

SAFETY DATA SHEET



Quadrant Uni-1-Bond

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Product name : Quadrant Uni-1-Bond
Other means of identification : Ethanol solution. Contains 2-Hydroxyethyl methacrylate
Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Dental bonding material

Details of the supplier of the safety data sheet

National contact

Cavex Holland
 Fustweg 5
 2031 CJ Haarlem
 The Netherlands

T +31 23 530 7700 E-Mail : dental@cavex.nl
 F +31 23 535 6482 Website : www.cavex.nl

National advisory body/Poison Centre/Emergency telephone number

Telephone number : +31 23 530 7700 (Office hours)

SECTION 2: Hazards identification

Classification of the substance or mixture

Product definition : Preparation

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

H225 - FLAMMABLE LIQUIDS Category 2.
 H317 - Sensitisation Category 1.
 H319 - Eye irritation Category 2A.

Classification according to Directive 67/548/EEC [DSD]

Europe

R10- Flammable.
 R36- Irritating to eyes.
 R43- May cause sensitisation by skin contact.

Classification according to Directive 1999/45/EC [DPD]

Europe

The preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

R10- Flammable.
 R36- Irritating to eyes.
 R43- May cause sensitisation by skin contact.

See Section 16 for the full text of the R phrases or H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

Label elements

Hazard pictograms



Signal word : Warning

Hazard statements : H225 - Highly flammable liquid and vapour.
 H317 - May cause an allergic skin reaction.
 H319 - Causes serious eye irritation.

Precautionary statements

Prevention : Read label before use.

Europe

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SECTION 2: Hazards identification



Irritant

Risk phrases : R10- Flammable.
R36- Irritating to eyes.
R43- May cause sensitisation by skin contact.

Safety phrases : None.

Hazardous ingredients : Not available.

Supplemental label elements : Comply with the safety instructions.

Other hazards

Other hazards which do not result in classification : Not applicable.

Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII : Not applicable.

Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : Not applicable.

SECTION 3: Composition/information on ingredients

Substance/mixture : Preparation

Product/ingredient name	Identifiers	%	Classification		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
Europe					
Ethanol		35-50	F; R11 Xi; R36/38	H225; H315; H319	[1]
2-Hydroxyethyl methacrylate		10-20	Xi; R36/38 R43	H315; H317; H319	[1]
Poly(methacrylic-oligo-acrylic acid)		5-10	Xi; R36	H319	-
4-methacryloxyethyl trimellitic anhydride		1-5	F; R11 Xi; R36/38 See Section 16 for the full text of the R-phrases declared above.	H225; H315; H319 See Section 16 for the full text of the H statements declared above.	-

Type

1: Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

Description of first aid measures

Eye contact : Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if irritation develops.

Inhalation : Supply fresh air, consult a doctor in case of symptoms.

Skin contact : Wash contaminated skin with soap and water.

Ingestion : Do not induce vomiting. Get medical attention immediately.

Protection of first-aiders : If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus.

Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact : Irritating to eyes.

Inhalation : Harmful by inhalation.

Skin contact : Non-irritant to skin. May cause skin sensitisation.

Ingestion : Harmful if swallowed.

Indication of any immediate medical attention and special treatment needed

Notes to physician : No specific treatment.

Specific treatments : Not available.

SECTION 5: Firefighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : In a fire, decomposition may produce toxic gases/fumes.
- Hazardous thermal decomposition products** : In a fire, decomposition may produce toxic gases/fumes.

Advice for firefighters

- Special protective actions for fire-fighters** : Avoid breathing dusts, vapours or fumes from burning materials.
- Special protective equipment for fire-fighters** : No special measures required.
- Additional information** : No additional remark.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : Avoid breathing vapour or mist.
- For emergency responders** : Avoid breathing vapour or mist.
- Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Absorb with liquid-binding material (sand, diatomite, universal binders etc.) or use a spill kit.

Methods and materials for containment and cleaning up

- Small spill** : Absorb with an inert material and place in an appropriate waste disposal container.
- Large spill** : Absorb with an inert material and place in an appropriate waste disposal container.

Reference to other sections

- : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

Precautions for safe handling

- Protective measures** : Store in a dry place.
- Advice on general occupational hygiene** : Store in a dry place.
- Conditions for safe storage, including any incompatibilities** : Keep in a cool place.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
Europe 2-Hydroxyethyl Methacrylate stabelized	EU OEL (Europe, 2002). Skin sensitizer TWA: 0.24 mg/m ³ 8 hour(s). Form: Vapour

- Recommended monitoring procedures** : Ethanol TWA (8 hours): 260 mg/m³
HEMA: TWA (8 hours): 0.24 mg/m³

- DNELs/DMELs** : No DNELs/DMELs available.

- PNECs** : No PNECs available

Exposure controls

- Appropriate engineering controls** : Provide adequate ventilation.

Individual protection measures

- Hygiene measures** : Wash thoroughly after handling.
- Eye/face protection** : Safety glasses.

SECTION 8: Exposure controls/personal protection

Skin protection

Hand protection : Gloves.

Body protection : Lab coat.

Other skin protection : Wash with soap and water.

Respiratory protection : A respirator is not needed under normal and intended conditions of product use.

Environmental exposure controls : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state : Liquid.

Colour : Yellowish.

Odour : Characteristic.

pH : No results available.

Melting point/freezing point : No results available.

Initial boiling point and boiling range : 78°C (172 °F)

Flash point : 23°C (73 °F)

Relative density : 1.00 g/cm³

Solubility in water : Non water-soluble liquid

Auto-ignition temperature : No results available.

Decomposition temperature : No results available.

Viscosity : No results available.

Oxidising properties : No results available.

Other information : No additional information.

SECTION 10: Stability and reactivity

Reactivity : No additional information.

Chemical stability : Stable under recommended storage and handling conditions (see Section 7).

Possibility of hazardous reactions : No known significant effects or critical hazards.

Conditions to avoid : No specific data.

Incompatible materials : No specific data.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

Information on toxicological effects

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

Irritation/Corrosion : Based on available data, the classification criteria are not met.

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

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

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

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

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

Potential acute health effects

Eye contact : Irritating to eyes.

Inhalation : Harmful by inhalation.

Skin contact : Non-irritant to skin. May cause skin sensitisation.

Ingestion : Harmful if swallowed.

Potential chronic health effects : No known significant effects or critical hazards.

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SECTION 11: Toxicological information

Other information : No additional information.

SECTION 12: Ecological information

Toxicity : No results available.

Persistence and degradability : No results available.

Bioaccumulative potential : No results available.

Mobility in soil : Not available.

Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

Waste treatment methods

Product

Methods of disposal : Absorb with an inert material and place in an appropriate waste disposal container.





Hazardous waste : Do not allow to enter surface water or drains undiluted or in large quantities.

Packaging

Methods of disposal : Absorb with an inert material and place in an appropriate waste disposal container.

Special precautions : None.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
UN number	1170	1170	1170	1170
UN proper shipping name	Ethanol solution	Ethanol solution	Ethanol solution	Ethanol solution
Transport hazard class (es)				
Packing group	III	III	III	III
Environmental hazards	-	-	-	-
Additional information	Flash point 23 °Celsius	Flash point 23 °Celsius	Flash point 23 °Celsius	Flash point 23 °Celsius

Special precautions for user : No special measures are required.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Substances of very high concern

None of the components are listed.

National regulations

Quadrant Uni-1-Bond

SECTION 15: Regulatory information

Chemical Safety Assessment : No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms :

- ATE = Acute Toxicity Estimate
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EUH statement = CLP-specific Hazard statement
- PBT = Persistent, Bioaccumulative and Toxic
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number
- vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
H225 - FLAMMABLE LIQUIDS Category 2. H317 - Sensitisation Category 1. H319 - Eye irritation Category 2A.	

Europe

Full text of abbreviated H statements :

- H225 - Highly flammable liquid and vapour.
- H315 - Causes skin irritation.
- H317 - May cause an allergic skin reaction.
- H319 - Causes serious eye irritation.

Full text of classifications [CLP/GHS] :

- H225 - FLAMMABLE LIQUIDS Category 2.
- H315 - SKIN CORROSION/IRRITATION Category 2.
- H317 - Sensitisation Category 1.
- H319 - Eye irritation Category 2A.

Full text of abbreviated R phrases :

- R10- Flammable.
- R11- Highly flammable.
- R36- Irritating to eyes.
- R36/38- Irritating to eyes and skin.
- R43- May cause sensitisation by skin contact.

Full text of classifications [DSD/DPD] :

- F - Highly flammable
- Xi - Irritant

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Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.