Reviewed on 09/04/2012

1 Identification of the substance/mixture and of the company/undertaking · Product identifier · Trade name: VITA A.R.T. BOND Bond · Article number: FCABB · Relevant identified uses of the substance or mixture and uses advised against · Application of the substance / the preparation Auxiliary for manufacture of dental prothesis · Details of the supplier of the safety data sheet · Manufacturer/Supplier: VITA Zahnfabrik H. Rauter GmbH & Co. KG Postfach 1338 Tel.: 07761/562-0 D 79704 Bad Säckingen Fax: 07761/562299 e-mail: info@vita-zahnfabrik.com • Emergency telephone number: Tel.: ++49-(0)761-19240 2 Hazards identification · Classification of the substance or mixture GHS07 Skin Irrit. 2 H315 Causes skin irritation. Skin Sens. 1 H317 May cause an allergic skin reaction. STOT SE 3 H335 May cause respiratory irritation. H320 Causes eye irritation. · Classification according to Directive 67/548/EEC or Directive 1999/45/EC Irritant Irritating to eyes, respiratory system and skin. May cause sensitization by skin contact. · Information concerning particular hazards for human and environment: The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version. · Classification system: The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data. · Label elements · Labelling according to EU guidelines: The product has been classified and marked in accordance with directives on hazardous materials. · Code letter and hazard designation of product: Xi Irritant · Hazard-determining components of labelling: 2-hydroxyethyl methacrylate · Risk phrases: Irritating to eyes, respiratory system and skin. May cause sensitization by skin contact. (Contd. on page 2) USA

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· Safety phrases:	
Do not breathe gas/fumes/vapour/spray.	
Avoid contact with skin.	
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.	
After contact with skin, wash immediately with plenty of water	
Wear suitable gloves.	
This material and its container must be disposed of as hazardous waste.	
· Classification system · NFPA ratings (scale 0-4)	
· NFFA raings (scale 0-4)	
Health = 1	
Fire = 1	
\mathbf{U} Reactivity = 0	
Other hazanda	
• Other hazards • Results of PBT and vPvB assessment	
• <i>Results of PB1 and VPVB assessment</i> • <i>PBT:</i> Not applicable.	
• vPvB: Not applicable.	
3 Composition/information on ingredients • Chemical characterization: Substances	
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3 Composition/information on ingredients Chemical characterization: Substances 	
3 Composition/information on ingredients • Chemical characterization: Substances • CAS No. Description:	
3 Composition/information on ingredients • Chemical characterization: Substances • CAS No. Description: methacrylate with the exception of thosespecified elsewhere in this Annex • Identification number(s):	
3 Composition/information on ingredients • Chemical characterization: Substances • CAS No. Description: methacrylate with the exception of thosespecified elsewhere in this Annex • Identification number(s): • Index number: 607-134-00-4	
3 Composition/information on ingredients • Chemical characterization: Substances • CAS No. Description: methacrylate with the exception of thosespecified elsewhere in this Annex • Identification number(s): • Index number: 607-134-00-4 • Chemical characterization: Mixtures	
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3 Composition/information on ingredients • Chemical characterization: Substances • CAS No. Description: methacrylate with the exception of thosespecified elsewhere in this Annex • Identification number(s): • Index number: 607-134-00-4 • Chemical characterization: Mixtures • Description: Mixture of the substances listed below with nonhazardous additions. • Dangerous components: methacrylate with the exception of thosespecified elsewhere in this Annex Xi R36/37/38	50-1009
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3 Composition/information on ingredients • Chemical characterization: Substances • CAS No. Description: methacrylate with the exception of thosespecified elsewhere in this Annex • Identification number(s): • Index number: 607-134-00-4 • Chemical characterization: Mixtures • Description: Mixture of the substances listed below with nonhazardous additions. • Dangerous components: methacrylate with the exception of thosespecified elsewhere in this Annex Xi R36/37/38	50-1009
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· Description of first aid measures

• After inhalation

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Supply fresh air; consult doctor in case of complaints.

In case of unconsciousness place patient stably in side position for transportation.

• After skin contact Immediately wash with water and soap and rinse thoroughly.

· After eye contact

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing

Rinse out mouth and then drink plenty of water.

If symptoms persist consult doctor.

· Information for doctor

• Most important symptoms and effects, both acute and delayed No further relevant information available.

- · Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

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5 Firefighting measures

- · Extinguishing media
- Suitable extinguishing agents Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.
- · Additional information None

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions: Do not allow product to reach sewage system or any water course.
- · Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.

· Reference to other sections

- See Section 7 for information on safe handling
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.

7 Handling and storage

· Handling

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- · Precautions for safe handling
- Ensure good ventilation/exhaustion at the workplace.
- Prevent formation of aerosols.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities

· Storage

- Requirements to be met by storerooms and receptacles: Store in cool, dry place in tightly closed receptacles.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- Storage class 10
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- Components with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be
- monitored at the workplace.
- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment
- General protective and hygienic measures Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

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• Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

• Protection of hands:



Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

• *Material of gloves* Nitrile rubber, NBR

e.g. Dermatril P, KCL Nr. 743

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

• Penetration time of glove material

e.g. KCL Dermatril P 30 min

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection:



Tightly sealed goggles.

9 Physical and chemical properties

· Information on basic physical and chemical properties				
· General Information				
· Appearance: Form:				
Form: Color:	Fluid Colorless			
· Odor:	Characteristic			
· Odour: · Odour threshold:	Not determined.			
· Oubur intesnola.				
· pH-value:	Not determined.			
· Change in condition				
Melting point/Melting range:	undetermined			
Boiling point/Boiling range:	undetermined			
· Flash point:	$> 150^{\circ}C (> 302^{\circ}F)$			
· Flammability (solid, gaseous)	Not applicable.			
· Ignition temperature:				
Decomposition temperature:	Not determined.			
· Auto igniting:	Product is not selfigniting.			
· Danger of explosion:	Product does not present an explosion hazard.			
· Explosion limits:				
Lower:	Not determined.			
Upper:	Not determined.			
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· Oxidizing properties	None		
· Vapor pressure:	Not determined.		
• Density at 20°C (68 °F):	1.1 g/cm ³ (9.18 lbs/gal)		
· Relative density	Not determined.		
· Vapour density	Not determined.		
· Evaporation rate	Not determined.		
· Solubility in / Miscibility with			
Water:	Not miscible or difficult to mix		
· Segregation coefficient (n-octonol/	water): Not determined.		
· Viscosity:			
dynamic:	Not determined.		
kinematic:	Not determined.		
· Solvent content:			
Organic solvents:	0.0~%		
• Other information	No further relevant information available.		

10 Stability and reactivity

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• *Reactivity* No decomposition if used and stored according to specifications.

· *Chemical stability No decomposition if used and stored according to specifications.*

• *Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.*

• **Possibility of hazardous reactions** No dangerous reactions known

• **Conditions to avoid** No further relevant information available.

• *Incompatible materials:* No further relevant information available.

· Hazardous decomposition products: No dangerous decomposition products known

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

• Primary irritant effect:

• on the skin: Irritant to skin and mucous membranes.

• on the eye: Irritating effect.

• Sensitization: Sensitization possible through skin contact.

· Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

12 Ecological information

· Toxicity

· Aquatic toxicity: No further relevant information available.

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Trade name: VITA A.R.T. BOND Bond

- Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- $\cdot \textit{Bioaccumulative potential No further relevant information available}.$
- \cdot **Mobility in soil** No further relevant information available.
- \cdot Additional ecological information:

· General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · **vPvB:** Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

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- · Waste treatment methods
- Recommendation Disposal must be made according to official regulations.
- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information

14 Transport injormation		
· UN-Number · DOT, ADR, ADN, IMDG, IATA	Void	
· UN proper shipping name · DOT, ADR, ADN, IMDG, IATA	Void	
· Transport hazard class(es)		
· DOT, ADR, ADN, IMDG, IATA · Class	Void	
· Packing group · DOT, ADR, IMDG, IATA	Void	
· Environmental hazards: · Marine pollutant:	No	
· Special precautions for user	Not applicable.	
• Transport in bulk according to Annex I MARPOL73/78 and the IBC Code	II of Not applicable.	
· Transport/Additional information:	Not dangerous according to the above specifications.	
· UN ''Model Regulation'':	-	

15 Regulatory information

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

· SARA Section 355 (extremely hazardous substances)

None of the ingredients is listed.

· SARA Section 313 (specific toxic chemical listings)

None of the ingredients is listed.

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Trade name: VITA A.R.T. BOND Bond

· TSCA (Toxic	Substances	Control Act)
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All ingredients are listed.

· Prop 65 - Chemicals known to cause cancer

None of the ingredients is listed.

· Cancerogenity categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

· National regulations

• Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Abbreviations and acronyms:
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 ACGIH: American Conference of Governmental Industrial Hygienists
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 NFPA: National Fire Protection Association (USA)

 \cdot * Data compared to the previous version altered.

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