

Material Safety Data Sheet

Safety Data Sheet according to regulation (EC) N°1907/2006, (EU) 2015/830, 1272/2008(CLP) & 453/2010

Date Revised : 05.01.2023

Revision : 01

Product : **L955 – High Performance UV Adhesive**

Section 1 : Identification of the Substance/Mixture and of the Company/ Undertaking

- 1.1 Product Identifier
Product name : U-Bond High Performance UV Adhesive – L955 Liquid
REACH notes : Substances contained in this product that are not classified as hazardous have been/will be registered for UK/EU REACH at the appropriate time.
- 1.2 Relevant identified uses of the mixture and uses advised against.
Identified use : PC1, Adhesives, sealants
Uses advised against : No other uses
- 1.3 Details of the supplier of the safety data sheet
Company identification Glassbond (NW) Ltd
West Side Industrial Estate
Jackson Street
St. Helens
Merseyside WA9 3AT
United Kingdom
- Telephone +44(0)1744 730334
Fax +44(0)1744 451661
Email technical@glassbond.co.uk
- 1.4 Emergency telephone number +44(0)1744 730334
(GMT, English spoken, Mon-Friday; 08.30-16.30)

Section 2 : Hazard Identification

- 2.1 Classification of the mixture:
Regulation (EC) No. 1272/2008(CLP)
Skin Corr. 1C: H314; Eye Dam. 1: H318; Skin Sens. 1: H317; STOT SE 3: H335; STOT – repeated exposure: H373; Aquatic Acute 1: H400; Aquatic Chronic 1: H410.
Most important adverse effects:
Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. May cause an allergic skin reaction. May damage the unborn child. Suspected of damaging fertility. Toxic to aquatic life with long lasting effects.
- 2.2 Label elements (According to Regulation (EC) No. 1272/2008(CLP))



GHS05: Corrosion

GHS07: Harmful

GHS08: Health hazard

GHS09: Dangerous for the environment

Signal Word(s) Danger

Hazard Statement(s)
 H314 - Causes severe skin burns and eye damage.
 H317 - May cause an allergic skin reaction.
 H335 - May cause respiratory irritation.
 H373 - May cause damage to organs through prolonged or repeated exposure.
 H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statement(s)
 P261 - Avoid breathing mist, spray, vapours.
 P280 - Wear protective clothing, eye protection, face protection, protective gloves.
 P301+P330+P331+P310 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
 Immediately call a POISON CENTER or doctor.
 P303+P361+P353+P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor.
 P305+P351+P338+P310 - 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.
 P312 - Call a POISON CENTRE or doctor if you feel unwell.
 P321 - Specific treatment (see supplemental first aid instruction on this label).
 P391 - Collect spillage.

Contains 2-Hydroxyethyl methacrylate, exo-1,7,7-trimethylbicyclo [2.2.1] hept-2-yl acrylate; isobornyl acrylate, Acrylic acid glacial

2.3 Other Hazards
 This product is not identified as a PBT/vPvB substance

Section 3 : Composition/Information on Ingredients

3.2 Hazardous ingredients:

Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate – REACH registered number(s): 01-2119490169-29

EINECS	CAS	PBT/WEL	CLP Classification	Percent
227-561-6	5888-33-5	-	Skin Irrit. 2: H315; Eye Irrit. 2: H319; Skin Sens. 1: H317; STOT SE: H335; Aquatic Acute 1: H400; Aquatic Chronic: H410	≥25 - <60

2-Hydroxyethyl Methacrylate – REACH registered number(s): 01-2119490169-29

EINECS	CAS	PBT/WEL	CLP Classification	Percent
212-782-2	868-77-9	-	Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317	≥25 - <60

Acrylic Acid Glacial - REACH registered number(s): 01-2119452449-31

201-177-9	79-10-7	-	Flam. Liq. 3: H226; Acute Tox. 4: H302; Acute Tox. 3: H311; Acute Tox. 4: H332; Acute Tox. 3: H331; Skin Corr. 1A: H314; STOT SE 3: H335 (SCL 1 ≤ C ≤ 10); STOT RE 2: H373; Aquatic Acute 1: H400; Aquatic Chronic 1: H410	≥1 - <15
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Section 4 : First Aid Measures

4.1 Description of first aid measures

Inhalation	Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
Eyes	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately
Skin	Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.
Ingestion	Wash out mouth with water. Do not induce vomiting. Consult a doctor.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation	Inhalation may cause irritation (cough, short breathing, difficulty in breathing).
Eyes	Serious damage to eyes. Corrosion of the eye tissue. redness, itching, tears. stinging.
Skin	Highly corrosive to skin. Burns. May cause an allergic skin reaction. irritation (itching, redness, blistering).
Ingestion	Burns or irritation of the linings of the mouth, throat, and gastrointestinal tract. Nausea. Vomiting.

4.3 Indication of any immediate medical attention and special treatment needed

Immediate/special treatment Treat symptomatically.

Section 5 : Fire-Fighting Measures

5.1 Extinguishing media	Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.
Unsuitable extinguishing media	Do not use water jet to extinguish.

5.2 Special hazards arising from the mixture Fire hazard: Burning produces irritating, toxic, noxious fumes.

Hazardous decomposition products in case of fire: Toxic fumes may be released.

5.3 Advice for fire fighters Precautionary fire measures: Evacuate area

Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Section 6 : Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures
Notify the police and fire brigade immediately. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2 Environmental precautions
Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3 Methods and material for containment and cleaning up
Take up liquid spill into absorbent material. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal. Place in an appropriate container and dispose of the contaminated material at a licensed site. Prevent entry to sewers and public waters. Dispose of materials or solid residues at an authorized site.

6.4 Reference to other sections
Refer to section 8 and 13 of SDS.

Section 7 : Handling and Storage

7.1 Precautions for safe handling

Handling requirements Do not breathe vapours, spray, mist. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Wear personal protective equipment

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions Store in a cool, well-ventilated area. Keep container tightly closed and locked up. Keep only in original container.

7.3 Specific end use(s) Adhesive.

Section 8 : Exposure Controls/Personal Protection

8.1 Control parameters

National occupational exposure and biological limit values

Acrylic acid glacial (79-10-7)	
EU – Indicative Occupational Exposure Limit (IOEL)	
Local name	Acrylic acid; Prop-2-enoic acid
IOEL TWA	29 mg/m ³
IOEL TWA [ppm]	10 ppm
IOEL STEL	59 mg/m ³
IOEL STEL [ppm]	20 ppm
Regulatory reference	COMMISSION DIRECTIVE (EU) 2017/16
United Kingdom – Occupational Exposure Limits	
Local name	Acrylic acid (Prop-2-enoic acid)
WEL TWA (OEL TWA) [1]	29 mg/m ³
WEL TWA (OEL TWA) [2]	10 ppm
WEL STEL (OEL STEL)	59 mg/m ³ STEL in relation to a 1-minute reference period
WEL STEL (OEL STEL) [ppm]	20 ppm STEL in relation to a 1-minute reference period
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

DNEL and PNEC

2-Hydroxyethyl methacrylate (868-77-9)	
DNEL/DMEL (Workers)	
Long-term – systemic effects, dermal	1.3 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	4.9 mg/m ³
DNEL/DMEL (General population)	
Long-term – systemic effects, oral	0.83 mg/kg bodyweight/day
Long-term – systemic effects, inhalation	2.9 mg/m ³
Long-term – systemic effects, dermal	0.83 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.482 mg/l
PNEC aqua (marine water)	0.482 mg/l

PNEC aqua (intermittent, freshwater)	1 mg/l
PNEC aqua (intermittent, marine water)	1 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	3.79 mg/kg dwt
PNEC sediment (marine water)	3.79 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.476 mg/kg/dwt
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l

exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate; isobornyl acrylate (5888-33-5)	
DNEL/DMEL (Workers)	
Long-term – systemic effects, dermal	1.39 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	4.9 mg/m ³
DNEL/DMEL (General population)	
Long-term – systemic effects, oral	0.83 mg/kg bodyweight/day
Long-term – systemic effects, inhalation	1.45 mg/m ³
Long-term – systemic effects, dermal	0.83 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.00092 mg/l
PNEC aqua (marine water)	0.000092 mg/l
PNEC aqua (intermittent, freshwater)	0.00704 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.145 mg/kg dwt
PNEC sediment (marine water)	0.0145 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.0285 mg/kg/dwt
PNEC (STP)	
PNEC sewage treatment plant	2 mg/l

Acrylic acid glacial (79-10-7)	
DNEL/DMEL (Workers)	

Acute - local effects, dermal	1 mg/cm ²
Acute - local effects, inhalation	30 mg/m ³
Long-term - local effects, inhalation	30 mg/m ³
DNEL/DMEL (General population)	
Acute - local effects, dermal	1 mg/m ²
Acute - local effects, inhalation	3.6 mg/m ³
Long-term - local effects, inhalation	3.6 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	0.003 mg/l
PNEC aqua (marine water)	0.0003 mg/l
PNEC aqua (intermittent, freshwater)	0.0013 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.0236 mg/kg dwt
PNEC sediment (marine water)	0.002346 mg/kg dwt
PNEC (Soil)	
PNEC soil	1 mg/kg/dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	0.03 g/kg food
PNEC (STP)	
PNEC sewage treatment plant	0.9 mg/l

(1-hydroxycyclohexyl) phenylmethanone (947-19-3)

DNEL/DMEL (Workers)	
Long-term – systemic effects, dermal	3 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	21.16 mg/m ³
DNEL/DMEL (General population)	
Long-term – systemic effects, oral	01.5 mg/kg bodyweight/day
Long-term – systemic effects, inhalation	5.22 mg/m ³
Long-term – systemic effects, dermal	1.5 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.014 mg/l
PNEC aqua (marine water)	0.001 mg/l

PNEC (Sediment)	
PNEC sediment (freshwater)	0.186 mg/kg dwt
PNEC sediment (marine water)	0.019 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.028 mg/kg/dwt
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l

8.2 Exposure controls

Engineering measures: ensure there is sufficient ventilation of the area.

Respiratory protection: in case of sufficient ventilation, wear suitable respiratory equipment

Hand protection: protective gloves.

Eye protection: tightly fitting safety goggles. Ensure eye bath is to hand.

Skin protection: protective clothing.

Section 9 : Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	Liquid	Colour	Colourless
Odour	Characteristic	Odour threshold ppm	Not Available
Ph Value	Not applicable	Density	1.1 g/m ³ @ 20°C
Melting Point/freezing pt	Not applicable	Solubility in Water @ 20°C	Not available
Initial Boiling Point/Range	Not applicable	Partition Coefficient	Not available
Flashpoint °C	>93°C	(n-octanol/water)	
Evaporation rate	Not applicable	Auto ignition temperature	Not available
Flammability (solid/gas)	Not applicable	Decomposition temperature	Not available
Upper explosive limit	Not Available	Viscosity mPa.s @ 25°C	Not available
Lower explosive limit	Not Available	Relative density	Not available
Vapour pressure	8 hPa @ 30°C	Relative vapour density @20°C	3000
Vapour density (air=1)	Not applicable	Particle Characteristics	Not available

Section 10 : Stability and Reactivity

10.1	Reactivity	Stable under recommended transport or storage conditions.
10.2	Chemical Stability	Stable under normal conditions.
10.3	Possibility of Hazardous reactions	No dangerous reactions known under normal conditions of use.
10.4	Conditions to Avoid	None under recommended storage and handling conditions.
10.5	Incompatible materials	Strong acids. Strong bases. Strong reducing agents. Strong oxidising agents.
10.6	Hazardous Decomposition Products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11 : Toxicological information

Acute toxicity (oral): Not classified

Acute toxicity (dermal): Not classified

Acute toxicity (inhalation): Not classified

2-Hydroxyethyl methacrylate (868-77-9)	
LD50 oral rat	5564 mg/kg bodyweight Animal: rat, Guideline: other:
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Animal sex: male
LOAEC (inhalation, rat, gas, 90 days)	350 ppm Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study), Remarks on results: other:
NOAEC (inhalation, rat, gas, 90 days)	100 ppm Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study), Remarks on results: other:

exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate; isobornyl acrylate (5888-33-5)	
D50 oral rat	4350 mg/kg bodyweight
LD50 dermal rabbit	> 3000 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: other:
STOT – single exposure	May cause respiratory irritation.
STOT – repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Acrylic acid glacial (79-10-7)	
LD50 oral rat	1500 mg/kg bodyweight
LD50 oral	340 mg/kg
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: other: U.S. EPA Health Effects Test Guidelines, OCSPP 870.1200
LD50 dermal	280 mg/kg
LC50 Inhalation - Rat	> 5.1 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
LC50 Inhalation - Rat (Dust/Mist)	2.75 mg/l/4h
LC50 Inhalation - Rat (Vapours)	3.6 mg/l/4h
STOT – repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	Not classified

Skin corrosion/irritation :	Causes severe skin burns.
Serious eye damage/irritation :	Causes serious eye damage.
Respiratory or skin sensitisation :	May cause an allergic skin reaction.
Germ cell mutagenicity :	Not classified
Carcinogenicity :	Not classified
Reproductive toxicity :	Not classified
STOT-single exposure :	May cause respiratory irritation.

Section 12 : Ecological Information

12.1 Ecology - general	Very toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short term (acute)	Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	Very toxic to aquatic life with long lasting effects. Not rapidly degradable.

2-Hydroxyethyl methacrylate (868-77-9)	
Acute toxicity - fish	LC ₅₀ , > 100 mg/l, <i>Oryzias latipes</i> (Red killifish)
Acute toxicity – aquatic invertebrates	EC ₅₀ , 48 hours: 380 mg/l, <i>Daphnia magna</i>
Acute toxicity – aquatic plants	EC ₅₀ , 72 hours: 836 mg/l, <i>Selenastrum capricornutum</i> NOEC, 72 hours: 345 mg/l, <i>Selenastrum capricornutum</i> ErC ₅₀ algae: 710 mg/l
Chronic toxicity – aquatic invertebrates	LOEC, 21 days: 49.6 mg/l, <i>Daphnia magna</i> NOEC, 21 days: 24.1 mg/l, <i>Daphnia magna</i>

exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate; isobornyl acrylate (5888-33-5)	
Acute toxicity – fish	LC ₅₀ , 0.704 mg/l, <i>Danio rerio</i>
Acute toxicity – aquatic plants	EC ₅₀ , 72 hours: 1.98 mg/l, <i>Pseudokirchneriella subcapitata</i>
Chronic toxicity – aquatic invertebrates	LOEC, 21 days: 0.277 mg/l, <i>Daphnia magna</i> NOEC, 21 days: 0.092 mg/l, <i>Daphnia magna</i>
Chronic toxicity – aquatic plants	NOEC: 0.408 mg/l

Acrylic acid glacial (79-10-7)	
Acute toxicity - fish	LC ₅₀ , 27 mg/l, Oncorhynchus mykiss
Acute toxicity – aquatic invertebrates	EC ₅₀ , 95 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 0.13 mg/l, Scenedesmus subspicatus ErC ₅₀ algae: 0.13 mg/l
Chronic toxicity – aquatic invertebrates	LOEC, 21 days: 8.1 mg/l, Daphnia magna NOEC, 21 days: 0.016 mg/l EC ₁₀ , 72 hours: 0.03 mg/l, Scenedesmus subspicatus
Chronic toxicity – microorganisms	900 mg/l, 0.5 hours

12.2	Persistence and degradability	No additional information available.
12.3	Bioaccumulative potential	No additional information available.
12.4	Mobility in soil	No additional information available.
12.5	Results of PBT and vPvB assessment	No additional information available.
12.6	Other adverse effects	No additional information available.

Section 13 : Disposal Consideration

13.1	Waste treatment methods	
	Disposal operations	Dispose of contents/container in accordance with licensed collector's sorting instructions.

Section 14 : Transport Information

Applies to road, sea, and air transportation to inner containers > 5 litres

14.1	UN number	UN1760
14.2	UN shipping name	CORROSIVE LIQUID, N.O.S (Acrylic acid glacial)
14.3	Transport hazard class(es)	8
14.4	Packing group	I
14.5	Environmental hazards	Environmentally hazardous: Yes Marine pollutant: Yes



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|------|--|---|
| 14.6 | Special precautions for user | No special precautions
Tunnel code: E
Transport category: 1 |
| 14.7 | Transport in bulk according to Annex II of Marpol 73/78 and the IBC code | Not applicable |

Section 15 : Regulatory Information

15.1 EU Regulations

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|--|---|
| REACH Annex XVII (Restriction List) | Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions) |
| REACH Annex XIV (Authorisation List) | Contains no substance(s) listed on REACH Annex XIV (Authorisation List) |
| REACH Candidate List (SVHC) | Contains no substance(s) listed on the REACH Candidate List |
| PIC Regulation (Prior Informed Consent) | Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals) |
| POP Regulation (Persistent Organic Pollutants) | Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants) |
| Ozone Regulation (1005/2009) | Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer) |
| Explosives Precursors Regulation (2019/1148) | Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors) |
| Drug Precursors Regulation (273/2004) | Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances) |

- 15.2 Chemical safety assessment:
No chemical safety assessment has been carried out.

Section 16 : Other Information

* Sections Revised N/A Supercedes date N/A

Other information This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010

Phrases used in s.2 and s.3 H226: Flammable liquid and vapour
H302: Harmful if swallowed
H312: Harmful in contact with skin
H314: Causes severe skin burns and eye damage
H315: Causes skin irritation
H317: May cause an allergic skin reaction
H318: Causes serious eye damage
H319: Causes serious eye irritation
H332: Harmful if inhaled
H335: May cause respiratory irritation
H361f: Suspected of damaging fertility
H400: Very toxic to aquatic life
H411: Toxic to aquatic life with long lasting effects
H412: Harmful to aquatic life with long lasting effects
H413: May cause long lasting harmful effects to aquatic life

This information relates only to the specific material designated and is to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness and without acceptance of liability for loss or damage attributable to reliance thereon as conditions of use lie outside our control. Users should always carry tests to establish the suitability of any products for their intended applications. No statements shall be incorporated in any contract unless expressly agreed in writing or construed as recommending the use of any product in conflict of any patent. All goods are supplied subject to Glassbond Ltd's General Conditions of Sale.