

# Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 28.02.2011

Revision: 28.02.2011

Hazardous according to criteria of Australian Safety and Compensation Council

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

- **Product details**
- **Trade name:** Futurabond NR Liquid A
- **Application of the substance / the preparation** Bonding
- **Manufacturer/Supplier:**  
 Australien contact and address:  
 VOCO Australia Pty Ltd.  
 Suite 406-408, 251 Oxford Street,  
 Bondi Junction, NSW 2022
- **Further information obtainable from:** Australia 0449 760 194
- **Information in case of emergency:** Australia: 131126

## 2 Hazards identification

- **Hazard description:**  
 C Corrosive
- **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.  
 R 34 Causes burns.  
 R 43 May cause sensitisation by skin contact.
- **Safety phrases:**  
 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
 28 After contact with skin, wash immediately with plenty of water.  
 37/39 Wear suitable gloves and eye/face protection.
- **Classification system:**  
 The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

## 3 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

	Acidic adhesive monomer	Xi; R 36/38	50-100%
1565-94-2	BIS-GMA	Xi; R 36/38	5-10%
868-77-9	2-hydroxyethyl methacrylate	Xi; R 36/38	5-10%

## 4 First aid measures

- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **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:** If symptoms persist consult doctor.

## 5 Fire-fighting measures

- **Suitable extinguishing agents:**  
 CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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- **Protective equipment:** No special measures required.

## 6 Accidental release measures

- **Person-related safety precautions:** Ensure adequate ventilation
- **Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralizing agent.  
Ensure adequate ventilation.

## 7 Handling and storage

- **Handling:**
- **Information for safe handling:** For dental use only.
- **Information about fire - and explosion protection:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Keep container tightly sealed.  
See storage instructions on package

## 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Ingredients 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 valid during the making were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.
- **Respiratory protection:** Not required.
- **Protection of hands:**



Protective gloves

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

- **Material of gloves**  
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**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· **Eye protection:** Safety glasses

## 9 Physical and chemical properties

### · General Information

<b>Form:</b>	Fluid
<b>Colour:</b>	Yellow
<b>Odour:</b>	Characteristic

### · Change in condition

**Melting point/Melting range:** Undetermined.  
**Boiling point/Boiling range:** Undetermined.

· **Flash point:** Not applicable.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Density at 20°C:** 1.2 g/cm<sup>3</sup>

· **Solubility in / Miscibility with water:** Partly miscible.

· **pH-value at 20°C:** 1.5

## 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

### · Acute toxicity:

#### · LD/LC50 values relevant for classification:

**Acidic adhesive monomer**

Oral LD50 > 2000 mg/kg (rat)

### · Primary irritant effect:

- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.

### · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
 Corrosive

- **Sensitisation** May cause sensitisation by skin contact.

## 12 Ecological information

### · Additional ecological information:

#### · General notes:

Water hazard class 1 (German Regulation) (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.

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## 13 Disposal considerations

- **Product:**
- **Recommendation**  
*Must not be disposed together with household garbage. Do not allow product to reach sewage system.*
- **Uncleaned packaging:**
- **Recommendation:** *Disposal must be made according to official regulations.*

## 14 Transport information

- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

## 15 Regulatory information

- **Australian Inventory of Chemical Substances**

*All ingredients are listed.*

- **Labelling according to EU guidelines:**  
*The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.*
- **Code letter and hazard designation of product:**



C Corrosive

- **Hazard-determining components of labelling:**  
*2-hydroxyethyl methacrylate  
Acidic adhesive monomer*
- **Risk phrases:**  
*34 Causes burns.  
43 May cause sensitisation by skin contact.*
- **Safety phrases:**  
*26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
28 After contact with skin, wash immediately with plenty of water.  
37/39 Wear suitable gloves and eye/face protection.*
- **Special labelling of certain preparations:**  
*Contains 2-hydroxyethyl methacrylate. May produce an allergic reaction.*

## 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.*

- **Department issuing MSDS:** *Scientific departement*
- **Contact:** *Tel.: +49 (0)4721-719-0*

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Hazardous according to criteria of Australian Safety and Compensation Council

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

- **Product details**
- **Trade name: Futurabond NR Liquid B**
- **Application of the substance / the preparation** Bonding
- **Manufacturer/Supplier:**  
 Australien contact and address:  
 VOCO Australia Pty Ltd.  
 Suite 406-408, 251 Oxford Street,  
 Bondi Junction, NSW 2022
- **Further information obtainable from:** Australia 0449 760 194
- **Information in case of emergency:** Australia: 131126

## 2 Hazards identification

- **Hazard description:** Not applicable.
- **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.  
 R 10 Flammable.
- **Safety phrases:**  
 7 Keep container tightly closed.  
 16 Keep away from sources of ignition - No smoking.  
 43 In case of fire, use sand, carbon dioxide or powdered extinguishing agent. Never use water.
- **Classification system:**  
 The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

## 3 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

64-17-5	ethanol	F; R 11	50-100%
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## 4 First aid measures

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.

## 5 Fire-fighting measures

- **Suitable extinguishing agents:** CO<sub>2</sub>, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Protective equipment:** No special measures required.

## 6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.

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- **Measures for environmental protection:**  
Do not allow to enter sewers/ surface or ground water.  
Dilute with plenty of water.
- **Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

## 7 Handling and storage

- **Handling:**
- **Information for safe handling:**  
For dental use only.  
No special measures required.
- **Information about fire - and explosion protection:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
See storage instructions on package  
Keep container tightly sealed.

## 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

- **Ingredients with limit values that require monitoring at the workplace:**

64-17-5 ethanol

NES (Australia) 1880 mg/m<sup>3</sup>, 1000 ppm

- **Additional information:** The lists valid during the making were used as basis.

- **Personal protective equipment:**
- **Respiratory protection:** Not required.
- **Protection of hands:**



Protective gloves

- **Material of gloves**  
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**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses

## 9 Physical and chemical properties

- **General Information**

<b>Form:</b>	Fluid
<b>Colour:</b>	Colourless
<b>Odour:</b>	Characteristic

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- |  |   |
|--|---|
| · <b>Change in condition</b><br>Melting point/Melting range: Undetermined.<br>Boiling point/Boiling range: Undetermined. |   |
| · <b>Flash point:</b>  | 24°C  |
| · <b>Self-igniting:</b>  | Product is not selfigniting.  |
| · <b>Danger of explosion:</b>  | Product is not explosive. However, formation of explosive air/vapour mixtures are possible. |
| · <b>Density at 20°C:</b>  | 0.9 g/cm <sup>3</sup>   |
| · <b>Solubility in / Miscibility with water:</b>   | Fully miscible.   |

## 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

## 12 Ecological information

- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (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.

## 13 Disposal considerations

- **Product:**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 3 Flammable liquids.

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Trade name: **Futurabond NR Liquid B**

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- **Danger code (Kemler):** 30
- **UN-Number:** 1170
- **Packaging group:** II
- **Hazard label:** 3
- **Description of goods:** 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
- **Limited quantities (LQ) LQ4**
- **Transport category** 2
- **Tunnel restriction code** D/E

· **Maritime transport IMDG:**



- **IMDG Class:** 3
- **UN Number:** 1170
- **Label** 3
- **Packaging group:** II
- **EMS Number:** F-E,S-D
- **Marine pollutant:** No
- **Proper shipping name:** ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

· **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1170
- **Label** 3
- **Packaging group:** II
- **Proper shipping name:** ETHANOL SOLUTION

## 15 Regulatory information

· **Australian Inventory of Chemical Substances**

All ingredients are listed.

· **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· **Risk phrases:**

10 Flammable.

· **Safety phrases:**

7 Keep container tightly closed.

16 Keep away from sources of ignition - No smoking.

43 In case of fire, use sand, carbon dioxide or powdered extinguishing agent. Never use water.

## 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.

· **Department issuing MSDS:** Scientific departement

· **Contact:** Tel.: +49 (0)4721-719-0