1 Identification

- **Product identifier**
  - **Trade name:** PANAVIA SA Cement Plus Automix, PANAVIA SA Cement Plus Handmix
  - **Article number:** CA190, CA205
  - **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**
  - **GHS07**
  - Skin Irritation - Category 2  H315  Causes skin irritation.
  - Eye Irritation - Category 2A  H319  Causes serious eye irritation.
  - Skin Sensitizer - Category 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/vapours/spray.
  - P264  Wash thoroughly after handling.
  - P272  Contaminated work clothing should not be allowed out of the workplace.
  - P280  Wear protective gloves/protective clothing/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.
  - P321  Specific treatment (see on this label).
  - P333+P313  If skin irritation or rash occurs: Get medical advice/attention.

(Contd. on page 2)
3 Composition/information on ingredients

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

<table>
<thead>
<tr>
<th>Hazard-determining components of labeling:</th>
</tr>
</thead>
<tbody>
<tr>
<td>bisphenol A diglycidylmethacrylate</td>
</tr>
<tr>
<td>triethyleneglycol dimethacrylate</td>
</tr>
<tr>
<td>2-hydroxyethyl methacrylate</td>
</tr>
<tr>
<td>sodium fluoride</td>
</tr>
</tbody>
</table>

Other ingredients:
- Silanated barium glass filler
- Silanated colloidal silica
- 10-Methacryloyloxydecyl dihydrogen phosphate
- Hydrophobic aromatic dimethacrylate
- Hydrophobic aliphatic dimethacrylate
- dl-Camphorquinone
- Peroxide
- Accelerators
- Catalysts
- Pigments

- Additional information: EUH032: Contact with acids liberates very toxic gas. (sodium fluoride)

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.
- After swallowing:
  - If symptoms persist consult doctor.
- Information for doctor:
  - Most important symptoms and effects, both acute and delayed: No further relevant information available.
Trade name: PANAVIA SA Cement Plus Automix, PANAVIA SA Cement Plus Handmix

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.

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.
    - 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:
  - 7681-49-4 sodium fluoride
  - EL: Long-term value: 2.5 mg/m³ as F
- Additional information:
  - The lists that were valid during the creation were used as basis.
46.0.15

· 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.
· Breathing equipment: Not required.
· Protection of hands:

  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.
  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
· General Information
· Appearance:
  Form: Pasty
  Color: Colored
  Odor: Odorless
  Odor threshold: Not determined
· pH-value: Not determined

· Change in condition
  Melting point/Melting range: Not determined
  Boiling point/Boiling range: Not determined

· Flash point: Not determined

· Flammability (solid, gaseous): Not determined

· Decomposition temperature: Not determined

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

· Explosion limits:
  Lower: Not determined
  Upper: Not determined
### 46.0.15

- **Oxidizing properties**: Not determined
- **Vapor pressure**: Not determined
- **Density**:
  - (Automix) 1.8 g/cm³
  - (Handmix) 1.9 g/cm³
- **Relative density**: Not determined
- **Vapor density**: Not determined
- **Evaporation rate**: Not determined
- **Solubility in / Miscibility with Water**: Insoluble.
- **Partition coefficient (n-octanol/water)**: Not determined
- **Viscosity**:
  - Dynamic: Not determined
  - Kinematic: Not determined
- **Other information**: 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 |
    | 4680 mg/kg (guinea pig) |
    | 3275 mg/kg (mouse) |
    | 5050 mg/kg (rat) |
- **Primary irritant effect**:
  - **on the skin**: Irritating effect
  - **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.
Trade name: PANAVIA SA Cement Plus Automix, PANAVIA SA Cement Plus Handmix

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

- **UN-Number**
  - **DOT, TDG, ADN, IMDG, IATA**: Void

- **UN proper shipping name**
  - **DOT, TDG, ADN, IMDG, IATA**: Void

- **Transport hazard class(es)**
  - **DOT, TDG, ADN, IMDG, IATA**: Void
  - **Class**: Void

- **Packing group**
  - **DOT, TDG, 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

(Contd. on page 7)
**15 Regulatory information**

- **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):** All ingredients are listed.

- **Canadian substance listings:**
  - **Canadian Domestic Substances List (DSL)** All ingredients are listed.
  - **Canadian Ingredient Disclosure list (limit 0.1%)** None of the ingredients is listed.
  - **Canadian Ingredient Disclosure list (limit 1%)**
    - 109-16-0 triethylene glycol dimethacrylate
    - 868-77-9 2-hydroxyethyl methacrylate

**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.

- * Data compared to the previous version altered.