

UVLED82

Safety Data Sheet

Section 1: Identification

Product Identifier and Other Means of Identification

Product Identifier: UVLED82**Other Means of Identification:** UV Curable Adhesive**Related Part #** UVLED82-3ML, UVLED82-10ML, UVLED82-30ML, UVLED82-300ML, UVLED82-1L, UVLED82-3.6L

Recommended Use and Restriction on Use

Use: UV Curable Adhesive**Uses Advised Against:** For industrial use only.

Details of Manufacturer or Importer

ManufacturerMG Chemicals
1210 Corporate Drive
Burlington, Ontario L7L 5R6
CANADA**Distributor**Mouser Electronics
1000 North Main Street
Mansfield, TX 76063
USA

+1-905-331-1396

+1-800-340-0772

E-MAIL support@mgchemicals.cominfo@mgchemicals.com**WEB** www.mgchemicals.com**E-MAIL** (Competent Person): sds@mgchemicals.com

Emergency Phone Number

For hazardous material incidents ONLY (leaks, spills, fires, exposures or accidents)
USA or CANADA—Call Verisk 3E at **+1-866-519-4752** or **+1-760-476-3962**
(Service access code: 335388)**For emergencies involving the transport of dangerous goods;** 24/7 service
CANADA—Call CANUTEC collect at **+1-613-996-6666** or ***666** on cellular phones

UVLED82

Section 2: Hazard(s) Identification



Classification of Hazardous Chemical

GHS Categories

| Criteria | | Category | Signal Word | Pictograms |
|--------------------------------------|-----------------|----------|-------------|-------------|
| Sensitization | Skin | 1 | Warning | Exclamation |
| Eye Irritation | | 2 | Warning | Exclamation |
| Skin Irritation | | 2 | Warning | Exclamation |
| Specific Target Organ Toxicity | Single Exposure | 3 | Warning | Exclamation |
| Hazardous to the Aquatic Environment | Chronic | 1 | Warning | Environment |

Note: The degree of severity is ranked within each hazard class from 1 (Highest Severity) to up to 5 (Lowest Severity), which is opposite to HMIS and NFPA conventions. Severity category rankings do not allow comparisons between classes.

Label Elements

| | |
|---|--|
| Signal Word | WARNING |
| Pictograms | Hazard Statements |
|  | H317: May cause an allergic skin reaction H315: Causes skin irritation H319: Causes serious eye irritation H335: May cause respiratory irritation |
|  | H410: Very toxic to aquatic life with long lasting effects |

Section continued on the next page

UVLED82

Continued...

| Prevention | Precautionary Statements |
|--------------------|--|
| P261 | Avoid breathing fumes, vapors and spray. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P280 | Wear protective gloves and eye protection. |
| P264 | Wash hands thoroughly after handling. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P273 | Avoid release to the environment. |
| Response | Precautionary Statements |
| 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 or attention. |
| P302 + P352 | IF ON SKIN: Wash with plenty of water or shower. |
| P362 + P364 | Take off contaminated clothing and wash it before reuse. |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice or attention. |
| P304 + P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P312 | Call a POISON CENTER or doctor if you feel unwell. |
| P391 | Collect spillage. |
| Storage | Precautionary Statements |
| P403 | Store in a well-ventilated place. |
| Disposal | Precautionary Statements |
| P501 | Dispose of contents in accordance to local, regional, national, and international regulations. |

Hazards Not Otherwise Classified

| Other Criteria | Hazard Statements/Precautionary Statement | Signal Word | Pictograms |
|-----------------------|---|--------------------|-------------------|
| Defats skin | Repeated exposure may cause skin dryness or cracking. | Not applicable | Not applicable |

UVLED82

Section 3: Composition/Information on Ingredients

| CAS # | Chemical Name | %(weight) |
|----------------------------|--|-----------|
| 5888-33-5 | isobornyl acrylate | 44% |
| Trade secret ^{a)} | isocyanatoacrylate | 23% |
| 63225-53-6 | 2-[(butylcarbamoyl)oxy]ethyl prop-2-enoate | 8% |
| 123-86-4 | n-butyl acetate | 2% |
| 162881-26-7 | phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide | 0.6% |

a) The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret. Exemption granted under HMIRC Registry Number: 3339191, December Pending.

Section 4: First-Aid Measures

| <i>Exposure Condition</i> | <i>GHS Code/Symptoms/Precautionary Statements</i> |
|---------------------------|--|
| IF IN EYES | P305 + P351 + P338, P337 + P313 |
| Immediate Symptoms | <i>redness, pain, irritation, swelling of the eye lids</i> |
| Response | Rinse cautiously with water for at least 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention. |
| IF ON SKIN | P302 + P352, P362 + P364, P333 + P313 |
| Immediate Symptoms | <i>redness, irritation, dry skin, allergic contact dermatitis</i> |
| Response | Wash with plenty of water or shower. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice or attention. |
| IF INHALED | P304 + P340, P312 |
| Immediate Symptoms | <i>cough, sore throat, dizziness, headache, irritation to the respiratory tract</i> |
| Response | Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. |

Section continued on the next page

UVLED82*Continued...*

| | |
|---------------------------|--|
| IF SWALLOWED | P301 + P330 + P331 |
| Immediate Symptoms | <i>nausea, abdominal pain, diarrhoea, vomiting</i> |
| Response | Rinse mouth. Do NOT induce vomiting. |

Section 5: Fire-Fighting Measures

| | |
|----------------------------|---|
| Extinguishing Media | In case of fire: Use dry chemical, carbon dioxide, chemical foam, or water spray to extinguish. |
| Specific Hazards | Produces irritating and toxic fumes in fires or in contact with hot surfaces. Produces irritating smoke of unknown toxicity in fires. Prevent fire-fighting wash from entering waterway or sewer system. |
| Combustion Products | Produces carbon oxides (CO, CO ₂) and toxic fumes. |
| Fire-Fighter | Wear self-contained breathing apparatus and full fire-fighting turn-out gear. |

Section 6: Accidental Release Measures

| | |
|----------------------------------|---|
| Personal Protection | See personal protection recommendations in Section 8. |
| Precautions for Response | Avoid breathing fumes, vapors, or spray. Remove or keep away all sources of extreme heat or open flames. |
| Environmental Precautions | Avoid releasing to the environment. Prevent spill from entering drains and waterways. |
| Containment Methods | Contain with inert and non-flammable absorbent (such as soil, sand, vermiculite). |
| Cleaning Methods | Collect liquid in a sealable, chemical-resistant container. Sprinkle inert absorbent compound onto spill, then sweep into the container. Wipe off residues with paper towels and place the used towels in the waste container. Use soap and water to remove the last traces of residue. |
| Disposal Methods | Dispose of spill waste according to Section 13. |

UVLED82**Section 7: Handling and Storage****Prevention**

Avoid breathing fumes, vapors or spray. Keep container tightly closed. Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

Handling

Wear protective gloves and eye protection. Wash hands thoroughly after handling.

Take off contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace.

Collect spillage.

Storage

Store in a well-ventilated place.

Section 8: Exposure Controls/Personal Protection**Substances with Occupational Exposure Limit Values**

| Chemical Name | Country | Long Term Exposure Limits (PEL) | Short Term Exposure Limits (STEL) |
|-----------------|-----------------|---------------------------------|-----------------------------------|
| n-butyl acetate | ACGIH | 150 ppm | Not established |
| | U.S.A. OSHA PEL | 150 ppm | Not established |
| | Canada AB | 150 ppm | 200 ppm |
| | Canada BC | 20 ppm | 200 ppm |
| | Canada ON | 150 ppm | Not established |
| | Canada QC | 150 ppm | 200 ppm |

Note: The ACGIH¹, OSHA (Table Z-1), and Canadian provinces exposure limits were consulted. Limits from suppliers' SDS were also consulted. Short term exposure limits (STEL) are for 15 min and long-term permissible exposure limits (PEL) for 8 h.

Engineering Controls**Ventilation**

Keep airborne concentrations below the occupational exposure limits (OEL).

Section continued on the next page

UVLED82

Personal Protective Equipment

Eye protection

Wear appropriate protective eyeglasses or chemical safety goggles.

RECOMMENDATION: Ensure that glasses have side shields for lateral protection.

Skin Protection

For likely contacts, use of protective butyl rubber or other chemically resistant gloves.

For incidental contacts, use nitrile or other chemically resistant gloves.

For extended contacts, use polyvinyl alcohol (PVA) or viton gloves and aprons.

Respiratory Protection

For over-exposures up to 10 x OEL of mist, vapors, and spray, wear respirator such as a half-mask respirator with organic vapor cartridges.

Above 10 x OEL, use a positive-pressure, air-supplied respirator or a self-contained breathing apparatus.

RECOMMENDATION: Consult your local safety supply store to ensure that your respirator has a NIOSH (U.S.) approved filter cartridges appropriate for the ingredients listed in Section 3. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or Canadian Standards Association (CSAQ) Standard Z94.4 must be followed whenever workplace conditions warrant a respirator's use. The respirator should be fitted to the employee by a professional. Ensure vapor cartridges are stored in sealed plastic bags when not being used.

General Hygiene Considerations

Wash hands thoroughly with water and soap after handling.

Section continued on the next page

UVLED82**Section 9: Physical and Chemical Properties**

| | | | |
|-------------------------------|----------------------|---|--------------------------|
| Physical State | Liquid | Lower Flammability Limit ^{a)} | Not available |
| Appearance | Amber | Upper Flammability Limit ^{a)} | Not available |
| Odor | Slightly acrylic | Vapor Pressure @20 °C | Not available |
| Odor Threshold | Not available | Vapor Density | >1 (Air=1) |
| pH | Not available | Relative Density @25 °C | 1.47 |
| Freezing/Melting Point | Not available | Solubility in Water | Immiscible |
| Initial Boiling Point | ≥65 °C [≥148 °F] | Partition Coefficient n-octanol/water | Not available |
| Flash Point | >120 °C [>248 °F] | Auto-ignition Temperature | Not available |
| Evaporation Rate | Not available | Decomposition Temperature | Not available |
| Flammability | Not flammable | Viscosity @25 °C | >20.5 mm ² /s |

a) Based on Raoult's Law and LeChatelier principle.

Section 10: Stability and Reactivity

| | |
|----------------------------|--|
| Reactivity | Not applicable. |
| Chemical Stability | Chemically stable at normal temperatures and pressures |
| Conditions to Avoid | Avoid flames, sparks, other ignition sources, direct sunlight and incompatible substances. |
| Incompatibilities | Strong oxidizing agents, strong acids, alkali, water |
| Polymerization | Will not occur |
| Decomposition | Will not decompose under normal conditions. For thermal decomposition, see combustion products in Section 5. |

UVLED82**Section 11: Toxicological Information****Summary of Effects and Symptoms by Routes of Exposure**

| | |
|-------------------|---|
| Eyes | May cause redness, pain, irritation, or swelling of the eye lids. |
| Skin | May cause skin redness, irritation, dry skin, or allergic contact dermatitis. |
| Inhalation | May cause cough, sore throat, dizziness, headache, irritation to the respiratory tract. |
| Ingestion | May cause nausea, abdominal pain, diarrhoea or vomiting. |
| Chronic | Prolonged and repeated exposure may lead to skin sensitization. |

Acute Toxicity (Lethal Exposure Concentrations)

| Chemical Name | LD50 oral | LD50 dermal | LC50 inhalation |
|---|----------------------|------------------------|--------------------------------|
| isobornyl acrylate | 4 350 mg/kg Rat | Not available | Not available |
| isocyanatoacrylate | Not available | Not available | Not available |
| 2-[(butylcarbamoyl)oxy] ethyl prop-2-enoate | >2 000 mg/kg Rat | Not available | >0.5 <1 mg/L Rat 4 h (mist) |
| n-butyl acetate | 10 768 mg/kg Rat | 17 600 mg/kg Rat | Not available |
| phenyl bis(2,4,6- trimethylbenzoyl)-phosphine oxide | Not available | Not available | Not available |
| ATE | >2 000 mg/kg | >2 000 mg/kg | >5 mg/L (mist) |

Note: Toxicity data from ECHA was consulted. The data from supplier SDSs were also consulted.

Section continued on the next page

UVLED82*Continued...***Other Toxicological Effects****Skin corrosion/irritation**

Isobornyl acrylate can cause skin irritation.

Serious eye damage/irritation

Isobornyl acrylate can cause serious eye irritation.

Sensitization
(allergic reactions)

Isobornyl acrylate, isocyanatoacrylate, 2-[(butylcarbamoyl)oxy]ethyl prop-2-enoate, and phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide can cause skin sensitization.

Carcinogenicity
(risk of cancer)

None of the ingredients are classified or listed as a carcinogen by IARC, ACGIH, CA Prop 65, or NTP.

Mutagenicity
(risk of heritable genetic effects)

Based on available data, the classification criteria are not met.

Reproductive Toxicity
(risk to sex functions)

Based on available data, the classification criteria are not met.

Teratogenicity (risk of fetus malformation)

Based on available data, the classification criteria are not met.

STOT-single exposure

May cause irritation of the respiratory tract.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazardThere are no category 1 components, and the kinematic viscosity is $>20.5 \text{ mm}^2/\text{s}$ at $40 \text{ }^\circ\text{C}$.

UVLED82**Section 12: Ecological Information**

Ecological classifications are based on the IMDG/GHS criteria in conjunction with ecotoxicological data from our suppliers, the European Chemical Agency database (<http://echa.europa.eu>), and other reliable sources.

Isobornyl acrylate is an acute and chronic category 1 environmental toxicant according to GHS criteria with a minimal LC50 96 h of 0.704 mg/L for Danio rerio (zebrafish); EC50 21 d 0.54 mg/L Daphnia magna (water flea).

The 2-[(butylcarbamoyl)oxy]ethyl prop-2-enoate is a chronic category 2 environmental toxicant with a LC50 96 h of 2.52 mg/L for Danio rerio (zebrafish); EC50 48 h of 18.6 mg/L for Daphnia magna (water flea); and EC50 72 h of 5.98 mg/L Desmodesmus subspicatus (green algae).

Based on available data n-butyl acetate, is not classified as environmental hazards according to GHS criteria.

Acute Ecotoxicity

See chronic ecotoxicity.

Chronic Ecotoxicity

Category 1

Very toxic to aquatic life with long lasting effect

Avoid release to the environment. Collect spillage.

Biodegradability

Not available

Bioaccumulation

Not available

Other Effects

Not available

Section 13: Disposal Considerations

Dispose of contents in accordance with all local, regional, and national regulations.

UVLED82

Section 14: Transport Information

Ground

Refer to TDG regulations (Canadian Transportation of Dangerous Goods regulations);
USA DOT 49 CFR (Parts 100 to 185) **Regulations.**

Sizes under 5 L

UVLED82-3ML, UVLED82-10ML,
UVLED82-30ML, UVLED82-300ML
UVLED82-1L, UVLED82-3.6L

NOT REGULATED in TDG
per Special Provisions 99(2)

NOT REGULATED in 49 CFR
per exception 171.4 (c)(2)

49 CFR: Sizes greater than 5 L FOR REFERENCE ONLY

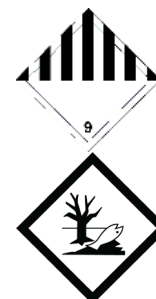
UN number: UN3082

Shipping Name:
ENVIRONMENTALLY HAZARDOUS
SUBSTANCE, LIQUID, N.O.S.
(isobornyl acrylate)

Class: 9

Packing Group: III

Marine Pollutant: Yes



Special Provision 99 (2): These Regulations, except for Part 1 (Coming into Force, Repeal, Interpretation, General Provisions and Special Cases) and Part 2 (Classification), do not apply to the handling, offering for transport or transporting of less than 450 kg of UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., or less than 450 L of UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., on a road vehicle or a railway vehicle. The dangerous goods must be contained in one or more small means of containment designed, constructed, filled, closed, secured and maintained so that under normal conditions of transport, including handling, there will be no accidental release of the dangerous goods that could endanger public safety.

171.4 (c) Exceptions:

(2) Single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass of 5 kg or less for solids, are not subject to any other requirements of this subchapter provided the packagings meet the general requirements in §§ 173.24 and 173.24a. This exception does not apply to marine pollutants that are a hazardous waste or a hazardous substance. In the case of marine pollutants also meeting the criteria for inclusion in another hazard class, all provisions of this subchapter relevant to any additional hazards continue to apply.

Section continued on the next page

UVLED82**Air****Refer to ICAO-IATA Dangerous Goods Regulations.**

Sizes 5 L and under

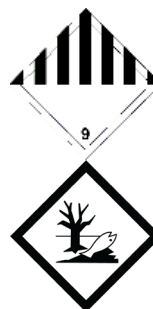
UVLED82-3ML, UVLED82-10ML,
UVLED82-30ML, UVLED82-300ML,
UVLED82-1L, UVLED82-3.6L**NOT REGULATED**

On air waybill write:

"Not Restricted, as per
Special Provisions A197"

Sizes greater than 5 L

FOR REFERENCE ONLY

UN number: UN3082**Shipping Name:**ENVIRONMENTALLY HAZARDOUS
SUBSTANCE, LIQUID, N.O.S.
(isobornyl acrylate)**Class:** 9**Packing Group:** III**Marine Pollutant:** Yes

Special Provision A197: These substances when transported in single or combination packagings containing net quantity per single or inner packaging of less than 5 L or less for liquids or having a net mass of 5 kg or less for solids, are not subject to any other provisions of these Regulations provided the packagings meet the general provisions 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

Section continued on the next page

UVLED82

Sea

Refer to IMDG regulations.

Sizes 5 L and under

UVLED82-3ML, UVLED82-10ML,
UVLED82-30ML, UVLED82-300ML,
UVLED82-1L, UVLED82-3.6L

NOT REGULATED

per 2.10.2.7

Sizes greater than 5 L

FOR REFERENCE ONLY

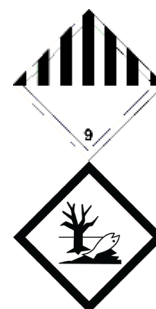
UN number: UN3082

Shipping Name:
ENVIRONMENTALLY HAZARDOUS
SUBSTANCE, LIQUID, N.O.S.
(isobornyl acrylate)

Class: 9

Packing Group: III

Marine Pollutant: Yes



2.10.2.7: Marine pollutants packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids are not subject to any other provision of this Code relevant to marine pollutants provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. In the case of marine pollutants also meeting the criteria for inclusion in another hazard class, all provisions of this Code relevant to any additional hazards continue to apply.

Note: Shipper must be appropriately trained and certified before involvement with the transport of dangerous goods.

Section 15: Regulatory Information

Canada

Domestic Substance List (DSL) / Non-Domestic Substance Lists (NDSL)

All hazardous ingredients are listed on the DSL.

Hazardous Products Act (R.S.C., 1985, c. H-3)

The safety data sheet and label comply with the Hazardous Product Act and WHMIS 2023.

Section continued on the next page

UVLED82

USA

OSHA Hazard Communication Standard (29 CFR Part 1900)

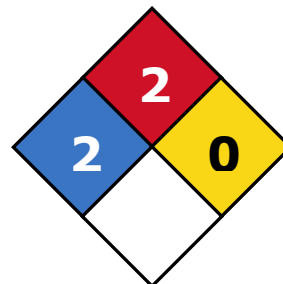
The safety data sheet and label comply with HCS 2024.

Other Classifications

HMIS® RATING

| | |
|-----------------------------|------------|
| HEALTH: | * 2 |
| FLAMMABILITY: | 2 |
| PHYSICAL HAZARD: | 0 |
| PERSONAL PROTECTION: | |

NFPA® 704 CODES



Approximate HMIS and NFPA Risk Ratings Legend:

0 (Low or none); 1 (Slight); 2 (Moderate); 3 (Serious); 4 (Severe)

CAA (Clean Air Act, USA)

This product does not contain any class 1 ozone depleting substances.

This product does not contain any class 2 ozone depleting substances.

This product does not contain substances that are listed as hazardous air pollutants.

EPCRA (Emergency Planning and Right to Know Act, USA, 40 CFR 372.45)

This product does not contain substances which are subject to the reporting requirements of section 313 Title III of the SARA of 1986 and 40 CFR part 372.

TSCA (Toxic Substances Control Act of 1976, USA)

All substances are TSCA listed.

California Proposition 65 (Chemicals known to cause cancer or reproductive toxicity, USA).

This product does not contain any substances on the California Proposition 65 list.

Europe

RoHS (Restriction of Hazardous Substances Directive)

This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, PBDE's, DEHP, BBP, DBP, or DIBP and complies with European RoHS regulations.

WEEE (Waste Electrical and Electronic Equipment Directive)

This product is not a piece of electrical or electronics equipment and is therefore not governed by this regulation.

UVLED82**Section 16: Other Information**

| | |
|----------------------------|-------------------------------------|
| SDS Prepared by | MG Chemical's Regulatory Department |
| Date of Review | 13 January 2025 |
| Supersedes | 01 August 2024 |
| Reason for Changes: | New size and minor modifications |

Reference

1) ACGIH 2023 TLVs and BEIs: Based on the documentation of the threshold limit values for chemical substances and physical agents & biological exposure indices, American Conference of Governmental of Industrial Hygienist Cincinnati, OH (2023).

Abbreviations

| | |
|-------|---|
| ACGIH | American Conference of Governmental Industrial Hygienists (USA) |
| EC50 | Half maximal effective concentration |
| EL50 | Half maximal effective loading |
| NOELR | No observable effect loading ratio |
| NTP | National Toxicology Program |
| GHS | Globally Harmonized System of Classification of Labeling of Chemicals |
| HMIRC | Hazardous Materials Information Review Commission |
| IARC | International Agency for Research on Cancer |
| LC50 | Lethal Concentration 50% |
| LCLo | Lowest published lethal concentration |
| LD50 | Lethal Dose 50% |
| OEL | Occupational Exposure Limit |
| PEL | Permissible Exposure Limit |
| SDS | Safety Data Sheet |
| STEL | Short-Term Exposure Limit |
| TCLo | Lowest published toxic concentration |
| TWA | Time Weighted Average |
| VOC | Volatile Organic Content |

Section continued on the next page

UVLED82

Technical Queries Contact us regarding any questions, improvement suggestions, or problems with this product. Application notes, instructions, and FAQs are located at www.mgchemicals.com.

Email: support@mgchemicals.com

Phone: +1-905-331-1396

Mailing Addresses *Manufacturing & Support*
1210 Corporate Drive
Burlington, Ontario, Canada
L7L 5R6

Disclaimer This safety data sheet is provided as an information resource only. *M.G. Chemicals, Ltd.* believes the information contained herein is accurate and compiled from reliable sources. It is the responsibility of the user to query and verify any information seeming suspect where doubt on the validity may exist. The buyer assumes all responsibility of using and handling the product in accordance with local, regional, national, and international regulations.