

# SAFETY DATA SHEET

Issuing Date 13-May-2015

Revision Date 11-Jan-2023

Revision Number 1

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

### GHS product identifier

Product Name UVR-182E

### Other means of identification

Product Code(s) 400260

Synonyms None

### Recommended use of the chemical and restrictions on use

Recommended Use UV Cure Legend Ink

Uses advised against No information available

### Supplier's details

#### Supplier Address

Taiyo America, Inc.  
2675 Antler Drive  
Carson City, NV 89701  
TEL: 775-885-9959 (M-F 8-4 PDT)

Email SDSinfo@taiyo-america.com

### Emergency telephone number

Emergency Telephone Number 1-800-255-3924 (USA) 1-813-248-0585 (International)

## 2. HAZARDS IDENTIFICATION

### Classification

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

Acute Oral Toxicity	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Skin Sensitization	Category 1

### GHS Label elements, including precautionary statements

#### Emergency Overview

#### Signal Word

Warning

#### Hazard Statements

- Harmful if swallowed
- Causes skin irritation
- Causes serious eye irritation
- May cause an allergic skin reaction

**Appearance** Black**Physical State** Viscous liquid.**Odor** Slight Solvent**Precautionary Statements****Prevention**

- Avoid breathing dust/fume/gas/mist/vapors/spray.
- Wash face, hands and any exposed skin thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Contaminated work clothing should not be allowed out of the workplace.
- Wear protective gloves/protective clothing/eye protection/face protection.

**General Advice**

- Specific treatment (see supplemental first aid instructions on this label)

**Eyes**

- 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.

**Skin**

- Take off contaminated clothing and wash before reuse.
- IF ON SKIN: Wash with plenty of soap and water.
- If skin irritation or rash occurs: Get medical advice/attention.

**Ingestion**

- Rinse mouth.
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

**Storage**

- None

**Disposal**

- Dispose of contents/container to an approved waste disposal plant.

**Hazard Not Otherwise Classified (HNOC)**

Not applicable

**Other information****3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No	Weight %	Trade secret
Talc	14807-96-6	10-30	*
Trimethylolpropane triacrylate	15625-89-5	10-30	*
Acrylic acid, hexa ester with dipentaerythritol	29570-58-9	5-10	*
2-Hydroxyethyl methacrylate	868-77-9	5-10	*
Calcium carbonate	471-34-1	5-10	*
Silicon dioxide	7631-86-9	1-5	*
Carbon black	1333-86-4	0.1-1	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

## 4. FIRST AID MEASURES

### Description of necessary first-aid measures

<b>General Advice</b>	Immediate medical attention is required. If symptoms persist, call a physician.
<b>Eye Contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
<b>Inhalation</b>	Move to fresh air. If symptoms persist, call a physician. If breathing is irregular or stopped, administer artificial respiration.
<b>Ingestion</b>	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. If symptoms persist, call a physician.
<b>Protection of First-aiders</b>	Use personal protective equipment. Avoid contact with skin, eyes and clothing.

### Most important symptoms/effects, acute and delayed

**Most Important Symptoms/Effects** No information available.

### Indication of immediate medical attention and special treatment needed, if necessary

**Notes to Physician** Treat symptomatically. May cause sensitization of susceptible persons.

## 5. FIRE-FIGHTING MEASURES

### Suitable Extinguishing Media

Water spray. Foam. Dry powder.

**Unsuitable Extinguishing Media** No information available.

### Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes. May cause sensitization by skin contact.

### Explosion Data

<b>Sensitivity to Mechanical Impact</b>	None.
<b>Sensitivity to Static Discharge</b>	None.

### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions** Evacuate personnel to safe areas. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak.

### Environmental Precautions

**Environmental Precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Prevent entry into waterways, sewers, basements or confined areas.

**Methods and materials for containment and cleaning up**

<b>Methods for Containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for Cleaning Up</b>	Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

**7. HANDLING AND STORAGE****Precautions for safe handling**

<b>Handling</b>	Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Do not breathe vapors or spray mist. Use only in area provided with appropriate exhaust ventilation. Do not eat, drink or smoke when using this product.
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**Conditions for safe storage, including any incompatibilities**

<b>Storage</b>	Keep in properly labeled containers. Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place.
<b>Incompatible Products</b>	Oxidizing agents. Peroxides. Free radical initiators

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****Control parameters****Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Talc 14807-96-6	TWA: 2 mg/m <sup>3</sup>	(vacated) TWA: 2 mg/m <sup>3</sup>	IDLH: 1000 mg/m <sup>3</sup> containing no asbestos and <1% quartz TWA: 2 mg/m <sup>3</sup>
Quartz 14808-60-7	TWA: 0.025 mg/m <sup>3</sup> respirable fraction	(vacated) TWA: 0.1 mg/m <sup>3</sup> respirable dust : (30)/(%)SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA total dust : (250)/(%)SiO <sub>2</sub> + 5) mppcf TWA respirable fraction : (10)/(%)SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA respirable fraction	IDLH: 50 mg/m <sup>3</sup> respirable dust TWA: 0.05 mg/m <sup>3</sup> respirable dust
Calcium carbonate 471-34-1	-	TWA: 15 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> (vacated) TWA: 15 mg/m <sup>3</sup> (vacated) TWA: 5 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable dust
Silicon dioxide 7631-86-9	10 mg/m <sup>3</sup>	20 mppcf TWA; ((80)/(%) SiO <sub>2</sub> ) mg/m <sup>3</sup> )	IDLH: 3000 mg/m <sup>3</sup> TWA: 6 mg/m <sup>3</sup>
Carbon black 1333-86-4	TWA: 3.5 mg/m <sup>3</sup>	TWA: 3.5 mg/m <sup>3</sup> (vacated) TWA: 3.5 mg/m <sup>3</sup>	IDLH: 1750 mg/m <sup>3</sup> TWA: 3.5 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup> Carbon black in presence of Polycyclic aromatic hydrocarbons PAH

*Immediately Dangerous to Life or Health. ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH:*

<b>Other Exposure Guidelines</b>	Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).
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**Appropriate engineering controls**

<b>Engineering Measures</b>	Showers Eyewash stations Ventilation systems
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**Individual protection measures, such as personal protective equipment**

<b>Eye/Face Protection</b>	Safety glasses with side-shields.
<b>Skin and Body Protection</b>	Protective gloves. Lightweight protective clothing.
<b>Respiratory Protection</b>	If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.
<b>Hygiene Measures</b>	When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Keep away from food, drink and animal feeding stuffs. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

<b>Physical State</b>	Viscous liquid	<b>Appearance</b>	Black
<b>Odor</b>	Slight Solvent	<b>Odor Threshold</b>	No information available
<b>Property</b>	<b>Values</b>	<b>Remarks/ - Method</b>	
<b>pH</b>	No data available	None known	
<b>Melting Point/Range</b>	No data available	None known	
<b>Boiling Point/Boiling Range</b>	No data available	None known	
<b>Flash Point</b>	>200 °C / >392 °F	None known	
<b>Evaporation rate</b>	No data available	None known	
<b>Flammability (solid, gas)</b>	No data available	None known	
<b>Flammability Limits in Air</b>			
<b>upper flammability limit</b>	No data available		
<b>lower flammability limit</b>	No data available		
<b>Vapor Pressure</b>	No data available	None known	
<b>Vapor Density</b>	No data available	None known	
<b>Specific Gravity</b>	1.53	None known	
<b>Water Solubility</b>	No data available	None known	
<b>Solubility in other solvents</b>	No data available	None known	
<b>Partition coefficient: n-octanol/water</b>	No data available	None known	
<b>Autoignition Temperature</b>	No data available	None known	
<b>Decomposition Temperature</b>	No data available	None known	
<b>Viscosity</b>	No data available	None known	
<b>Flammable Properties</b>	Combustible material: may burn but does not ignite readily.		
<b>Explosive Properties</b>	No data available		
<b>Oxidizing Properties</b>	No data available		
<b>Other information</b>			
<b>VOC Content (%)</b>	0		

**10. STABILITY AND REACTIVITY****Reactivity**

No data available.

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

None under normal processing.

**Hazardous Polymerization**

Hazardous polymerization does not occur.

**Conditions to avoid**

Incompatible products.

**Incompatible materials**

Oxidizing agents. Peroxides. Free radical initiators

**Hazardous decomposition products**

Carbon oxides. Thermal decomposition can lead to release of irritating gases and vapors.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure****Product Information**

<b>Inhalation</b>	There is no data available for this product.
<b>Eye Contact</b>	Causes serious eye irritation.
<b>Skin Contact</b>	Causes skin irritation.
<b>Ingestion</b>	Harmful if swallowed.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Trimethylolpropane triacrylate	> 5000 mg/kg ( Rat )	= 5000 mg/kg ( Rabbit )	-
Quartz	= 500 mg/kg ( Rat )	-	-
2-Hydroxyethyl methacrylate	= 5050 mg/kg ( Rat )	>3000 mg/kg ( Rabbit )	-
Calcium carbonate	= 6450 mg/kg ( Rat )	-	-
Silicon dioxide	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	>2.2 mg/L ( Rat ) 4 h

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** No information available.

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

**Sensitization** May cause an allergic skin reaction.  
**Mutagenic Effects** No information available.  
**Carcinogenicity** This product contains crystalline silica (quartz) in a non-respirable form. Inhalation of crystalline silica is unlikely to occur from exposure to this product.

This product contains carbon black which is classified as a possible carcinogen when present as respirable dust. This is not relevant for this product since it is not in a respirable form.

Chemical Name	ACGIH	IARC	NTP	OSHA
Silicon dioxide		Group 3		
Carbon black	A3	Group 2B	-	X

**ACGIH: (American Conference of Governmental Industrial Hygienists)**

A2 - Suspected Human Carcinogen  
 A3 - Animal Carcinogen

**IARC: (International Agency for Research on Cancer)**

Group 1 - Carcinogenic to Humans  
 Group 2B - Possibly Carcinogenic to Humans  
 Group 3 - Not Classifiable as to its Carcinogenicity to Humans

**NTP: (National Toxicity Program)**

Known - Known Carcinogen

**OSHA: (Occupational Safety & Health Administration)**

X - Present

<b>Reproductive Toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	May cause damage to organs through prolonged or repeated exposure.
<b>Chronic Toxicity</b>	Avoid repeated exposure. Repeated contact may cause allergic reactions in very susceptible persons.
<b>Target Organ Effects</b>	Respiratory system. Eyes. Lungs.
<b>Aspiration Hazard</b>	No information available.

**Numerical measures of toxicity - Product**

The following values are calculated based on chapter 3.1 of the GHS document:

<b>LD50 Oral</b>	1474 mg/kg
<b>LD50 Dermal</b>	5627 mg/kg mg/L

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Talc 14807-96-6		LC50 96 h: > 100 g/L semi-static (Brachydanio rerio)		
2-Hydroxyethyl methacrylate 868-77-9		LC50 96 h: 213-242 mg/L flow-through (Pimephales promelas) LC50 96 h: = 227 mg/L (Pimephales promelas)		
Silicon dioxide 7631-86-9	EC50 72 h: = 440 mg/L (Pseudokirchneriella subcapitata)	LC50 96 h: = 5000 mg/L static (Brachydanio rerio)		EC50 48 h: = 7600 mg/L (Ceriodaphnia dubia)
Carbon black 1333-86-4				EC50 24 h: > 5600 mg/L (Daphnia magna)

**Persistence and Degradability** No information available.

**Bioaccumulation**

Chemical Name	Log Pow
2-Hydroxyethyl methacrylate	0.47

**Other Adverse Effects**

No information available.

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Methods**

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

**Contaminated Packaging**

Do not re-use empty containers.

## 14. TRANSPORT INFORMATION

**DOT** Not regulated

**IATA** Not regulated

**IMDG/IMO** Not regulated

## 15. REGULATORY INFORMATION

### International Inventories

<b>TSCA</b>	Complies
<b>EINECS</b>	Complies
<b>ELINCS</b>	Complies

### Legend

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

### U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

### SARA 311/312 Hazard Categories

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	No
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

### Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

### U.S. State Regulations

#### California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	CAS-No	California Prop. 65
Quartz	14808-60-7	Carcinogen
Carbon black	1333-86-4	Carcinogen

### U.S. State Right-to-Know Regulations

"X" designates that the ingredients are listed on the state right to know list.

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Talc	X	X	X		X
Quartz	X	X	X	-	X
Carbon black	X	X	X	X	X

### U.S. EPA Label Information

**EPA Pesticide Registration Number** Not applicable

## 16. OTHER INFORMATION

<b>NFPA</b>	<b>Health Hazard</b> 2	<b>Flammability</b> 1	<b>Instability</b> 0	<b>Physical and Chemical Hazards</b> -
<b>HMIS</b>	<b>Health Hazard</b> 2	<b>Flammability</b> 1	<b>Physical Hazard</b> 0	<b>Personal Protection</b> X



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<b>Prepared By</b>	Product Stewardship 23 British American Blvd. Latham, NY 12110 1-800-572-6501
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<b>Revision Note</b>	Updated Contact Information

**General Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**