



SAFETY DATA SHEET

Quadrant Uni-1-Bond

1. Identification of the substance/preparation and company/undertaking

Identification of the substance or preparation

Product name : **Quadrant Uni-1-Bond**
Use of the substance/preparation : Filling material for dental use.

Company/undertaking identification

Manufacturer : Cavex Holland
 Harmenjansweg 19
 PO Box 852
 2003 RW Haarlem
 The Netherlands

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

Emergency telephone number : Call local Poison Control Center for assistance.

2. Composition/information on ingredients

Substance/preparation : Preparation

Ingredient name	CAS number	%	EC number	Classification
Ethanol	64-17-5	56	200-578-6	F; R11
2-Hydroxyethyl methacrylate stabelized	86877-9	10-25	212-782-2	Xi; R36/38 R43
Poly(methacrylic-oligo-acrylic acid)		5-10		Xi; R36
4-methacryloxyethyl trimellitic anhydride		0-5		F; R11 Xi; R36/38
See section 16 for the full text of the R-phrases declared above				

Occupational exposure limits, if available, are listed in section 8.

3. Hazards identification

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

Classification : R10- Flammable.
Physical/chemical hazards : Flammable.
Human health hazards : R36- Irritating to eyes.
 R43- May cause sensitisation by skin contact.

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

4. First-aid measures

First-aid measures

Inhalation : Supply fresh air, consult a doctor in case of symptoms.
Ingestion : Do not induce vomiting. Get medical attention immediately.
Skin contact : Wash contaminated skin with soap and water.
Eye contact : Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.

Notes to physician : No additional remark.

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

5. Fire-fighting measures

Extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Special exposure hazards : In a fire, decomposition may produce toxic gases/fumes.

Hazardous thermal decomposition products : None.

Special protective equipment for fire-fighters : No special measures required.

6. Accidental release measures

- Personal precautions** : Safety glasses. Gloves. Lab coat. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate.
- Environmental precautions and clean-up methods** : 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.

Note: see section 8 for personal protective equipment and section 13 for waste disposal.

7. Handling and storage

- Handling** : Keep away from sources of ignition.
- Storage** : Keep in a cool place.
- Packaging materials**
- Suitable** : Use original container.

8. Exposure controls/personal protection

Ingredient name

Ethanol

Occupational exposure limits

Nationale MAC-lijst (Netherlands, 2002).

TGG: 1000 mg/m³ 8 hour/hours. Form: Vapour

2-Hydroxyethyl methacrylate stabelized

Nationale MAC-lijst (Netherlands, 2002). Skin sensitiser

TGG: 0,24 mg/m³ 8 hour/hours. Form: Vapour

Exposure controls

- Occupational exposure controls** : Provide adequate ventilation.
- Respiratory protection** : A respirator is not needed under normal and intended conditions of product use.
- Hand protection** : Gloves.
- Eye protection** : Safety glasses.
- Skin protection** : Lab coat.

9. Physical and chemical properties

General information

Appearance

- Physical state** : Liquid.
- Colour** : Yellowish.
- Odour** : Characteristic.

Important health, safety and environmental information

- pH** : Not available.
- Boiling point** : 78°C (172.4°F)
- Flash point** : Closed cup: 23°C
Explosion limits: 3.5 - 15.0 Vol %
- Flammability (solid, gas)** : Auto-ignition temperature: 425°C.
- Vapour pressure** : 57 hPa (43 mm Hg)
- Relative density** : Weighted average: 0.87 g/cm³
- Solubility** : Easily soluble in methanol, acetone.
Partially soluble in cold water.
- Octanol/water partition coefficient** : Not established
- Viscosity** : Not established
- Vapour density** : Not established
- Evaporation rate (butyl acetate = 1)** : Not available.

Other information

10. Stability and reactivity

- Stability** : The product is stable.
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame).
- Materials to avoid** : Slightly reactive to reactive with oxidising agents
- Hazardous decomposition products** : None.

11. Toxicological information

Potential acute health effects

Acute toxicity :

<u>Ingredient name</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
2-Hydroxyethyl methacrylate stabelized	LD50	5050 mg/kg	Oral	Rat

12. Ecological information

Ecotoxicity data

<u>Ingredient name</u>	<u>Species</u>	<u>Period</u>	<u>Result</u>
2-Hydroxyethyl methacrylate stabelized	Fish (LC50)	96 hour/hours	227 mg/l

Other Ecological Information

<u>Ingredient name</u>	<u>Persistence/degradability</u>						<u>Bioaccumulative potential</u>		
	<u>BOD₅</u>	<u>COD</u>	<u>ThOD</u>	<u>Aquatic half-life</u>	<u>Photolysis</u>	<u>Biodegradability</u>	<u>LogP_{ow}</u>	<u>BCF</u>	<u>Potential</u>
2-Hydroxyethyl methacrylate stabelized						Readily			

Other adverse effects :





13. Disposal considerations

Methods of disposal : Dispose of according to all federal, state and local applicable regulations.

Hazardous waste : 18 01 06 Chemicals consisting of, or containing dangerous substances.

14. Transport information

International transport regulations

<u>Regulatory information</u>	<u>UN number</u>	<u>Proper shipping name</u>	<u>Class</u>	<u>Packing group</u>	<u>Label</u>	<u>Additional information</u>
ADR/RID Class	1170	Ethanol solution	3	III		-Flash point 23°C.
ADNR Class	1170	Ethanol solution	3	II		-Flash point 23°C.
IMDG Class	1170	Ethanol solution	3	III		-Flash point 23°C.
IATA-DGR Class	1170	Ethanol solution	3	III		-Flash point 23°C.

15. Regulatory information

EU regulations

Hazard symbol/symbols :



Irritant

Risk phrases :

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

Contains :

2-Hydroxyethyl methacrylate stabelized

212-782-2

Product use :

Dental filling material

National regulations

16. Other information

History

Date of printing : 3-5-2006.
Date of issue : 3-5-2006.
Date of previous issue : No previous validation.
Version : 1.1

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.

Version 1.1

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