

Safety Data Sheet

Issue Date: 04-Mar-2013

Revision Date: 14-Aug-2024

Version 2

1. IDENTIFICATION

Product identifier

Product Name UV-200

Other means of identification

SDS # UO-003

Recommended use of the chemical and restrictions on use

Recommended Use Optics Coating.

Details of the supplier of the safety data sheet

Manufacturer Address

Ultra Optics Company
9200 Wyoming Avenue N.
Suite 360
Brooklyn Park, MN 55455

Emergency telephone number

Company Phone Number 1-800-365-9993
Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Clear liquid

Physical state Liquid

Odor Slight acrylic

Classification

Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Reproductive toxicity	Category 2
Flammable liquids	Category 4

Signal Word

Danger

Hazard statements

Causes severe skin burns and eye damage
May cause an allergic skin reaction
Suspected of damaging fertility or the unborn child
Combustible liquid



Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood
Wear protective gloves/protective clothing/eye protection/face protection
Do not breathe dusts or mists
Wash face, hands and any exposed skin thoroughly after handling
Contaminated work clothing must not be allowed out of the workplace
Keep away from flames and hot surfaces. - No smoking

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor
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 doctor
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower
Wash contaminated clothing before reuse
If skin irritation or rash occurs: Get medical advice/attention
IF INHALED: Remove person to fresh air and keep comfortable for breathing
Immediately call a POISON CENTER or doctor
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
IN CASE OF FIRE: Use CO2, dry chemical, or foam to extinguish

Precautionary Statements - Storage

Store locked up
Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards

Toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
(3-Glycidyloxypropyl)trimethoxysilane	2530-83-8	45-70
2-Propenoic acid, 1,4-butanediyl ester	1070-70-8	10-30
Cyclohexyl vinyl ether	2182-55-0	3-7
Bis[4-(diphenylsulfonio)phenyl]sulfide bis(hexafluoroantimonate)	273400-00-3	1-5
Propylene carbonate	108-32-7	1-5
Octamethylcyclotetrasiloxane	556-67-2	0.1-1

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES**Description of first aid measures****General Advice**

Immediately call a poison center or doctor/physician.

Eye Contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

Skin Contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
Inhalation	Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor/physician.
Ingestion	Rinse mouth. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed

Symptoms	May be harmful if swallowed. May be harmful in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Carbon dioxide (CO₂). Foam. Dry chemical.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Combustible liquid.

Hazardous combustion products Carbon oxides. Nitrogen oxides (NO_x). Silicon oxides. Hydrogen fluoride.

Explosion Data**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 Use personal protective equipment as required.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Contain spilled material using absorbent material. Place absorbent material in clean container.

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

Advice on Safe Handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing and eye/face protection. Do not breathe dusts or mists. Wash face, hands and any exposed skin thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

Conditions for safe storage, including any incompatibilities**Storage Conditions**

Store locked up. Store in a well-ventilated place. Keep cool.

Incompatible Materials

Strong oxidizers. Water. Inert gases. Amines. Alkali.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Appropriate engineering controls**Engineering Controls**

Apply technical measures to comply with the occupational exposure limits. Showers. Eyewash stations. Ventilation systems.

Individual protection measures, such as personal protective equipment**Eye/Face Protection**

Wear appropriate chemical goggles. Refer to 29 CFR 1910.133 for eye and face protection regulations.

Skin and Body Protection

Use nitrile, neoprene, or multilayer laminate gloves to protect skin from contact. Suitable protective clothing. Refer to 29 CFR 1910.138 for appropriate skin and body protection.

Respiratory Protection

If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection. Refer to 29 CFR 1910.134 for respiratory protection requirements.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties**Physical state**

Liquid

Appearance

Clear liquid

Color

Not determined

Odor

Slight acrylic

Odor Threshold

Not determined

Property**Values****Remarks • Method**

pH

No data available

Melting point / freezing point

No data available

Initial boiling point and boiling range

No data available

Flash point

> 60 °C / 141 °F

Evaporation Rate

Not determined

Flammability (Solid, Gas)

Liquid- Not Applicable

Flammability Limit in Air

Upper flammability or explosive limits

No data available

Lower flammability or explosive limits

No data available

Vapor Pressure	<1 mmHg
Vapor Density	No data available
Relative Density	1.12 - 1.15
Water Solubility	Not determined
Solubility in other solvents	Not determined
Partition Coefficient	Not determined
Autoignition temperature	No data available
Decomposition temperature	Not determined
Kinematic viscosity	Not determined
Dynamic Viscosity	Not determined
Explosive Properties	Not determined
Oxidizing Properties	Not determined

Other information**10. STABILITY AND REACTIVITY****Reactivity**

Not reactive under normal conditions.

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

Excessive temperature. Unintended contact with water or moisture.

Incompatible materials

Strong oxidizers. Water. Inert gases. Amines. Alkali.

Hazardous decomposition products

Carbon oxides. Nitrogen oxides (NOx). Silicon oxides. Hydrogen fluoride.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Product Information****Eye Contact**

Avoid contact with eyes.

Skin Contact

May be harmful in contact with skin.

Inhalation

Do not inhale.

Ingestion

May be harmful if swallowed.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
(3-	= 7.01 g/kg (Rat)	= 3.97 mL/kg (Rabbit)	> 5.3 mg/L (Rat) 4 h

Glycidyoxypropyltrimethoxysilane 2530-83-8			
2-Propenoic acid, 1,4-butanediyl ester 1070-70-8	= 587 mg/kg (Rat)	400 - 800 mg/kg (Rat)	> 0.06 mg/L (Rat) 8 h
Water 7732-18-5	> 90 mL/kg (Rat)	-	-
Cyclohexyl vinyl ether 2182-55-0	-	> 2000 mg/kg (Rat)	> 22.007 mg/L (Rat) 4 h
Propylene carbonate 108-32-7	= 29000 mg/kg (Rat)	> 3000 mg/kg (Rabbit)	-
Octamethylcyclotetrasiloxane 556-67-2	= 1540 mg/kg (Rat)	> 2375 mg/kg (Rat)	= 36 mg/L (Rat) 4 h

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms

Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation

Causes severe skin burns.

Serious eye damage/eye irritation

Causes severe eye damage.

Sensitization

May cause an allergic skin reaction.

Carcinogenicity

Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Reproductive toxicity

Suspected of damaging fertility or the unborn child.

Numerical measures of toxicity

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

Oral LD50 2,334.70 mg/kg

Dermal LD50 2,733.30 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects.

Component Information

Chemical name	Algae/aquatic plants	Fish	Crustacea
(3-Glycidyoxypropyl)trimethoxysilane 2530-83-8		LC50: =55mg/L (96h, Cyprinus carpio)	
Propylene carbonate 108-32-7	EC50: >500mg/L (72h, Desmodesmus subspicatus)	LC50: >1000mg/L (96h, Cyprinus carpio)	EC50: >500mg/L (48h, Daphnia magna)
Octamethylcyclotetrasiloxane 556-67-2		LC50: >500mg/L (96h, Brachydanio rerio) LC50: >1000mg/L (96h, Lepomis macrochirus)	

Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

Mobility

Chemical name	Partition coefficient
2-Propenoic acid, 1,4-butanediyl ester 1070-70-8	1.9
Cyclohexyl vinyl ether 2182-55-0	3.5
Propylene carbonate 108-32-7	0.48
Octamethylcyclotetrasiloxane 556-67-2	6.488

Other adverse effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

Note

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

Please contact manufacturer for most current information

IATA

Please contact manufacturer for most current information

IMDG

Please contact manufacturer for most current information

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	TSCA Inventory Status	DSL/NDL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AIIC
(3-Glycidyloxypropyl)trimethoxy silane	X	ACTIVE	X	X	X	X	X	X	X

2-Propenoic acid, 1,4-butanediyl ester	X	ACTIVE	X	X	X	X	X	X	X
Water	X	ACTIVE	X	X	X	X	X	X	X
Cyclohexyl vinyl ether	X	ACTIVE	X	X	X		X	X	
Propylene carbonate	X	ACTIVE	X	X	X	X	X	X	X
Octamethylcyclotetrasiloxane	X	ACTIVE	X	X	X	X	X	X	X

Legend:*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List**EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances**ENCS - Japan Existing and New Chemical Substances**IECSC - China Inventory of Existing Chemical Substances**KECL - Korean Existing and Evaluated Chemical Substances**PICCS - Philippines Inventory of Chemicals and Chemical Substances**AICS - Australian Inventory of Chemical Substances***US Federal Regulations****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).

SARA 313

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

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Water 7732-18-5			X

16. OTHER INFORMATION

<u>NFPA</u>	Health hazards	Flammability	Instability	Special hazards
	-	-	-	-
<u>HMIS</u>	Health hazards	Flammability	Physical hazards	Personal Protection
	-	-	-	Not determined

Issue Date: 04-Mar-2013
Revision Date: 14-Aug-2024
Revision Note: Updated formula

Disclaimer

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet