

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

· **Trade name:** CLEARFIL SE BOND ; BOND

· **Article number:** 064-B

· **Registration number** Not applicable

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

No further relevant information available.

· **Application of the substance / the mixture** Dental materials

**1.3 Details of the supplier of the safety data sheet****Supplier :**

Kuraray Europe GmbH  
Philipp-Reis-Str. 4,  
65795 Hattersheim am Main  
Germany

Phone: +49 (0)69 305 35 835

E-mail: dental.eu@kuraray.com

· **Further information obtainable from:** Supplier

**1.4 Emergency telephone number:**

[Malta] National poisons helpline; 1774 to the public from Monday to Sunday between 8:00 and 20:00

[3E Company] (Great Britain (London))+44 20 351 47487, (United Kingdom - Domestic)+44 800 680 0425,

(United Kingdom - International)+44 808 189 0979 (Europe Non-Specific)+1 760 476 3962 \*Kuraray

Access Code: 334674

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

**2.2 Label elements****Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

**Hazard pictograms**

GHS07

· **Signal word** Warning

**Hazard-determining components of labelling:**

2-hydroxyethyl methacrylate

**Hazard statements**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

**Precautionary statements**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection / face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P362+P364 Take off contaminated clothing and wash it before reuse.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

(Contd. on page 2)

MT

**Trade name: CLEARFIL SE BOND ; BOND**

(Contd. of page 1)

- P321 Specific treatment (see on this label).  
 P337+P313 If eye irritation persists: Get medical advice/attention.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable
- **vPvB:** Not applicable

### SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 868-77-9	2-hydroxyethyl methacrylate	15 - 40%
EINECS: 212-782-2	⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	

- **Additional information:** Silicon oxide; Nanoform, Amorphous silica

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:**  
Supply fresh air and to be sure call for a doctor.  
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:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.  
Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** See Section 8.
- **6.2 Environmental precautions:**  
Before cleaning, pre-clean the equipment under running water with a damp cloth.  
Avoid disposing of uncured product residues into the sewage system.
- **6.3 Methods and material for containment and cleaning up:**  
Dispose contaminated material as waste according to section 13.  
Ensure adequate ventilation.

(Contd. on page 3)

**Trade name: CLEARFIL SE BOND ; BOND**

(Contd. of page 2)

- Absorb liquid components with liquid-binding material.
- Vacuum or sweep material and place in a disposal container. Provide ventilation.
- Use appropriate Personal Protective Equipment (PPE).
- **6.4 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.

## SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
- Ensure good ventilation/exhaustion at the workplace.
- Prevent formation of aerosols.
- Avoid contact with skin and eyes. Do not swallow. Avoid generating dust. Do not breathe dust/fume/gas/mist/vapors/spray.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a refrigerator (2-8°C).
- **Information about storage in one common storage facility:** Not required
- **Further information about storage conditions:**
- Keep container tightly sealed.
- Store in cool, dry conditions in well sealed receptacles.
- Protect from heat and direct sunlight.
- **7.3 Specific end use(s)** No further relevant information available.

## SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **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.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see section 7.
- **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.
- **Respiratory protection:**
- In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- Suitable respiratory protective device recommended.
- **Hand protection**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

(Contd. on page 4)

-MT-

**Trade name: CLEARFIL SE BOND ; BOND**

(Contd. of page 3)

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **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/face protection**



Tightly sealed goggles

## SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

· <b>Physical state</b>	Liquid
· <b>Colour:</b>	Yellow
· <b>Odour:</b>	Odourless
· <b>Melting point/freezing point:</b>	Not determined.
· <b>Boiling point or initial boiling point and boiling range</b>	213 °C (868-77-9 2-hydroxyethyl methacrylate)
· <b>Flammability</b>	Not determined
· <b>Lower and upper explosion limit</b>	
· <b>Lower:</b>	Not determined
· <b>Upper:</b>	Not determined
· <b>Flash point:</b>	106 °C (868-77-9 2-hydroxyethyl methacrylate)
· <b>Auto-ignition temperature:</b>	375 °C (868-77-9 2-hydroxyethyl methacrylate)
· <b>Decomposition temperature:</b>	Not applicable.
· <b>pH</b>	Not determined
· <b>Kinematic viscosity</b>	Not determined
· <b>Solubility</b>	
· <b>water:</b>	Not miscible or difficult to mix.
· <b>Partition coefficient n-octanol/water (log value)</b>	Not applicable.
· <b>Vapour pressure at 68 °C:</b>	1.3 hPa (868-77-9 2-hydroxyethyl methacrylate)
· <b>Density at 20 °C:</b>	1.1 g/cm <sup>3</sup>
· <b>Relative vapour density</b>	Not determined
· <b>Particle characteristics</b>	Not applicable.

- **9.2 Other information**

- **Information with regard to physical hazard classes**

· <b>Explosives</b>	Product does not present an explosion hazard.
· <b>Flammable gases</b>	Void
· <b>Aerosols</b>	Void
· <b>Oxidising gases</b>	Void
· <b>Gases under pressure</b>	Void
· <b>Flammable liquids</b>	Void
· <b>Flammable solids</b>	Void
· <b>Self-reactive substances and mixtures</b>	Void
· <b>Pyrophoric liquids</b>	Void
· <b>Pyrophoric solids</b>	Void

(Contd. on page 5)

**Trade name: CLEARFIL SE BOND ; BOND**

(Contd. of page 4)

· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability** No hazardous reaction when handled and stored according to provisions.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** Carbon monoxide and carbon dioxide

### SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

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

##### 868-77-9 2-hydroxyethyl methacrylate

Oral	LD50	4,680 mg/kg (guinea pig)
		3,275 mg/kg (mouse)
		5,050 mg/kg (rat)
Dermal	LD50	5,000 mg/kg (rabbit)

- **Skin corrosion/irritation** Causes skin irritation.
- **Serious eye damage/irritation** Causes serious eye irritation.
- **Respiratory or skin sensitisation** May cause an allergic skin reaction.
- **Germ cell 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.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

#### · 11.2 Information on other hazards

##### · Endocrine disrupting properties

None of the ingredients is listed.

### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable
- **vPvB:** Not applicable

(Contd. on page 6)

**Trade name: CLEARFIL SE BOND ; BOND**

(Contd. of page 5)

- **12.6 Endocrine disrupting properties** For information on endocrine disrupting properties see section 11.
- **12.7 Other adverse effects**
- **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.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
 Dispose of this product as medical waste.  
 Mix residues on disposable materials (e.g. paper, tray) and dispose of them as solid waste.  
 Uncured product residues should be cured before disposal if possible.
- **Uncleaned packaging:**
- **Recommendation:**  
 Dispose of packaging according to regulations on the disposal of packagings.  
 Non contaminated packagings may be recycled.  
 Do not rinse product containers before disposal.  
 Waste Framework Directive (Directive 2008/98/EC on waste)  
 [No. 064-B] Packing inside the bottle cap contains 0.1% or more each of SVHC.  
 1. Octamethylcyclotetrasiloxane (D4) (CAS 556-67-2)  
 2. Decamethylcyclopentasiloxane (D5) (CAS 541-02-6)  
 SCIP number: 1325379d-44c7-4d00-8a24-b48295dc74c7  
 [No. 064-B, 064-P] Packing inside the cap of the bottle case contains 0.1% or more each of SVHC.  
 1. Octamethylcyclotetrasiloxane (D4) (CAS 556-67-2)  
 2. Decamethylcyclopentasiloxane (D5) (CAS 541-02-6)  
 3. Dodecamethylcyclohexasiloxane (D6) (CAS 540-97-6)  
 SCIP number: 7fe833ae-2c52-4800-b781-d4da494eb60a  
 The SCIP number shall be communicated down to waste operators of the product.  
 For more information about the directive, visit ECHA website: <https://echa.europa.eu/understanding-wfd>

### SECTION 14: Transport information

- |                                                                                             |                |
|---------------------------------------------------------------------------------------------|----------------|
| · <b>14.1 UN number or ID number</b><br>· <b>ADR, ADN, IMDG, IATA</b>                       | Void           |
| · <b>14.2 UN proper shipping name</b><br>· <b>ADR, ADN, IMDG, IATA</b>                      | Void           |
| · <b>14.3 Transport hazard class(es)</b><br>· <b>ADR, ADN, IMDG, IATA</b><br>· <b>Class</b> | Void           |
| · <b>14.4 Packing group</b><br>· <b>ADR, ADN, IMDG, IATA</b>                                | Void           |
| · <b>14.5 Environmental hazards:</b>                                                        | Not applicable |
| · <b>14.6 Special precautions for user</b>                                                  | Not applicable |
| · <b>14.7 Maritime transport in bulk according to IMO instruments</b>                       | Not applicable |
| · <b>UN "Model Regulation":</b>                                                             | Void           |

MT

(Contd. on page 7)

**Trade name: CLEARFIL SE BOND ; BOND**

(Contd. of page 6)

## SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 94/33/EC:** Care should be taken when people under 18 handle this product.
- **Directive 94/85/EEC:** No further relevant information available.
- **Named dangerous substances - ANNEX I** None of the ingredient is listed.

· <b>REGULATION (EU) 2019/1021 on persistent organic pollutants (POP)</b>
---------------------------------------------------------------------------

None of the ingredients is listed.
------------------------------------

- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

· <b>Regulation (EU) No 649/2012</b>
--------------------------------------

None of the ingredients is listed.
------------------------------------

- **REGULATION (EU) 2019/1148**

· <b>Annex II - REPORTABLE EXPLOSIVES PRECURSORS</b>
------------------------------------------------------

None of the ingredients is listed.
------------------------------------

- **Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.
------------------------------------

- **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.
------------------------------------

- **REGULATION (EU) 2024/590 on substances that deplete the ozone layer**

None of the ingredients is listed.
------------------------------------

- **Waste Framework Directive (Directive 2008/98/EC on waste)**

[No. 064-B] Packing inside the bottle cap contains 0.1% or more each of SVHC.

1. Octamethylcyclotetrasiloxane (D4) (CAS 556-67-2)

2. Decamethylcyclopentasiloxane (D5) (CAS 541-02-6)

SCIP number: 1325379d-44c7-4d00-8a24-b48295dc74c7

[No. 064-B, 064-P] Packing inside the cap of the bottle case contains 0.1% or more each of SVHC.

1. Octamethylcyclotetrasiloxane (D4) (CAS 556-67-2)

2. Decamethylcyclopentasiloxane (D5) (CAS 541-02-6)

3. Dodecamethylcyclohexasiloxane (D6) (CAS 540-97-6)

SCIP number: 7fe833ae-2c52-4800-b781-d4da494eb60a

The SCIP number shall be communicated down to waste operators of the product.

For more information about the directive, visit ECHA website: <https://echa.europa.eu/understanding-wfd>

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## SECTION 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.

Medical devices as defined in Regulation (EU) 2017/745 and which are invasive or used in direct physical contact with the human body, are exempted from the provisions of Regulation (EC) No 1272/2008 (CLP/GHS) usually if they are in the finished state and intended for the final user.

This Safety Data Sheets is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

- **Classification according to Regulation (EC) No 1272/2008**

The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

- **Abbreviations and acronyms:**

ELINCS: European List of Notified Chemical Substances

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

(Contd. on page 8)

**Trade name: CLEARFIL SE BOND ; BOND**

(Contd. of page 7)

· **Relevant phrases**

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

· **\* Data compared to the previous version altered.**

MT