SAFETY DATA SHEET

Issuing Date 13-May-2015	Revision Date	11-Jan-20	23	Revision Number 1	
1. IDENTIFICATION OF THE	E SUBSTANCI	E/PREP/	ARATION AND	THE COMPANY/UNDERTAKING	
GHS product identifier					
Product Name	UVR-150 TU Blue, UVR-150 TU Red, UVR-150 TU Green				
Other means of identification					
Product Code(s)	400246, 400251,	400241			
Synonyms	None				
Recommended use of the chemical	and restrictions	on use			
Recommended Use	UV Cure Solder Mask				
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



Precautionary Statements

Prevention

- · Wash face, hands and any exposed skin thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Avoid breathing dust/fume/gas/mist/vapors/spray.
- 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

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

Ingestion

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

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	*
Quartz	14808-60-7	10-30	*
Trimethylolpropane triacrylate	15625-89-5	10-30	*
2-Hydroxyethyl methacrylate	868-77-9	7-13	*
Silicon dioxide	7631-86-9	1-5	*

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

4. FIRST AID MEASURES

Description of necessary first-aid measures

General Advice

If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.

Eye Contact	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.		
Skin Contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation persists, call a physician.		
Inhalation	Move to fresh air. If breathing is irregular or stopped, administer artificial respiration. If symptoms persist, call a physician.		
Ingestion	Drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.		
Protection of First-aiders	Use personal protective equipment.		
Most important symptoms/effects, acute and delayed			
Most Important Symptoms/Effects	No information available.		
Indication of immediate medical att	ention and special treatment needed, if necessary		
Notes to Physician	May cause sensitization of susceptible persons. Treat symptomatically.		
5. FIRE-FIGHTING MEASURES			
Suitable Extinguishing Media Water spray. Dry powder. Foam.			
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	
Sensitivity to Mechanical Impact	
Sensitivity to Static Discharge	

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

None.

None.

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. See Section 12 for additional Ecological Information.		
Methods and materials for containment and cleaning up			
Methods for Containment	Prevent further leakage or spillage if safe to do so.		
Methods for Cleaning Up	Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.		

7. HANDLING AND STORAGE

Precautions for safe handling

Handling	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.		
Conditions for safe storage, including any incompatibilities			
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. Keep out of the reach of children.		
Incompatible Products	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 ³	(vacated) TWA: 2 mg/m ³	IDLH: 1000 mg/m ³ containg no asbestos and <1% quartz TWA: 2 mg/m ³
Quartz 14808-60-7	TWA: 0.025 mg/m ³ respirable fraction	30/(%SiO2+2) mg/m ³ TWA, Total Dust;250/%SiO2+5) mppcf TWA, respirable fraction; 10/(%SiO2+2) mg/m ³ TWA, respirable TWA: 0.1 mg/m ³ (vacated)	TWA: 0.05 mg/m ³ respirable dust
Silicon dioxide 7631-86-9	10 mg/m ³	20 mppcf TWA; ((80)/(% SiO2) mg/m ³)	IDLH: 3000 mg/m ³ TWA: 6 mg/m ³

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:

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures	Showers
	Eyewash stations
	Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection Skin and Body Protection Respiratory Protection	Safety glasses with side-shields. Protective gloves. Lightweight protective clothing. If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.
Hygiene Measures	When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	Appearance	Blue, Red, Green
Odor	Slight Solvent	Odor Threshold	No information available
Property	Values	<u>Remarks/ - Me</u>	ethod

рН	No data available	None known
Melting Point/Range	No data available	None known
Boiling Point/Boiling Range	No data available	None known
Flash Point	200 °C	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limits in Air		
upper flammability limit	No data available	
lower flammability limit	No data available	
Vapor Pressure	No data available	None known
Vapor Density	No data available	None known
Specific Gravity	1.55	None known
Water Solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/wate	rNo data available	None known
Autoignition Temperature	No data available	None known
Decomposition Temperature	No data available	None known
Viscosity	No data available	None known
Flammable Properties	Combustible material: may	burn but does not ignite readily.
Explosive Properties	No data available	
Oxidizing Properties	No data available	
Other information		
VOC Content (0/)	0	

VOC Content (%) VOC (g/l) 0 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

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

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

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

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation	
Quartz	-	-	-	
Trimethylolpropane triacrylate	> 5000 mg/kg (Rat)	= 5000 mg/kg (Rabbit)	-	
2-Hydroxyethyl methacrylate	= 5050 mg/kg (Rat)	>3000 mg/kg (Rabbit)	-	
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		
Mutagenic Effects		
Carcinogenicity		

No information available. No information available. This product contains crystalline silica (quartz) in a non-respirable form. Inhalation of crystalline silica is unlikely to occur from exposure to this product.

Chemical Name	ACGIH	IARC	NTP	OSHA
Quartz	A2	Group 1	Known	Х
Silicon dioxide		Group 3		

ACGIH: (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC: (International Agency for Research on Cancer)

Group 1 - 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

Reproductive Toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration Hazard	No information available.

Numerical measures of toxicity - Product

The following values are calculated based on chapter 3.1 of the GHS document:LD50 Oral1197mg/kg; Acute toxicity estimateLD50 Dermal5484mg/kg; Acute toxicity estimate

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		LC50 96 h: > 100 g/L		
14807-96-6		semi-static (Brachydanio		
		rerio)		

2-Hydroxyethyl methacrylate		LC50 96 h: 213-242 mg/L	
868-77-9		flow-through (Pimephales	
		promelas)	
		LC50 96 h: = 227 mg/L	
		(Pimephales promelas)	
Silicon dioxide	EC50 72 h: = 440 mg/L	LC50 96 h: = 5000 mg/L	EC50 48 h: = 7600 mg/L
7631-86-9	(Pseudokirchneriella	static (Brachydanio rerio)	(Ceriodaphnia dubia)
	subcapitata)		

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	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 InventoriesTSCACompliesEINECSCompliesELINCSComplies

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

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	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

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	Х	Х	Х		Х
Quartz	Х	Х	Х	-	Х

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION				
NFPA_	Health Hazard 2	Flammability 1	Instability 0	Physical and Chemical Hazards -
HMIS	Health Hazard 2	Flammability 1	Physical Hazard 0	Personal Protection X
Prepared By Issuing Date Revision Date Revision Note	Product Stewardship 23 British American Blvd. Latham, NY 12110 1-800-572-6501 13-May-2015 11-Jan-2023 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