


## 1 Identification

- **Product identifier**
- **Trade name:** PANAVIA SA Cement Universal
- **Article number:** US231
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Resin-based dental adhesive cement
- **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.  
33 Maiden Lane, 6th Floor, New York,  
NY 10038 U.S.A.  
Tel: 800-879-1676  
Fax: 888-700-5200  
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 Irrit. 2 H315 Causes skin irritation.  
Eye Irrit. 2A H319 Causes serious eye irritation.  
Skin Sens. 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:**  
bisphenol A diglycidylmethacrylate  
triethylene glycol dimethacrylate  
sodium fluoride  
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.

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- 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).
- 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:**

1565-94-2	bisphenol A diglycidylmethacrylate ⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319	1-10%
109-16-0	triethylene glycol dimethacrylate ⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	1-10%
868-77-9	2-hydroxyethyl methacrylate ⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317	1-3%
7681-49-4	sodium fluoride ⚠ Acute Tox. 3, H301; ⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319	<1%

- **Other ingredients:**
- Silanated barium glass filler
- Silanated colloidal silica
- Aluminum oxide filler
- 10-Methacryloyloxydecyl dihydrogen phosphate
- Hydrophobic aromatic dimethacrylate
- Silane coupling agent
- dl-Camphorquinone
- Peroxide
- Accelerators
- Catalysts
- Pigments

**4 First-aid measures**

- **Description of first aid measures**
- **General information:**
- Avoid contact with eyes.
- Avoid contact with skin.
- **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.
- If skin irritation continues, consult a doctor.
- **After eye contact:**
- Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

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- **After swallowing:** 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.

### 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 fully protective suit.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** See Section 8.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:** Pick up mechanically.
- **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.
- **Protective Action Criteria for Chemicals**

· **PAC-1:**

109-16-0	triethylene glycol dimethacrylate	33 mg/m <sup>3</sup>
868-77-9	2-hydroxyethyl methacrylate	1.9 mg/m <sup>3</sup>
7681-49-4	sodium fluoride	17 mg/m <sup>3</sup>

· **PAC-2:**

109-16-0	triethylene glycol dimethacrylate	360 mg/m <sup>3</sup>
868-77-9	2-hydroxyethyl methacrylate	21 mg/m <sup>3</sup>
7681-49-4	sodium fluoride	90 mg/m <sup>3</sup>

· **PAC-3:**

109-16-0	triethylene glycol dimethacrylate	2,100 mg/m <sup>3</sup>
868-77-9	2-hydroxyethyl methacrylate	1,000 mg/m <sup>3</sup>
7681-49-4	sodium fluoride	1,100 mg/m <sup>3</sup>

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **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 cool location (2-25°C).
- **Information about storage in one common storage facility:**  
Store away from oxidizing agents.  
Store away from reducing agents.
- **Further information about storage conditions:**  
Keep receptacle tightly sealed.

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- 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**

- **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 following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.  
At this time, the other constituents have no known exposure limits.

**7681-49-4 sodium fluoride**

PEL	Long-term value: 2.5 mg/m <sup>3</sup> as F
REL	Long-term value: 2.5 mg/m <sup>3</sup> as F
TLV	Long-term value: 2.5 mg/m <sup>3</sup> as F, BEI

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **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:** Not required.
- **Protection of hands:**  
Neoprene 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.  
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:** Goggles recommended during refilling.

**9 Physical and chemical properties**

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
  - Form:** Pasty
  - Color:** Coloured
  - Odor:** Odorless

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· <b>Odor threshold:</b>	Not determined
· <b>pH-value:</b>	Not determined
· <b>Change in condition</b>	
<b>Melting point/Melting range:</b>	Not determined
<b>Boiling point/Boiling range:</b>	Not determined
· <b>Flash point:</b>	Not determined
· <b>Flammability (solid, gaseous):</b>	Not determined
· <b>Ignition temperature:</b>	Not determined
· <b>Decomposition temperature:</b>	Not determined
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
<b>Lower:</b>	Not determined
<b>Upper:</b>	Not determined
· <b>Oxidizing properties</b>	Not determined
· <b>Vapor pressure:</b>	Not determined
· <b>Density:</b>	1.8-1.9g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined
· <b>Vapor density</b>	Not determined
· <b>Evaporation rate</b>	Not determined
· <b>Solubility in / Miscibility with</b>	
<b>Water:</b>	Insoluble.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined
· <b>Viscosity:</b>	Not determined
· <b>Dynamic:</b>	Not determined
· <b>Kinematic:</b>	Not determined
· <b>Other information</b>	No further relevant information available.

## 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **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:**

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

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

Oral	LD50	4,680 mg/kg (guinea pig)
		3,275 mg/kg (mouse)

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	5,050 mg/kg (rat)
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- **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**

· <b>IARC (International Agency for Research on Cancer)</b>	
7681-49-4 sodium fluoride	3

· <b>NTP (National Toxicology Program)</b>
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.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **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**

- **Waste treatment methods**
- **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**

· <b>UN-Number</b>	
· <b>DOT, ADR, ADN, IMDG, IATA</b>	Void
· <b>UN proper shipping name</b>	
· <b>DOT</b>	Void
· <b>ADR, ADN, IMDG, IATA</b>	Void

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

**15 Regulatory information**

· **Sara**

· <b>Section 355 (extremely hazardous substances):</b>
None of the ingredient is listed.

· <b>Section 313 (Specific toxic chemical listings):</b>
None of the ingredients is listed.

· **SARA 311/312:** See Section 2 for the information on physical and health hazards.  
· **Proposition 65**

· <b>Chemicals known to cause cancer:</b>
None of the ingredients is listed.

· <b>Chemicals known to cause reproductive toxicity for females:</b>
None of the ingredients is listed.

· <b>Chemicals known to cause reproductive toxicity for males:</b>
None of the ingredients is listed.

· <b>Chemicals known to cause developmental toxicity:</b>
None of the ingredients is listed.

· **Carcinogeny categories :**

· <b>EPA (Environmental Protection Agency)</b>
None of the ingredients is listed.

· <b>TLV (Threshold Limit Value established by ACGIH)</b>	
7681-49-4 sodium fluoride	A4

**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.

· **NFPA ratings (scale 0 - 4)**



Health = 2  
Fire = 0  
Reactivity = 0

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· **HMIS-ratings (scale 0 - 4)**

**HEALTH** 2

Health = 2

**FIRE** 0

Fire = 0

**REACTIVITY** 0

Reactivity = 0

· **Abbreviations and acronyms:**

Acute Tox. 3: Acute toxicity – Category 3

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

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

Skin Sens. 1: Skin sensitisation – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3