

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 02/08/2019

Reviewed on 02/08/2019

1 Identification

- **Product Identifier**
- **Trade Name:** UV-CURABLE PROTECTIVE SEALER
- **Relevant identified uses of the substance or mixture and uses advised against:**
- **Product Description:** UV Curable Resin
- **Application of the substance / the mixture:** Industry Specific Application
- **Details of the Supplier of the Safety Data Sheet:**
- **Manufacturer/Supplier:**
Multicoat Products Inc.
1 Putnam Business Park Drive
Fraziers Bottom, WV 25082
(P) 1-800-660-6729
- **Emergency telephone number:** CHEMTREC (800) 424-9300

2 Hazard(s) Identification

- **Classification of the substance or mixture:**



Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.

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



GHS07

- **Signal word:** Warning
- **Hazard-determining components of labeling:**
Proprietary
Acrylated esters
Aliphatic urethane acrylate
Proprietary
Acrylic Ester
Acrylic Ester
Trade Secret
pentaerythritol tetraacrylate
- **Hazard statements:**
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
- **Precautionary statements:**
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 Wash thoroughly after handling.
P272 Contaminated work clothing must not be allowed out of the workplace.

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Trade Name: UV-CURABLE PROTECTIVE SEALER

- P280 Wear protective gloves / eye protection / face protection.
- P302+P352 If on skin: Wash with plenty of water.
- P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P332+P313 If skin irritation occurs: Get medical advice/attention.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P321 Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P363 Wash contaminated clothing before reuse.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

• **Unknown acute toxicity:**

This value refers to knowledge of known, established toxicological or ecotoxicological values.
0 % of the mixture consists of component(s) of unknown toxicity.

- **Classification system:** NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme
- **NFPA ratings (scale 0 - 4)**



• **HMIS-ratings (scale 0 - 4)**



- **Hazard(s) not otherwise classified (HNOC):** None known

3 Composition/Information on Ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of substances listed below with non-hazardous additions.

• **Dangerous Components:**

Proprietary ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317; STOT SE 3, H335	15-30%
Aliphatic urethane acrylate ⚠ Eye Irrit. 2A, H319; Skin Sens. 1, H317	2-12%
Proprietary ⚠ Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Irrit. 2B, H320	2-12%
Proprietary ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315	5-20%
Acrylated Resin ⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319	2-12%
Acrylated esters ⚠ Eye Dam. 1, H318; ⚠ Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Acute 2, H401	2-12%
Acrylic Ester ⚠ Skin Sens. 1B, H317; Eye Irrit. 2B, H320	≤2.5%

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Acrylic Ester ⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317	≤2.5%
Trade Secret ⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317	≤2.5%
Trade Secret ⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317	≤2.5%

- **Additional information:**

The exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions of paragraph (i) of §1910.1200 of 29 CFR 1910.1200 Trade Secrets.

4 First-Aid Measures

- **Description of first aid measures**

- **After inhalation:**

Supply fresh air; consult doctor if symptoms persist.

In case of unconsciousness place patient stably in the side position for transportation.

- **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation occurs, consult a doctor.

- **After eye contact:**

Rinse opened eye for at least 15 minutes under running water. If symptoms persist, consult a doctor.

If easy to do so, remove contact lenses if worn.

- **After swallowing:**

Do not induce vomiting.

If swallowed and symptoms occur, consult a doctor.

- **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:**

No further relevant information available.

5 Fire-Fighting Measures

- **Extinguishing media**

- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.

- **For safety reasons unsuitable extinguishing agents:** No further relevant information.

- **Special hazards arising from the substance or mixture:** No further relevant information available.

- **Advice for firefighters**

- **Special protective equipment for firefighters:**

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures:**

Avoid contact with skin, eyes and clothing.

- **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 (i.e. sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

Dispose of the collected material according to regulations.

- **Reference to other sections:**

See Section 7 for information on safe handling.

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See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

· **Protective Action Criteria for Chemicals**

· PAC-1:	
Acrylic Ester	3 mg/m ³
· PAC-2:	
Acrylic Ester	170 mg/m ³
· PAC-3:	
Acrylic Ester	990 mg/m ³

7 Handling and Storage

- **Handling**
- **Precautions for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **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 section 7.
- **Control parameters:**
- **Components with occupational exposure limits:**
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the other constituents have no known exposure limits.

Acrylic Ester	
WEEL	Long-term value: 1 mg/m ³ DSEN
Trade Secret	
WEEL	Long-term value: 1 mg/m ³ DSEN

- **Additional information:** The lists that were valid during the creation of this SDS were used as basis.
- **Exposure controls:**
- **Personal protective equipment**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing and wash before reuse.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Breathing equipment:** Not required.

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· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Select glove material based on penetration times, rates of diffusion and degradation.

· **Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material:**

The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

· **Eye protection:**



Safety glasses

· **Limitation and supervision of exposure into the environment:** None

9 Physical and Chemical Properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Liquid
Color: Clear, colorless
Odour: Odorless
Odor threshold: Not determined.

· **pH-value:** Not applicable.

· **Change in condition**

Melting point/Melting range: Not determined.
Boiling point/Boiling range: Not determined.

· **Flash point:** None

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** Not applicable

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not self-igniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

Lower: Not determined.
Upper: Not determined.

· **Vapor pressure:** Not determined.

· **Density:**

Relative density: Not determined.

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- Vapor density:** Not determined.
- Evaporation rate:** Not determined.
- **Solubility in / Miscibility with:**
 - Water:** Not miscible or difficult to mix.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
 - Dynamic:** Not determined.
 - Kinematic:** Not determined.
- **Solvent content:**
 - Solids content:** 0.0 %
- **Other information:** No further relevant information available.

* 10 Stability and Reactivity

- **Reactivity:** Stable under normal conditions.
- **Chemical stability:** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** Polymerization occurs when exposed to ultraviolet light or heat
- **Conditions to avoid:** Contact with moisture, acids and bases.
- **Incompatible materials:**
Avoid contact with radical forming initiators, peroxides, strong alkalies or reactive metals to prevent exothermic polymerization.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological Information

- **Information on toxicological effects:**
- **Acute toxicity:**

• **LD/LC50 values that are relevant for classification:**

Proprietary

Oral	LD50	2,000 mg/kg (Rat)
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Acrylic Ester

Oral	LD50	>5,000 mg/kg (Rat)
Dermal	LD50	>3,000 mg/kg (rab)

- **Primary irritant effect:**
- **On the skin:**
Irritant to skin and mucous membranes.
May cause an allergic skin reaction.
- **On the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
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.

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<ul style="list-style-type: none"> · NTP (National Toxicology Program):
None of the ingredients are listed.
<ul style="list-style-type: none"> · 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.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms
- **Results of PBT and vPvB assessment:**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects:** No further relevant information available.

13 Disposal Considerations

- **Waste treatment methods**
- **Recommendation:**
Observe all federal, state and local environmental regulations when disposing of this material.
- **Uncleaned packaging**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport Information

- | | |
|--|--|
| <ul style="list-style-type: none"> · UN-Number: · DOT, ADR/ADN, ADN, IMDG, IATA · UN proper shipping name: · DOT, ADR/ADN, ADN, IMDG, IATA · Transport hazard class(es): · DOT, ADR/ADN, ADN, IMDG, IATA · Class: · Packing group: · DOT, ADR/ADN, IMDG, IATA · Environmental hazards: · Special precautions for user: · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: · UN "Model Regulation": | <ul style="list-style-type: none"> Non-Regulated Material Non-Regulated Material Non-Regulated Material Non-Regulated Material Non-Regulated Material Non-Regulated Material Product contains environmentally hazardous substances: (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate Not applicable. Not applicable. Non-Regulated Material |
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15 Regulatory Information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
- **SARA (Superfund Amendments and Reauthorization):**

· **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

· **TSCA (Toxic Substances Control Act):**

Proprietary

Proprietary

Photo-Initiator

Acrylic Ester

Trade Secret

4986-89-4 pentaerythritol tetraacrylate

Proprietary

· **TSCA new (21st Century Act): (Substances not listed)**

Aliphatic urethane acrylate

Proprietary

Proprietary

Acrylated Resin

Acrylated esters

Acrylic Ester

· **California 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.

· **New Jersey Right-to-Know List:**

None of the ingredients are listed.

· **New Jersey Special Hazardous Substance List:**

None of the ingredients are listed.

· **Pennsylvania Right-to-Know List:**

None of the ingredients are listed.

· **Pennsylvania Special Hazardous Substance List:**

None of the ingredients are listed.

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• **Carcinogenic categories:**

<p>• EPA (Environmental Protection Agency):</p> <p>None of the ingredients are listed.</p>

• **TLV (Threshold Limit Value established by ACGIH):**

<p>None of the ingredients are listed.</p>
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• **NIOSH-Ca (National Institute for Occupational Safety and Health):**

<p>None of the ingredients are listed.</p>
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• **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

• **Hazard pictograms:**



GHS07

• **Signal word:** Warning

• **Hazard-determining components of labeling:**

Proprietary
Acrylated esters
Aliphatic urethane acrylate
Proprietary
Acrylic Ester
Acrylic Ester
Trade Secret
pentaerythritol tetraacrylate

• **Hazard statements:**

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.

• **Precautionary statements:**

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 Wash thoroughly after handling.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves / eye protection / face protection.
P302+P352 If on skin: Wash with plenty of water.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P362+P364 Take off contaminated clothing and wash it before reuse.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P321 Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
P337+P313 If eye irritation persists: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

• **National regulations:**

<p>None of the ingredients are listed.</p>
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• **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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16 Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

• **Date of preparation / last revision:** 02/08/2019 / 3

• **Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety and Health
OSHA: Occupational Safety & Health Administration
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Acute Tox. 4: Acute toxicity – Category 4
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
Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B
Skin Sens. 1: Skin sensitisation – Category 1
Skin Sens. 1B: Skin sensitisation – Category 1B
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard – Category 2
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

• *** Data compared to the previous version altered.**

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