

Printing date 05/22/2017

Reviewed on 05/22/2017

1 Identification of the substance/mixture and of the company

- · Product identifier
- · Trade name: UV-1006S UV Curable Dielectric Green
- · Application of the substance / the mixture Screen printing ink
- \cdot Details of the supplier of the safety data sheet

• Manufacturer/Supplier: Applied Ink Solutions 17 Hampshire Drive, Unit 8 Hudson, NH 03051 USA

- Information department: Product Safety Email: sales@appliedinksolutions.com
- Emergency telephone number: Chemtrec USA Emergency : <u>800-424-9300</u> Chemtrec International Emergency : <u>703-527-3887</u> Applied Ink Solutions : <u>603-595-6221</u>

2 Hazard(s) identification

· Classification of th	he substance or mixture
GHS05	Corrosion
Eye Dam. 1	H318 Causes serious eye damage.
GHS07	
	H315 Causes skin irritation. H317 May cause an allergic skin reaction.
-	H402 Harmful to aquatic life. H412 Harmful to aquatic life with long lasting effects.
· Label elements · GHS label elemen · Hazard pictogram	ts The product is classified and labeled according to the Globally Harmonized System (GHS). s
GHS05 GHS07	7
GHS05 GHS07 • Signal word Dang	

(Contd. on page 2)



Printing date 05/22/2017

Safety Data Sheet acc. to OSHA HCS

Reviewed on 05/22/2017

Trade name: UV-1006S UV Curable Dielectric - Green

	(Contd. of page 1)
H318 Causes se	erious eye damage.
H317 May caus	se an allergic skin reaction.
H402 Harmful	to aquatic life.
H412 Harmful	to aquatic life with long lasting effects.
· Precautionary	statements
P261	Avoid breathing dust/fume/gas/mist/vapors/spray
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P273	Avoid release to the environment.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P305+P351+P	338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present
	and easy to do. Continue rinsing.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container in accordance with local/regional/national/international
	regulations.
· Classification s	ystem:
· NFPA ratings ((scale 0 - 4)
	Health = 2
I I I I I I I I I I I I I I I I I I I	Fire = 1

· HMIS-ratings (scale 0 - 4)



- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · **vPvB:** Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Mixture of the substances listed below with nonhazardous additions.

	Polyester Resin	40-60%
	🕎 Eye Dam. 1, H318	
	Epoxide Monomer	25-50%
	🐼 Eye Irrit. 2A, H319; Skin Sens. 1B, H317	
25085-96-8	Propane, 2,2-bis[p-(2,3-epoxyproxy)phenyl]-,polymers	10-25%
	Aquatic Chronic 2, H411; 🚯 Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1B, H317; Aquatic Acute 2, H401	
	Proprietary Dye	<1%
	🚯 Eye Irrit. 2A, H319; Skin Sens. 1A, H317	

(Contd. on page 3)



Printing date 05/22/2017

Reviewed on 05/22/2017

Trade name: UV-1006S UV Curable Dielectric - Green

(Contd. of page 2)

4 First-aid measures

· Description of first aid measures

· General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact:

Wash eyes immediately with a large amount of water or normal saline, occasionally lifting upper and lower eye lids until no evidence of chemical remains (about 20 minutes). Remove contact lenses if present and easy to remove. Seek immediate medical attention.

· After swallowing:

Do not induce vomiting unless instructed to do so by a physician. Wash out mouth with water and keep person at rest. Seek immediate medical attention.

- · Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed Treat symptomatically.

5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents:
- Alcohol resistant foam
- Fire-extinguishing powder
- ABC powder
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Wear SCBA.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
 Ensure adequate ventilation
 Wear protective equipment. Keep unprotected persons away.
 Keep away from ignition sources
 Environmental precautions:
 Inform respective authorities in case of seepage into water course or sewage system.
- Do not allow to enter sewers/ surface or ground water. • Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation. • Reference to other sections
- See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

(Contd. on page 4)

[—] US



Printing date 05/22/2017

Reviewed on 05/22/2017

Trade name: UV-1006S UV Curable Dielectric - Green

(Contd. of page 3)

Protective Action Criteria for Chemicals

• PAC-1:

None of the ingredients are listed.

· PAC-2:

None of the ingredients are listed.

· PAC-3:

None of the ingredients are listed.

7 Handling and storage

- · Handling:
- **Precautions for safe handling** Ensure good ventilation/exhaust at the workplace. Prevent formation of aerosols.
- Information about protection against explosions and fires: Keep ignition sources away - Do not smoke. Protect against electrostatic charges.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and containers: No special requirements.
- Information about storage in one common storage facility: Do not store together with alkalis (caustic solutions). Do not store together with oxidizing and acidic materials.
- Further information about storage conditions: None.
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- Components with limit values that require monitoring at the workplace:
- The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures: Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work.
- Avoid contact with the eyes.
- · Respiratory equipment:
- In case of low exposure, use cartridge respirator. In case of intensive or longer exposure, use SCBA. Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. • *Material of gloves* Nitrile rubber, NBR

(Contd. on page 5)

US



Printing date 05/22/2017

Reviewed on 05/22/2017

Trade name: UV-1006S UV Curable Dielectric - Green

• *Penetration time of glove material Contact glove manufacture for break-through time.* • *Eye protection:*

Tightly sealed goggles

Information on basic physical and	chemical properties	
General Information		
Appearance:		
Form:	Thick liquid	
Color: Odor:	Green Acrylic-like	
Odor threshold:	Not determined.	
pH-value:	Not determined.	
Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	Undetermined.	
Flash point:	>100 °C (>212 °F)	
Flammability (solid, gaseous):	Not applicable.	
Ignition temperature:		
Decomposition temperature:	Not determined.	
Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure:	Not determined.	
Density:	See other information	
Relative density	Not determined.	
Vapor density	Not determined.	
Evaporation rate	1.6-2.3 (BuAc=1)	
Solubility in / Miscibility with		
Water:	Water miscible No	
Partition coefficient (n-octanol/wat	er): Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Solvent content:	0.00/	
Organic solvents:	0.0 %	
Solids content:	100%	



Printing date 05/22/2017

Reviewed on 05/22/2017

Trade name: UV-1006S UV Curable Dielectric - Green

(Contd. of page 5)

• Other information

No further relevant information available.

10 Stability and reactivity

· Reactivity No further relevant information available.

- · Chemical stability Stable under normal use conditions
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight. Contact with incompatible materials.

- · Incompatible materials: Strong Oxidizing Agents, Strong Acids, Strong Bases
- · Hazardous decomposition products:
- Hydrogen chloride gas

Carbon monoxide and carbon dioxide

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: Strong irritant with the danger of severe eye injury.
- Sensitization: Sensitization possible through skin contact.
- Additional toxicological information: The product shows the following danger.

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients are listed.

· NTP (National Toxicology Program)

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients are listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Harmful to fish
- Additional ecological information:
- · General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

(Contd. on page 7)



Printing date 05/22/2017

Reviewed on 05/22/2017

Trade name: UV-1006S UV Curable Dielectric - Green

(Contd. of page 6)

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Harmful to aquatic organisms

· Results of PBT and vPvB assessment

• **PBT:** Not applicable.

• **vPvB:** Not applicable.

 \cdot Other adverse effects No further relevant information available.

13 Disposal considerations

• Waste treatment methods

· Recommendation:

Must not be disposed of as regular garbage/trash. Do not allow product to reach sewage system. Disposal must be made in accordance with Federal, State, and Local regulations.

· Uncleaned packagings:

· Recommendation: Disposal must be made in accordance with Federal, State, and Local regulations.

· UN-Number · DOT, ADR, IMDG, IATA	Not Regulated	
UN proper shipping name DOT, ADR, IMDG, IATA	Not Regulated	
· Transport hazard class(es)		
DOT, ADR, IMDG, IATA Class	Not Regulated	
· Packing group · DOT, ADR, IMDG, IATA	Not Regulated	
Environmental hazards:	Not applicable.	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.	
· UN ''Model Regulation'':	Not Regulated	

15 Regulatory information

 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot Sara

· Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

• TSCA (Toxic Substances Control Act): All ingredients are listed or comply with TSCA regulations.

(Contd. on page 8)

US –



Printing date 05/22/2017

Reviewed on 05/22/2017

Trade name: UV-1006S UV Curable Dielectric - Green

(Contd. of page 7)

· Proposition 65	
· Chemicals known to cause cancer:	

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients are listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients are listed.

 \cdot NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients are listed.

· California SCAQMD Rule 443.1 VOC's: No information available.

• *GHS label elements* The product is classified and labeled according to the Globally Harmonized System (GHS). • *Hazard pictograms*



· Signal word Danger

• Hazard-determin	ning components of labeling:
Polyester Resin	
Epoxide Monome	2 r
*	[p-(2,3-epoxyproxy)phenyl]-,polymers
Proprietary Dye	
· Hazard statemen	ts
H315 Causes ski	n irritation.
H318 Causes ser	ious eye damage.
H317 May cause	an allergic skin reaction.
H402 Harmful to	aquatic life.
H412 Harmful to	aquatic life with long lasting effects.
· Precautionary st	atements
P261	Avoid breathing dust/fume/gas/mist/vapors/spray
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P273	Avoid release to the environment.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P305+P351+P3.	38 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present
	and easy to do. Continue rinsing.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
	(Contdonn name 0)

(Contd. on page 9)

[–] US



Printing date 05/22/2017

Reviewed on 05/22/2017

Trade name: UV-1006S UV Curable Dielectric - Green

	(Contd. of page 8)
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container in accordance with local/regional/national/international
	regulations.

· National regulations:

• Other regulations, limitations and prohibitive regulations RoHS 2 2011/65/EU along with EU Directive 2022/19/EU – Waste from Electrical and Electronic Equipment (WEEE):

Applied Ink Solutions products do not exceed the amount of allowable levels concerning: Cadmium (Cd); Hexavalent Chromium (CrVI); Mercury (Hg); Lead (Pb); Polybrominated Biphenyls (PBB's) as bromide; Polybrominated Diphenyl Ethers (PBDEs) as bromide, decaBDE.

Applied Ink Solutions has confirmed with our precious metal suppliers that they do not use conflict minerals, as outlined in the **Dodd-Frank Wall Street Reform and Consumer Protection Act in Title XV, Section 1502.**

Registration, Evaluation and Authorization of Chemicals (REACH) & Substances of Very High Concern (SVHC): This product does not contain substances on the SVHC list. • Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: Product safety department

· Contact: Mr. Cole

· Revision History: New SDS 04/25/2017 • Date of preparation / last revision 05/22/2017 Rev. 1 · Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit Skin Irrit. 2: Skin corrosion/irritation - Category 2 Eye Dam. 1: Serious eye damage/eye irritation – Category 1 Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A Skin Sens. 1: Skin sensitisation - Category 1 Skin Sens. 1A: Skin sensitisation – Category 1A Skin Sens. 1B: Skin sensitisation - Category 1B Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard - Category 2 Aquatic Acute 3: Hazardous to the aquatic environment - acute aquatic hazard - Category 3 Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3

- US -