 2, UVO-1037	TS	1.0%	1.6%
Acrylate Oligomer	TS	6.0%	0.8%
Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	0.3%	0.5%
Epoxy acrylate oligomer	TS	0.2%	0.4%
Glycerol, propoxylated, esters with acrylic acid	52408-84-1	0.1%	0.3%

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: Thermal decomposition or combustion products may include CO_X , and NOx. High pressure my build up in heated containers. Heat may cause product polymerization.

(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 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. Collect spillage.

(b) Methods for containment and cleaning up:

If it is safe to do so, adjust leaking containers to reduce or eliminate the continued release. Wear all Personal Protection listed in Section 8 before directly contacting spilled material. For high viscosity materials, scoop or shovel material into appropriate container for reuse, recycling, or disposal. For low viscosity materials, first surround and then cover spilled material with inert absorbent (vermiculite, or similar). Then scoop or shovel material into appropriate container for reuse, recycling, or disposal.

Residual material can be cleaned with UV blanket wash, acetone, or other press solvent.

Consult your company's spill procedure for details of regulatory restrictions and recommendations.

Do not allow spilled materials, or clean up materials to enter storm drains or natural water ways.

SECTION 7: HANDLING AND STORAGE

(a) Precautions for safe handling:

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

(b) Conditions for safe storage:

Store in original container and keep containers covered and sealed.

Store in cool, dry, well-ventilated place.

Appropriate storage temperature is approximately 7° - 35° C (45° - 95° F).

Incompatibilities: Avoid contact with heat, sources of ignition, sunlight, and strong oxidizers.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

(a) Permissible exposure limits		OSHA PEL		Cal/OSHA	NIOSH	ACGIH
				PEL	REL	2015 TVL
Substance	CAS#	ppm	mg/m ³	8-hour	Up to 10-	8-hour
				TWA (ST)	hour	TWA (ST)
				STEL (C)	TWA	STEL (C)
				Ceiling	(ST)	Ceiling
					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: Adequate ventilation in accordance with good engineering practice must be provided.



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. 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.

Eye Contact: Wear eye protection/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, opaque white color

(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: 230 °F (110 °C) estimated
(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

(I) **Vapor Density** (Air = 1): Data not available

(m) Relative Density (H₂O = 1): 1.83(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: < 0.15 lbs./gal; < 18.3 g/L

SECTION 10: STABILITY AND REACTIVITY INFORMATION

- (a) **Reactivity:** Not reactive under normal storage conditions. See Section 7. Mixture will undergo polymerization reaction in the presence of sunlight, bright industrial lights, or high temperatures.
- **(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: No data 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:

	CAS#			
	(TS= trade			
Substance	secret)	Oral	Inhalation	Dermal
Silicic acid (H4SiO4), zinc salt (1:2)	68611-47-2	LD50 2000 mg/kg bw (rat)	Data not available	Data not available
Aromatic urethane acrylate	TS	Data not available	Data not available	Data not available
2-ethyl-2-[[(1- oxoallyl)oxy]met hyl]	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)
2,2-bis[[(1-oxoallyl)oxy]	4986-89-4	Data not available	Data not available	Data not available
2-hydroxy-2- methylpropiophe none	7473-98-5	LD50 1694 mg/kg bw (rat)	Data not available	LD50 6929 mg/kg bw (rat)
diphenyl (2,4,6- trimethylbenzoyl	TS	Data not available	Data not available	Data not available
Acrylated resin 1, UVO-1036	TS	Data not available	Data not available	Data not available
Acrylated resin UVO-1040	TS	Data not available	Data not available	Data not available
2- (hydroxymethyl)	3524-68-3	Data not available	Data not available	Data not available
Acrylated resin 2, UVO-1037	TS	Data not available	Data not available	Data not available
Acrylate Oligomer	TS	Data not available	Data not available	Data not available
Naphtha (petroleum)	64742-82-1	LD50 5000 mg/kg bw (rat)	Data not available	LD50 2000 mg/kg bw (rabbit)
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)



(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:

- $\circ \quad \text{Hazardous to the Aquatic Environment, Acute-- Category 1} \\$
- o Hazardous to the Aquatic Environment, Chronic Category 1
- (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.

(c) Transport hazard class: 9 (d) Packing Group: PG III

(e) Environmental hazards: Marine Pollutant

(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: No data available



Pennsylvania Right to Know: No data available

<u>Canadian Environmental Protection Act:</u>
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.

