1 Identification

- **Product identifier**
  - **Trade name:** PANAVIA V5 ; Tooth Primer
  - **Article number:** CA214-TP
  - **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.
    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**
  - **GHS label elements**
    
  - **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.
    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.
    P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

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

Dangerous components:

<table>
<thead>
<tr>
<th>Chemical Code</th>
<th>Chemical Name</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>868-77-9</td>
<td>2-hydroxyethyl methacrylate</td>
<td>25-50% w/w</td>
</tr>
</tbody>
</table>

Other ingredients:
- 10-Methacryloyloxydecyl dihydrogen phosphate
- Hydrophilic aliphatic dimethacrylate
- Accelerators
- Water

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.
· 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.
- 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: No special measures required.

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.
7 Handling and storage

- Handling:
  - Precautions for safe handling: Ensure good ventilation/exhaustion at the workplace.
  - 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

- 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 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
  - 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.
    - 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. 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.
# Physical and chemical properties

## Information on basic physical and chemical properties
### General Information
- **Appearance:** Liquid
- **Color:** Light blue
- **Odor:** Odorless
- **pH-value:** <2.3

### Change in condition
- **Melting point/Melting range:** Not determined
- **Boiling point/Boiling range:** 205 °C (2-hydroxyethyl methacrylate)

### Flash point:
- **Ignition point:** 97 °C (2-hydroxyethyl methacrylate)

### Decomposition temperature:
- **Auto igniting:** Not determined

### Danger of explosion:
- **Explosion limits:** Not determined
- **Explosion limits:** Not determined
- **Flash point:** Not determined
- **Auto igniting:** Not determined
- **Danger of explosion:** Product does not present an explosion hazard.

### Explosive properties
- **Density:** 1.1 g/cm³
- **Relative density:** Not determined
- **Vapor density:** Not determined
- **Evaporation rate:** Not determined

### Solubility in / Miscibility with
- **Water:** Fully miscible.

### Partition coefficient (n-octanol/water):
- **Not determined**

### Viscosity:
- **Not determined**

### Other information:
- **Not determined**
- **No further relevant information available.**

# 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.**

(Contd. on page 5)
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.
  - 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.
  - 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.
Trade name: PANAVIA V5 ; Tooth Primer

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 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

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%)
    All ingredients are 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.
- * Data compared to the previous version altered.