

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY UNDERTAKING**

- 1.1 **Product Identifier**  
 Product Name: HCoating - SR  
 CAS No.: Mixture
- 1.2 **Relevant Identified Uses of The Substance Or Mixture and Uses Advised Against**  
 Identified Uses: Protective coating for lenses and transparent polymeric substrates
- 1.3 **Details of The Supplier of The Safety Data Sheet**  
 Company: Arotek International LLC  
 23890 Copper Hill Dr. #238  
 Valencia, CA 91354 , USA  
 Telephone & Fax: (815) 301-8789
- 1.4 **Emergency Telephone Number** (562) 303-3772

**SECTION 2: HAZARDOUS IDENTIFICATION**

- 2.1 **Classification of the Substance or Mixture**  
 Acute toxicity, oral (Category 5) H303  
 Skin Irritation (Category 2) H315  
 Skin Sensitization (Category 1) H317  
 Eye Irritation (Category 2A) H319  
 Chronic Aquatic Toxicity (Category 3) H412
- 2.2 **GHS Label Elements, Including Precautionary Statements**

**Pictogram:**  **Signal Word:** Warning

**Hazard Statements**

- H303 May be harmful if swallowed
- H315 Causes skin irritation
- H317 May cause an allergic skin reaction
- H319 Causes serious eye irritation
- H412 Harmful to aquatic life with long lasting effects

**Precautionary Statements**

- P210 Keep away from heat/sparks/open flames/hot surfaces
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray
- P264 Wash skin thoroughly after handling
- P272 Contaminated work clothing should not be allowed out of the workplace
- P273 Avoid release to the environment
- P280 Wear protective glove/eye protection/face protection
- P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water
- P333 + P313 If skin irritation or rash occurs: Get medical advice/attention
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- P337 + P313 If eye irritation persists: Get medical advice/attention
- P362 Take off contaminated clothing and wash before reuse
- P501 Dispose of contents/container to an approved waste disposal plant

- 2.3 **Hazards Not Otherwise Classified Or Not Covered By GHS - None.**

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Hazardous Component	CAS No.	EC No.	Concentration
1, 6-Hexanediol diacrylate	13048-33-4	235-921-9	< 40 %
Trimethylol propane triglycidyl ether polymer	30499-70-8	-	< 40 %
Epoxy silane polymer with modified silsesquioxanes	-	-	< 40 %
Dipentaerythritol hexaacrylate	29570-58-9	249-698-0	< 25 %
Pentaerythritol, ethoxylated, tetraacrylate	51728-26-8	500-111-9	< 25 %
Trimethylolpropane triacrylate	15625-89-5	239-701-3	< 25 %
{{Phenylthio} Phenyl} Diphenylsulfonium Hexafluorophosphate	68156-13-8	269-006-0	< 6 %
Bis[4-Diphenylsulfonio] Sulfide Bis(Hexafluorophosphate)	74227-35-3	403-490-8	< 6 %
2-Hydroxy-2-methylpropiophenone	7473-98-5	231-272-0	< 6 %
Propylene carbonate	108-32-7	203-572-1	< 6 %
(3-Glycidyloxypropyl) trimethoxysilane	2530-83-8	219-784-2	< 6 %

**SECTION 4: FIRST AID MEASURES**

- 4.1 **Description of First Aid Measures**  
 Inhalation: Remove the affected person to fresh air and assist in breathing if necessary. If irritation persists, seek medical attention.  
 Skin Contact: Wash off with soap and plenty of water. If rash develops, seek medical attention.  
 Eye Contact: Rinse thoroughly with plenty of water for 15 minutes, remove contact lenses if present and easy to do. If irritation persists, seek medical attention.

- Ingestion: Rinse mouth with water. Do not induce vomiting. Get immediate medical attention.
- 4.2 **Most Important Symptoms and Effects, Both Acute and Delayed** The most important symptoms and effects are described in section 2.2 and/or in section 11.
- 4.3 **Indication of Any Immediate Medical Attention and Special Treatment Needed** No data available.

#### SECTION 5: FIRE-FIGHTING MEASURES

- 5.1 **Extinguishing Media** Water, alcohol-resistant foam, dry chemical or carbon dioxide.
- 5.2 **Special Hazards Arising From The Substance Of Mixture:** Carbon oxides, silicone oxides.
- 5.3 **Advice for Firefighters** Wear self-contained breathing apparatus for the fire-fighting if necessary.
- 5.4 **Further Information** No data available.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

- 6.1 **Personal Precautions, Protective Equipment and Emergency Procedures** Use safety glasses, chemical resistant gloves, and a NIOSH approved respirator. Ensure adequate ventilation. Evacuate personnel to safe areas.
- 6.2 **Environmental Precautions** Prevent further leakage or spillage. Do not let product enter drains and be discharged into environment.
- 6.3 **Methods and Materials for Containment and Cleaning up** Soak up with sand or inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

#### SECTION 7: HANDLING AND STORAGE

- 7.1 **Precautions for Safe Handling** Avoid contact with eye and skin. Work in well ventilated areas. Avoid breathing dust, fumes, mist, or vapor. Wash hands before eating and drinking.
- 7.2 **Conditions for Safe Storage, Including Any Incompatibilities** Keep container tightly closed in a dry and cool area away from heat, direct sunlight, moisture, sparks, and flame.
- 7.3 **Specific End Uses** Consult the supplier.

#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 **Control Parameters**  
**Components with Workplace Control Parameters**
- | Component                      | CAS No.    | Exposure Limits (WEEL)       |
|--------------------------------|------------|------------------------------|
| Hexamethylene diacrylate       | 13048-33-4 | 1 mg/m <sup>3</sup> (8h TWA) |
| Trimethylolpropane triacrylate | 15625-89-5 | 1 mg/m <sup>3</sup> (8h TWA) |
- 8.2 **Exposure Controls**  
**Personal Protective Equipment**
- Eye Protection:** Use safety glasses or goggles as a minimum.
- Skin Protection:** Use chemical resistant gloves (butyl-rubber). Wash hands before eating and drinking.
- Respiratory Protection:** Use a NIOSH approved respirator.
- Engineering Control:** Provide eye wash station, local exhaust ventilation, and general dilution ventilation.

#### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 **Information on Basic Physical and Chemical Properties**
- |                            |               |                            |               |
|----------------------------|---------------|----------------------------|---------------|
| Appearance:                | Clear liquid  | Color:                     | Light yellow  |
| Odor:                      | Solvent odor  | Odor threshold:            | N/A           |
| pH:                        | not available | Melting point:             | not available |
| Boiling point:             | > 100°C       | Flash point:               | > 100°C       |
| Evaporation rate:          | N/A           | Flammability:              | not available |
| Explosive limit:           | N/A           | Vapor pressure:            | N/A           |
| Vapor density:             | N/A           | Specific gravity:          | ~1.1          |
| Solubility in water:       | not available | Partition coefficient:     | not available |
| Auto-ignition temperature: | not available | Decomposition temperature: | not available |
| Viscosity:                 | < 50 cps      |                            |               |

#### SECTION 10: STABILITY AND REACTIVITY

- 10.1 **Reactivity** No spontaneous reaction occurs if stored in a cool, dry area.
- 10.2 **Chemical Stability** Stable under recommended storage conditions.
- 10.3 **Possibility of Hazardous Reactions** No hazardous polymerization occurs under storage conditions.
- 10.4 **Conditions to Avoid** Oxidizing agents usage, moisture, direct sunlight, heat.
- 10.5 **Incompatible Materials** Strong oxidizers, acids, bases, and water.
- 10.6 **Hazardous Decomposition Products** Methanol forms by reaction with water. Thermal decomposition at high heat may evolve metal oxides, carbon oxides, silicon oxides, formaldehyde.

#### SECTION 11: TOXICOLOGICAL INFORMATION

- 11.1 **Information on Toxicological Effects**
- Acute Toxicity:** This product is classified in Category 5 Acute Toxicity, may be harmful if swallowed.
- Skin Corrosion/Irritation:** This product is classified in both Category 1 Skin Sensitization, may cause an allergic skin reaction and Category 2 Skin Irritation, causes skin irritation.
- Serious Eye Damage/Irritation:** This product is classified in Category 2A Eye Irritation, causes serious eye irritation.
- Respiratory Or Skin Sensitization:** No data available.

**Germ Cell Mutagenicity:** No data available.  
**Carcinogenicity:** No components of this mixture present at levels greater than or equal to 0.1% is identified as a known or potential carcinogen.  
**Reproductive Toxicity:** No data available.  
**Specific Target Organ Toxicity - Single Exposure:** No data available.  
**Specific Target Organ Toxicity - Repeated Exposure:** No data available.  
**Aspiration Hazard:** No data available.

**11.2 Additional Information**  
 1, 6-Hexanediol diacrylate RTECS: AT1430000  
 2-Hydroxy-2-methylpropiophenone RTECS: UC2977245  
 (3-Glycidioxypropyl) trimethoxysilane RTECS: VV4025000  
 Trimethylolpropane triacrylate RTECS: AT4810000

**SECTION 12: ECOLOGICAL INFORMATION**

**12.1 Toxicity:** This product is classified in Category 3 Acute Aquatic Toxicity and Category 3 Chronic Aquatic Toxicity, harmful to aquatic life with long lasting effects.  
**12.2 Persistence and Degradability:** No data available.  
**12.3 Bioaccumulative Potential:** No data available.  
**12.4 Mobility in Soil:** No data available.  
**12.5 Results of PBT and vPvB assessment:** No data available.  
**12.6 Other Adverse Effects:** No data available.

**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1 Waste Treatment Methods:** Disposal should adhere to all local, state, and federal regulations. Contact a licensed professional waste disposal service to dispose of this material.  
**13.2 Additional Information:** None.

**SECTION 14: TRANSPORT INFORMATION**


DOT UN	Not regulated.	Road/Rail (ADR/RID)	Not regulated.
Sea Transport (IMDG)	Not regulated.	Air Transport (IATA)	Not regulated.

**SECTION 15: REGULATORY INFORMATION**

**Federal Regulations**  
 TSCA - Toxic Substance Control Act Status: Released/listed.  
 SARA 302 - Extremely Hazardous Substances: None.  
 SARA 311/312 - Hazard Categories: Acute health hazard, chronic health hazard.  
 SARA 313 - Toxic Chemicals: None.  
**Pennsylvania Right-to-Know Components:**  
 2-Hydroxy-2-methylpropiophenone CAS No. 7473-98-5  
 [3-(2, 3-Epoxypropoxy) propyl] trimethoxysilane CAS No. 2530-83-8  
 Hexamethylene diacrylate CAS No. 13048-33-4  
 Trimethylolpropane triacrylate CAS No. 15625-89-5  
**New Jersey Right-to-Know Components:**  
 2-Hydroxy-2-methylpropiophenone CAS No. 7473-98-5  
 [3-(2, 3-Epoxypropoxy) propyl] trimethoxysilane CAS No. 2530-83-8  
 Hexamethylene diacrylate CAS No. 13048-33-4  
 Trimethylolpropane triacrylate CAS No. 15625-89-5  
**California Prop. 65 Components:** None.

**SECTION 16: OTHER INFORMATION**

<b>HMIS/NFPA Rating:</b>	<b>HMIS</b>	<b>NFPA</b>
	Health - 2 Physical hazard - 1	Health - 2 Flammability - 1 Instability - 1



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