

MaxLight+™ UV Resin Systems

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	• MaxLight+™ UV Resin Systems
Trade Name	• MaxLight+™ UV Resin Systems
Company	• Maxliner, 450 College Drive, Martinsville, VA 24112 USA
Company Contact	• info@maxlinerusa.com
Company Phone	• 1-877-426-5948
Emergency	• 24-Hour Emergency Contact: (Infotrac) 1-800-535-5053 • Local Emergency Contact: 1-800-535-5053

2. HAZARDS IDENTIFICATION

Hazard classification			
GHS US classification	<i>Skin sensitization</i>	• Category 1	• May cause an allergic skin reaction
	<i>Skin corrosion/irritation</i>	• Category 2	• Causes skin irritation
	<i>Eye irritation/damage</i>	• Category 2A	• Causes serious eye irritation
	<i>Hazardous to the aquatic environment</i>	• Category 2	• Toxic to aquatic life with long lasting effects
GHS US labeling			
<i>Hazard pictograms (GHS US)</i>			
	<i>Pictogram</i>		
<i>Signal word</i>	• Warning		
Hazard Statements	<i>H317</i>	• May cause an allergic skin reaction	
	<i>H318</i>	• Causes serious eye damage	
	<i>H411</i>	• Toxic to aquatic life with long lasting effects	
Precautionary Statements			
	<i>P261</i>	• Avoid breathing dust/fume/gas/mist/vapors/spray	
	<i>P264</i>	• Wash hands, forearms and face thoroughly after handling.	
	<i>P272</i>	• Contaminated work clothing must not be allowed out of the workplace.	
	<i>P273</i>	• Avoid release to the environment	
	<i>P280</i>	• Wear protective gloves/protective clothing/eye protection/face protection	

2. HAZARDS IDENTIFICATION (CONTINUED)

Response	P302+P352	• IF ON SKIN: Wash with plenty of soap and 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.
	P310	• Immediately call a poison center or doctor.
	P321	• Specific treatment (see supplemental first aid instruction on this label).
	P332+P313	• If skin irritation occurs: Get medical advice/attention.
	P333+P313	• If skin irritation or rash occurs: Get medical advice/attention
	P362+P364	• Take off contaminated clothing and wash it before reuse.
	P363	• Wash contaminated clothing before reuse.
	P391	• Collect spillage.
	P501	• Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation
Hazards not otherwise classified	No additional information available	

3. COMPOSITION / INFORMATION ON INGREDIENTS

This product is a mixture.

Chemical Name	Product Identifier	Percentage
Bisphenol A Epoxy Acrylate	55818-57-0	40-60
Vinyl Ester	Proprietary	40-60
2-Hydroxyethyl Methacrylate	868-77-9	15-50
Diphenyl (2, 4, 6-trimethylbenzoyl) Phosphine Oxide	75980-60-8	<5.0%

Full text of hazard classes and H-statements: see section 16.

4. FIRST AID MEASURES**Description of necessary first aid measures**

<i>Inhalation</i>	Remove person to fresh air and keep comfortable for breathing. If breathing is difficult, give oxygen. Obtain medical assistance. Remove all contaminated clothing and footwear.
<i>Skin contact</i>	Wash skin with plenty of water. Take off contaminated clothing. Wash clothing before re-using. If skin irritation or rash occurs: Get medical advice/attention.
<i>Eye contact</i>	Rinse cautiously with water for several minutes. Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Obtain medical attention if pain, blinking or redness persists.
<i>Ingestion</i>	Immediately call a poison center or doctor/physician. Never attempt to induce vomiting. Do not give an unconscious person anything to drink.

Most important symptoms/effects, acute and delayed

<i>Effects on humans</i>	None known
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Immediate medical attention and special treatment needed, if necessary.

<i>Notes to physician</i>	Treat symptomatically.
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5. FIRE FIGHTING MEASURES**Extinguishing media**

<i>Suitable extinguishing media</i>	Water spray. Dry powder. Carbon dioxide.
<i>Unsuitable extinguishing media</i>	Do not use a heavy water stream.
Specific hazards arising from the chemical	No specific fire or explosion hazard
<i>Fire hazard</i>	Cool containers / tanks with spray water if possible.
<i>Explosion hazard</i>	Heating may cause an explosion.
<i>Reactivity in case of fire</i>	Hazardous vapors may be released
Special protective equipment for fire-fighters	
<i>Precautionary measures fire</i>	Get the package away from the fire if this can be done without risk.
<i>Protection during firefighting</i>	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

<i>General measures</i>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Stop leak if safe to do so. Do not attempt to take action without suitable protective equipment. For further information refer to <i>Section 8: "Exposure controls/personal protection"</i>.
<i>For non-emergency personnel</i>	Wear recommended personal protective equipment
<i>For emergency responders</i>	Wear self-contained breathing apparatus.
<i>Methods for cleaning up</i>	Contain or absorb spilled liquid with non-combustible material.

For further information refer to Section 13.

7. HANDLING AND STORAGE

Precautions for safe handling	- To facilitate product transfer from the original container, the product may be heated to 40°C for not more than 24 hours. Do not use direct steam or band heaters to heat product. Hot boxes or hot rooms are recommended for heating the product. Keep away from hot surfaces/sparks/open flames/other ignition sources. No smoking. Handle and open container with care. Ground/bond container and receiving equipment. Ensure good ventilation of the workstation. Avoid contact with skin and eyes. Avoid breathing vapors, spray. Wear personal protective equipment. If frozen, thaw and mix thoroughly before use. If freezing/crystalizing occurs, warm and mix thoroughly with low shear to disperse the initiator evenly throughout the solution. - Contaminate clothing must not be allowed out of the building. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. .
Conditions for safe storage, including any incompatibilities	
<i>Storage conditions</i>	Protect from sunlight. Store in a closed container. Store in dry, cool, well-ventilated area.
<i>Storage temperature</i>	≤ 35°C

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters	No additional information available.
Appropriate engineering controls	Ensure good ventilation of the work station. Both local exhaust and general room ventilation are usually required.
Individual protection measures/ Personal protective equipment	
<i>Hand protection</i>	Chemically resistant protective gloves.
<i>Eye protection</i>	Splash goggles. Protective goggles or face shield.
<i>Skin and body protection</i>	If skin contact or contamination of clothing is possible, protective clothing should be worn.
<i>Respiratory protection</i>	In case of insufficient ventilation, wear suitable respiratory equipment. Approved organic vapor respirator.

9. PHYSICAL & CHEMICAL PROPERTIES

<i>Physical state at 25°C</i>	Liquid
<i>Color</i>	Colorless
<i>Odor</i>	Slightly sweet
<i>Odor Threshold</i>	No data available
<i>pH</i>	6.8 – 7.2
<i>Melting point</i>	No data available
<i>Freezing point</i>	No data available
<i>Boiling point</i>	213°C
<i>Flash point</i>	180°C
<i>Relative evaporation rate (butyl acetate=1)</i>	No data available
<i>Flammability (solid, gas)</i>	No data available
<i>Vapor pressure</i>	0.08mbar
<i>Relative vapor density at 20°C</i>	No data available
<i>Relative density</i>	1.14
<i>Solubility</i>	No data available
<i>Partition coefficient: n-octanol/water (Log Pow)</i>	No data available
<i>Auto-ignition temperature</i>	No data available
<i>Decomposition temperature</i>	No data available
<i>Viscosity, kinematic</i>	No data available
<i>Viscosity, dynamic</i>	2800 – 3200 cP @25°C
<i>No additional information available</i>	

10. CHEMICAL STABILITY & REACTIVITY INFORMATION

<i>Reactivity</i>	The product is non-reactive under normal conditions of use, storage and transport. Hazardous polymerization may occur if exposed to high temperature.
<i>Chemical stability</i>	Stable under normal conditions.
<i>Possibility of hazardous reactions</i>	Under normal conditions of storage and use, hazardous reactions will not occur.
<i>Conditions to avoid</i>	Heating may cause an explosion. Product may freeze or crystallize in cold weather or even under normal storage conditions. When product freezes or crystallizes, the inhibitor may become unevenly distributed..
<i>Incompatible materials</i>	Initiators. Strong alkalis. Peroxides. Curing agent. Reactive metals (Al, K, Zn.
<i>Hazardous decomposition products</i>	In the event of thermal decomposition : Carbon oxides (CO, CO₂). Soot. Smokes.

11. TOXICOLOGICAL INFORMATION**Information on toxicological effects**

<i>Acute toxicity (oral)</i>	Not classified
<i>Acute toxicity (dermal)</i>	Not classified.
<i>Acute toxicity (inhalation)</i>	Not classified.

Bisphenol A epoxy acrylate (55818-57-0)

<i>LD50 oral rat</i>	> 2000 mg/kg
<i>LD50 dermal rat</i>	> 2000 mg/kg

2-Hydroxyethyl methacrylate (868-77-9)

<i>LD50 oral rat</i>	>5000 mg/kg
<i>LD50 dermal rat</i>	>5000 mg/kg
<i>Skin corrosion/irritation</i>	May cause sensitization by contact.

Bisphenol A epoxy acrylate (55818-57-0)

<i>Additional information</i>	No skin irritation.
<i>Serious eye damage/irritation</i>	Causes serious eye damage.

Bisphenol A epoxy acrylate (55818-57-0)

<i>Additional information</i>	Mutagenicity tests are negative.
<i>Carcinogenicity</i>	Not classified.
<i>Reproductive toxicity</i>	Not classified.

Bisphenol A epoxy acrylate (55818-57-0)

<i>Toxicity for Reproduction</i>	Based upon available data of the substances, classification criteria are not met.
<i>STOT-single exposure</i>	Not classified.
<i>STOT-repeated exposure</i>	Not classified.
<i>Aspiration hazard</i>	Not classified.
<i>Effects on humans</i>	Not classified.

12. ECOLOGICAL INFORMATION**Toxicity****Bisphenol A epoxy acrylate (55818-57-0)**

<i>EC50 72h - Algae [1]</i>	• 105 mg/l <i>Pseudokirchneriella subcapitata</i>
<i>NOEC (chronic)</i>	• 0.25 mg/l 33days, <i>Pimephales promelas</i>
<i>NOEC chronic crustacea</i>	• 0.51 mg/l 21days, <i>Daphnia magna</i>

2-Hydroxyethyl methacrylate (868-77-9)

<i>LC50 - Fish [1]</i>	• >100mg/l 96hrs, Golden orfe
<i>EC50 - Crustacea [1]</i>	• 380 mg/l 48hrs, <i>Daphnia magna</i>
<i>EC50 72h - Algae [1]</i>	• 836 mg/l Test organisms (species): <i>Desmodesmus subspicatus</i> (previous name: <i>Scenedesmus subspicatus</i>)

Persistence and Degradability**Bisphenol A epoxy acrylate (55818-57-0)**

<i>Persistence and degradability</i>	• Inherently biodegradable
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2-Hydroxyethyl methacrylate (868-77-9)

<i>Persistence and degradability</i>	• Readily biodegradable
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Bioaccumulative Potential**Bisphenol A epoxy acrylate (55818-57-0)**

<i>Partition coefficient n-octanol/water (Log Pow)</i>	• 1.6 – 3.8
Mobility in soil	• No additional information available.
Other adverse effects	• No additional information available.

13. DISPOSAL CONSIDERATIONS**Disposal methods**

Product/Packaging disposal recommendations: Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

14. TRANSPORT INFORMATION

In accordance with DOT / IMDG / IATA

UN number	
<i>DOT NA No</i>	• UN3082
<i>UN-No. (IMDG)</i>	• 3082
<i>UN-No. (IATA)</i>	• 3082
UN proper shipping name	
<i>Proper Shipping Name (DOT)</i>	• Environmentally hazardous substances, liquid, n.o.s. (contains Bisphenol A epoxy acrylate)
<i>Proper Shipping Name (IMDG)</i>	• ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains Bisphenol A epoxy acrylate)
<i>Proper Shipping Name (IATA)</i>	• Environmentally hazardous substance, liquid, n.o.s. (contains Bisphenol A epoxy acrylate)

Transport hazard class(es)

DOT	
<i>Transport hazard class(es) (DOT)</i>	• 9
<i>Hazard labels (DOT)</i>	• 9
IMDG	
<i>Transport hazard class(es) (IMDG)</i>	• 9
<i>Hazard labels (IMDG)</i>	• 9
IATA	
<i>Transport hazard class(es) (IATA)</i>	• 9
<i>Hazard labels (IATA)</i>	• 9
<i>Transport Label</i>	

Packing group	
<i>Packing group (DOT)</i>	• III
<i>Packing group (IMDG)</i>	• III
<i>Packing group (IATA)</i>	• III

Environmental hazards	
<i>Dangerous for the environment</i>	• Yes
<i>Marine pollutant</i>	• Yes
<i>Label</i>	

<i>Other information</i>	• DOT in 49CFR §171.4(c)(1) states: "Except when all or part of the transportation is by vessel, the requirements of this subchapter specific to marine pollutants do not apply to non-bulk packagings transported by motor vehicle, rail car or aircraft".
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15. REGULATORY INFORMATION**US Federal Regulations**

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory. Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

<i>4,4'-isopropylidenediphenol; bisphenol A</i>	CAS-No. 80-05-7
<i>Toluene</i>	CAS-No. 108-88-3
<i>Acrylic acid</i>	CAS-No. 79-10-7
<i>Cyclohexane</i>	CAS-No. 110-82-7

International Regulations

<i>Australia</i>	Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory) - Secondary Notification
<i>Canada</i>	Listed on the Canadian DSL (Domestic Substances List)
<i>China</i>	Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
<i>EU</i>	Not listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
<i>Japan</i>	Listed on the Japanese ENCS (Existing New Chemical Substances) inventory
<i>Korea</i>	Listed on KECL/KECI (Korean Existing Chemicals Inventory)
<i>New Zealand</i>	Listed on NZIoC (New Zealand Inventory of Chemicals)
<i>Taiwan</i>	Listed on the TCSI (Taiwan Chemical Substance Inventory)

U.S. Federal State Regulations

<i>Warning</i>	This product can expose you to Bisphenol A (BPA), which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.
<i>Warning label</i>	

16. OTHER INFORMATION

OSHA Hazard Communication Standard 29 CFR 1910.1200 (HazCom 2012)

Full text of H-phrases	
H315	• <i>Causes skin irritation</i>
H317	• <i>May cause an allergic skin reaction</i>
H318	• <i>Causes serious eye damage</i>
H411	• <i>Toxic to aquatic life with long lasting effects</i>
Disclaimer	• MAXLINER urges each customer or recipient of this SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific SDSs, we are not and cannot be responsible for SDSs obtained from any source other than ourselves. If you have obtained an SDS from another source or if you are not sure that the SDS you have is current, please contact us for the most current version.