


**1 Identification**

- **Product identifier**
- **Trade name:** CLEARFIL LINER BOND 2V ; PRIMER A
- **Article number:** US061-PA
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Dental bonding material
- **Details of the supplier of the safety data sheet**
- **Manufacturer:**  
Kuraray Noritake Dental Inc.  
1621 Sakazu, Kurashiki,  
Okayama 710-0801,  
Japan
- **Contact information :**  
Kuraray America, Inc.  
32 Old Slip, 7th Floor, New York,  
NY 10005 U.S.A.  
Tel: 800-879-1676  
Website: www.kuraraydental.com
- **Emergency telephone number:**  
For chemical emergency spill, leak, fire, exposure or accident  
Call CHEMTREC day and night  
Within USA and Canada: 1-800-424-9300 CCN706984 or +1 703-527-3887 (collect calls accepted)

**2 Hazard(s) identification**

- **Classification of the substance or mixture**  
Skin Irritation 2      H315 Causes skin irritation.  
Eye Irritation 2A      H319 Causes serious eye irritation.  
Sensitization - Skin 1      H317 May cause an allergic skin reaction.
- **Label elements**
- **GHS label elements**  
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**  
  
GHS07
- **Signal word** Warning
- **Hazard-determining components of labeling:**  
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/vapors/spray  
P264      Wash thoroughly after handling.  
P280      Wear protective gloves / eye protection / face protection.  
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.  
P321      Specific treatment (see on this label).

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- P337+P313 If eye irritation persists: Get medical advice/attention.
- P363 Wash contaminated clothing before reuse.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

**3 Composition/information on ingredients**

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

**Dangerous components:**

868-77-9	2-hydroxyethyl methacrylate	10-25%
	⚠ Skin Irritation 2, H315; Eye Irritation 2A, H319; Sensitization - Skin 1, H317	

- **Other ingredients:**
- Water
- 10-Methacryloyloxydecyl dihydrogen phosphate
- Hydrophilic aliphatic dimethacrylate
- Accelerators
- dl-Camphorquinone
- Dye

**4 First-aid measures**

- **Description of first aid measures**
- **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:**  
Do not induce vomiting; immediately call for medical help.  
If symptoms persist consult 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.

**5 Fire-fighting measures**

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Wear fully protective suit.

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## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** See Section 8.
- **Environmental precautions:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **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

- **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 a refrigerator (2-8°C).
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Keep receptacle tightly sealed.  
Store in cool, dry conditions in well sealed receptacles.  
Protect from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **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**
- **Additional information about design of technical systems:** No further data; see section 7.
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.
- **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.

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

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 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**

· <b>Physical state</b>	Liquid
· <b>Color:</b>	Orange
· <b>Odor:</b>	Odorless
· <b>Odor threshold:</b>	Not determined.
· <b>Melting point/Melting range:</b>	-12 °C (2-hydroxyethyl methacrylate)
· <b>Boiling point/Boiling range:</b>	205 °C (2-hydroxyethyl methacrylate)
· <b>Flammability (solid, gaseous):</b>	Not determined.
· <b>Explosion limits:</b>	
· <b>Lower:</b>	Not determined
· <b>Upper:</b>	Not determined
· <b>Flash point:</b>	97 °C (2-hydroxyethyl methacrylate)
· <b>Auto igniting:</b>	Not determined
· <b>Decomposition temperature:</b>	Not determined
· <b>pH-value at 20 °C:</b>	≤3
· <b>Viscosity:</b>	Not determined
· <b>Solubility in / Miscibility with</b>	
· <b>Water:</b>	Partly miscible.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined
· <b>Vapor pressure:</b>	Not determined
· <b>Relative density</b>	Not determined
· <b>Relative vapor density</b>	Not determined

· **Other information**

· **Important information on protection of health and environment, and on safety.**

· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Change in condition</b>	
· <b>Oxidizing properties</b>	Not determined
· <b>Evaporation rate</b>	Not determined

**10 Stability and reactivity**

· **Reactivity** No further relevant information available.

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- **Chemical stability**
- **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:** Carbon monoxide and carbon dioxide

**11 Toxicological information**

- **Information on toxicological effects**
- **Acute toxicity:** Based on available data, the classification criteria are not met.

**LD/LC50 values that are relevant for classification:**

**868-77-9 2-hydroxyethyl methacrylate**

Oral	LD50	4680 mg/kg (guinea pig)
		3275 mg/kg (mouse)
		5050 mg/kg (rat)

- **on the skin:**  
Causes skin irritation.
- **on the eye:**  
Causes serious eye irritation.
- **Sensitization:**  
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.
- **Specific target organ toxicity - single exposure**  
Based on available data, the classification criteria are not met.
- **Specific target organ toxicity - repeated exposure**  
Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **Subacute to chronic toxicity:**
- **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.
- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects**
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (Self-assessment): slightly hazardous for water

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

**13 Disposal considerations**

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

**14 Transport information**

· UN-Number	
· DOT, IMDG, IATA	Void
· UN proper shipping name	
· DOT, IMDG, IATA	Void
· Transport hazard class(es)	
· DOT, IMDG, IATA	
· Class	Void
· Packing group	
· DOT, IMDG, IATA	Void
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	Void

**15 Regulatory information**

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

· **Section 355 (extremely hazardous substances):**  
None of the ingredient is listed.

· **Section 313 (Specific toxic chemical listings):**  
None of the ingredients is listed.

· **SARA 311/312:** See Section 2 for the information on physical and health hazards.

· **TSCA (Toxic Substances Control Act):**

7732-18-5	water, distilled, conductivity or of similar purity
868-77-9	2-hydroxyethyl methacrylate

· **Proposition 65**

· **Chemicals known to cause cancer:**  
None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**  
None of the ingredients is listed.

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· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenicity categories :**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value)**

None of the ingredients is listed.

**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.

· **Relevant phrases**

- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.

· **NFPA ratings (scale 0 - 4)**



Health = 2  
Fire = 0  
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



HEALTH 2 Health = 2  
FIRE 0 Fire = 0  
REACTIVITY 0 Reactivity = 0

· **Abbreviations and acronyms:**

- DOT: US Department of Transportation
- ELINCS: European List of Notified Chemical Substances
- TLV: Threshold Limit Value
- PEL: Permissible Exposure Limit
- REL: Recommended Exposure Limit
- Skin Irritation 2: Skin corrosion/irritation – Category 2
- Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A
- Sensitization - Skin 1: Skin sensitisation – Category 1

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