1 Identification

- Product identifier
- Trade name: PANAVIA 21; ED PRIMER Liquid A
- Article number: US050-EA
- Relevant identified uses of the substance or mixture and uses advised against
  
  No further relevant information available.

- Application of the substance / the mixture
  Dental material for tooth surface conditioning

- 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 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:
  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.
  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.
  P337+P313 If eye irritation persists: Get medical advice/attention.

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

- Chemical characterization: Substances None
- Chemical characterization: Mixtures
- Description: Mixture of substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>Dangerous components:</th>
<th>2-hydroxyethyl methacrylate</th>
<th>Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317</th>
</tr>
</thead>
<tbody>
<tr>
<td>868-77-9</td>
<td>30-50%</td>
<td></td>
</tr>
</tbody>
</table>

- Other ingredients:
  - 2-Methacryloyloxydecyl dihydrogen phosphate
  - N-Methacryloyl-5-aminosalicylic acid
  - Water
  - Accelerators

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.
- 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 self-contained respiratory protective device.
  - Wear fully protective suit.
6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
  Wear protective equipment. Keep unprotected persons away.
- 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).
- 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
    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:
  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:

  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 cannot 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:** Liquid
      - **Color:** Transparent
      - **Odor:** Odorless
    - **pH-value:** Not determined
  
    - **Change in condition**
      - **Melting point/Melting range:** -12 °C (2-hydroxyethyl methacrylate)
      - **Boiling point/Boiling range:** 205 °C (2-hydroxyethyl methacrylate)
    - **Flash point:** 97 °C (2-hydroxyethyl methacrylate)
    - **Ignition temperature:** Not determined
    - **Decomposition temperature:** Not determined
    - **Danger of explosion:** Product does not present an explosion hazard.
  
    - **Explosion limits:**
      - **Lower:** Not determined
      - **Upper:** Not determined
    - **Oxidizing properties:** Not determined
  
    - **Vapor pressure:** Not determined
  
    - **Density:** 1.1 g/cm³
    - **Relative density:** Not determined
    - **Vapor density:** Not determined
    - **Evaporation rate:** Not determined
  
    - **Solubility in / Miscibility with Water:** Partly miscible.
  
    - **Partition coefficient (n-octanol/water):** Not determined
  
    - **Viscosity:** 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: 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**
  - 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.
Trade name: PANAVIA 21; ED PRIMER Liquid A

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.
  - **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

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

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

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

  - **Class:** Void

- **Packing group**
  - DOT, ADR, 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.

  - **TSCA (Toxic Substances Control Act):**
    All ingredients are listed.

  - **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.
### 45.1.3

#### 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.

#### Cancerogenity categories

- **EPA (Environmental Protection Agency)**
  - None of the ingredients is listed.

- **TLV (Threshold Limit Value established by ACGIH)**
  - None of the ingredients is listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**
  - None of the ingredients is listed.

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

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### 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)

<table>
<thead>
<tr>
<th>Health</th>
<th>Fire</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
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<td>0</td>
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#### HMIS-ratings (scale 0 - 4)

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#### Abbreviations and acronyms:

- 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

* Data compared to the previous version altered.