SAFETY DATA SHEET

Section 1. Identification

GHS product identifier Multiple Names (CT, SC, API, etc. No)

Product type Liquid.

SDS# 7jeo:m5ds:8j8

Relevant identified uses of the substance or mixture and uses advised against

Printing ink or additive.

Uses advised against **Reason**

Not applicable.

Supplier's details

American Printing Ink
PO Box 1085
Hixson, TN. 37343
United States

Emergency telephone number (with hours of operation)

For Product Questions during business hours call (423) 875-4705
For Health and Safety Questions during business hours (423) 875-4705

Section 2. Hazards identification

OSH/HCS status This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

SKIN CORROSIONIIRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
SKIN SENSITIZATION - Category 1

GHS label elements

Hazard pictograms

Signal word Danger

Hazard statements

Causes serious eye damage.
Causes skin irritation.
May cause an allergic skin reaction.

Precautionary statements

Prevention

Wear protective gloves. Wear eye or face protection. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

Section 2. Hazards identification

Response	IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.
Storage	Not applicable.
Disposal	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise classified	None known.

Section3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name		CAS number
VRD433-00638 Proprietary Polyester Acrylate	15 - 40	VRD433-00638
Epoxy acrylate oligomer;Xi; R43, R53 (H317)	10 - 30	55818-57-0
2-propenoic acid, 2-[[2 ,2-bis[[(1-oxo-2-propenyl)oxy]methyl]butoxy]methyl] -2-ethyl-1 ,3-propanediyl ester	3-7	94108-97-1
2-propenoic acid reaction products with pentaerythritol	1 - 5	1245638-61-2
Glycerol, propoxylated, esters with acrylic acid;Xi;R36, R43	1 - 5	52408-84-1
1-propanone, 2-hydroxy-2-methyl-1-phenyl-;R52/53, Xn;R22	1 - 5	7473-98-5

The specific chemical identity and/or exact percantage (concentration) of composition has been withheld as a trade secret. There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
Inhalation	Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated Clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Section 4. First aid measures

Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects. acute and delayed

Potential acute health effects

Eye contact
Causes serious eye damage.

Inhalation
May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.

Skin contact
Causes skin irritation. May cause an allergic skin reaction.

Ingestion
May cause burns to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact
Adverse symptoms may include the following:
pain
watering
redness

Inhalation
No specific data.

Skin contact
Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

Ingestion
Adverse symptoms may include the following:
stomach pains

Indication of immediate medical attention and special treatment needed. if necessary

Notes to physician
treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments
No specific treatment.

Protection of first-aiders
No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media
Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media
None known.

Specific hazards arising from the chemical
In a fire or if heated, a pressure increase will occur and the container may burst. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products
Decomposition products may include the following materials:
carbon dioxide
Carbon monoxide
Phosphorus oxides
Halogenated compounds
Metal oxide/oxides

Special protective actions for fire-fighters
Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Section5. Fire-fighting measures

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions. protective equipment and emergency procedures

For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training.

Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

Small spill

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section7. Handling and storage

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Appropriate engineering controls	If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures

Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/ or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state	Liquid.
Color	Multipl
Odor	Not available.
Odor threshold	Not available.
pH	Not available.
Melt point/Freeze point	Not available.
Boiling point	100°C (212°F)
Flash point	Higher than 93.3°C (200°F).
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Lower and upper explosive (flammable) limits	Not available.
Vapor pressure	Not available.

Section 9. Physical and chemical properties

Vapor density	Not available.
Relative density	Not available.
Solubility	Not available.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Density	*1251 g/l/1* 0.4396 lbs/gal

VOC data

0.1 by weight
0.2 by volume
1.7 glll 0 lbs/gal
1.7 glll 0 lbs/gal [With volume exclusion [water excluded))

Section 10. Stability and reactivity

Reactivity	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	No specific data.
Incompatible materials	No specific data.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
1-propanone, 2-hydroxy-2-methyl-1-phenyl-	LD50 Dermal	Rat	*6929 mg/kg*	-
	LD50 Oral	Rat	*1694 mg/kg*	-

Carcinogenicity

Specific target organ toxicity (Single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Section 11. Toxicological information

Information on the likely routes of exposure : Not available.

potential acute health effects

Eye contact Causes serious eye damage.

Inhalation May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.

Skin contact Causes skin irritation. May cause an allergic skin reaction.

Ingestion May cause burns to mouth, throat and stomach.

Symptoms related to the physical. chemical and toxicological characteristics

Eye contact Adverse symptoms may include the following:
pain
watering
redness

Inhalation No specific data.

Skin contact Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

Ingestion Adverse symptoms may include the following:
stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects Not available.

Potential delayed effects Not available.

Long term exposyre

Potential immediate effects Not available.

Potential delayed effects Not available.

Potential chronic health effects Not available.

Not available.

General Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity No known significant effects or critical hazards.

Mutagenicity No known significant effects or critical hazards.

Teratogenicity No known significant effects or critical hazards.

Developmental effects No known significant effects or critical hazards.

Fertility effects No known significant effects or critical hazards.

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Section 12. Ecological information

Bio accumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (Koc) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TOG Classification	IMDG	IATA
UN number	Not applicable.	Not applicable.	UN3082	Not applicable.
UN proper shipping name			ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-((2,2-bis((1-oxoallyl)oxy)methyl) butoxy)methyl)-2-ethyl-1, 3-propanediyl diacrylate, 2-propenoic acid reaction products with pentaerythritol)	
Transport hazard class(es}			9 	
Packing group			III	
Environmental hazards			Yes.	
Additional information			The marine pollutant mark is not required when transported in sizes ef SS L or :55 kg.	

Section 14. Transport information .'

Special precautions for user: Transport within user's premises: always transport In closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

US. Federal regulations

United States inventory (TSCA 8b): All components are listed or exempted.

SARA 311/312

Classification: Immediate (acute) health hazard

State regulations

California prop. 65

Section 16. Other information

History

Date of printing	7/20/2015.
Date of issue/Date of revision	5/29/2015.
Date of previous issue	5/4/2015
Version	.
Key to abbreviations	2

ATE = Acute Toxicity Estimate
BCF = Bio concentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
lATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
Log Pow = logarithm of the octanol water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships. 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

'"Indicates information that has changed from previously issued version.

Notice to reader

American Printing Ink has prepared this Safety Data Sheet ("SDS") in compliance with 29 CFR 1910.1200, understands that its customers may use this SDS to comply with that section, and believes that the data set forth herein are accurate as of the date hereof; however, this SDS shall not constitute a warranty with respect thereto.