

Material Safety Data Sheet

Heliobond



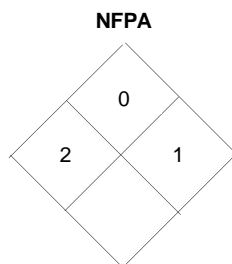
Date of issue / Reference 27.09.2007 lise / Version 4
Replaces version of 01.06.2005 hot
Date of printing 27.09.2007 **Sheet No. 1142**

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Company Ivoclar Vivadent AG, Bendererstrasse 2, FL - 9494 Schaan
Principality of Liechtenstein

1 Commercial product name and supplier

1.1 Commercial product name / Designation **Heliobond**



HMIS	
H	2
F	0
R	1
C	

1.2 Application / Use Light curing bonding agent

1.3 Producer Ivoclar Vivadent AG, Bendererstrasse 2, 9494 Schaan
Principality of Liechtenstein (FL)

1.4 Supplier Ivoclar Vivadent, Inc.
175 Pineview Drive, Amherst NY 14228, USA
2785 Skymark Ave., Unit 1 Mississagua, ON L4W4Y3, Canada
MSDS prepared by Andejeet Gulati. Tel. No. 716 691-0010

1.5 24 Hour Emergency Assistance Emergency-Call USA- Infotrac: 1-800-535-5053
Emergency-Call Canada - Canutec: 1-613-996-6666

General MSDS Assistance US: 1-800-533-6825
Canada: 1-800-263-8182

2 Composition

2.1 Chemical characterization Mixture of Bis-GMA, dimethacrylate, initiators and stabilizers

2.2 Hazardous components

CAS No. 1565-94-2 < 60 % Bis-GMA
Xi: Irritant. R36: Irritating to eyes. R38: Irritating to skin.

CAS No. 109-16-0 < 40 % Triethylene glycoldimethacrylate
Xi: Irritant. R36/37/38: Irritating to eyes, respiratory system and skin.

2.3 Further information None.

3 Hazards identification

Uncured material may cause slight, reversible irritation. Avoid contact with skin, mucous membrane, and eyes. The material is contraindicated if a person is known to be allergic to any of the ingredients of the product.

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4 First aid measures

- | | | |
|-----|---------------------|---|
| 4.1 | Eye contact | Flush with plenty of water. Consult a physician if irritation persists. |
| 4.2 | Skin contact | Wash thoroughly with water. |
| 4.3 | Ingestion | No hazards anticipated from swallowing small amounts incidentally to normal handling. |
| 4.4 | Inhalation | Remove to fresh air. |
| 4.5 | Further information | If you feel unwell, seek medical advice (show this safety data sheet). |

5 Fire-fighting measures

- | | | |
|-----|------------------------------|---|
| 5.1 | Suitable extinguishing media | Water fog, carbon dioxide, foam, dry chemicals. |
| 5.2 | Extinguishing media to avoid | None known |
| 5.3 | Flash point | Test method: |
| 5.4 | Ignition temperature | not determined |
| 5.5 | Explosion limits | Lower:
Upper:
not applicable |
| 5.6 | Further information | None. |

6 Accidental release measures

Clean up mechanically.
Dispose of according to local and national regulations.

7 Handling and storage

- | | | |
|-----|--------------------------------|---|
| 7.1 | Handling | Only adequately trained personnel should handle this product.
Keep out of reach of children. |
| 7.2 | Industrial hygiene | Usual hygienic measures for dental practice.
When using, do not eat, drink or smoke. |
| 7.3 | Storage | Store at 2-28 °C / 36-82 °F |
| 7.4 | Place of storage | Avoid exposure to light. |
| 7.5 | Fire- and explosion-protection | Not required. |

8 Exposure controls / Personal protection

- | | | |
|-----|-----------------------------|--|
| 8.1 | Technical measures | Good general ventilation should be sufficient. |
| 8.2 | Control of threshold limits | None established. |

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8.3 Personal protective equipment

- 8.3.1 Respiratory protection Respiratory Protection.
- 8.3.2 Hand protection Gloves.
Commercial medical gloves do not provide protection against the sensitizing effect of methacrylates.
- 8.3.3 Eye protection Safety goggles.
- 8.3.4 Other None.

9 Physical and chemical properties

- 9.1 Appearance clear liquid
- 9.2 Colour yellowish
- 9.3 Odour practically odourless
- 9.4 Change of physical state Test method:
- 9.5 Density 1.14 g/cm³ (20°C)
- 9.6 Vapour pressure
not applicable
- 9.7 Viscosity
not determined
- 9.8 Solubility
Solubility in water < 0.1 %
- 9.9 pH
not determined
- 9.10 Further information None.

10 Stability and reactivity

- 10.1 Thermal decomposition None, if used in accordance to instructions.
- 10.2 Hazardous decomposition products None under normal conditions of storage and use.

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10.3 Hazardous reactions None.
10.4 Further information Avoid exposure of product to light.

11 Toxicological information

11.1 Acute toxicity The oral LD-50 for rats is > 5000 mg/kg.
11.2 Subacute / Chronic toxicity Uncured material: prolonged or frequently repeated skin contact may cause allergic skin reactions.
11.3 Further information No hazards anticipated from swallowing small amounts incidentally to normal handling.

12 Ecological information No ecological problems to be anticipated if properly handled and used.
nearly insoluble

13 Disposal considerations Take to a waste incineration plant, under conditions approved by the local authority.

14 Transport information

14.1 Transport at land

ADR	---	RID	---
UN Number	---	Kemler Number	---
Packing Group	---		
Proper shipping name	---		

14.2 Transport at sea

ADNR	---	IMDG	---
UN Number	---		
EMS	---	MFAG	---
Packing Group	---		
Proper shipping name	---		

14.3 Air transport

ICAO / IATA-DGR	---
UN Number	---
Proper shipping name	---
Subsidiary Risk	---
Labels	---
Packing Group	---
Passenger airplane	Packing Instructions ---
	max. ---
Cargo Airplane	Packing Instructions ---
	max. ---

14.4 Further information Product is not classified as a dangerous good for transport.

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15 Regulatory information

The product is a medical device according to the EC-directive 93/42/EEC.
This product is classified as a medical device under US and Canadian regulations and has been reviewed by the US Food and Drug Administration and Health Canada.
This product does not require classification as Dangerous Goods.

15.1 National regulations

15.2 NFPA Storage

15.3 Further information None.

16 Other information

Version: 4
Changes: 1.5

The above mentioned data correspond to our present state of knowledge and experience. The safety data sheet serves as description of the products in regard to necessary safety measures. The indications do not have the meaning of guarantees on properties.