1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name**: PANAVIA F 2.0 ; ED PRIMER || Liquid A
- **Article number**: US070-A
- **Application of the substance / the preparation**: 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

2 Composition/information on ingredients

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

<table>
<thead>
<tr>
<th>Dangerous components:</th>
</tr>
</thead>
<tbody>
<tr>
<td>868-77-9 2-hydroxyethyl methacrylate</td>
</tr>
</tbody>
</table>

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

3 Hazards identification

- **Classification of the substance or mixture**

<table>
<thead>
<tr>
<th>GHS07</th>
</tr>
</thead>
<tbody>
<tr>
<td>H315   Causes skin irritation.</td>
</tr>
<tr>
<td>H319   Causes serious eye irritation.</td>
</tr>
<tr>
<td>H317   May cause an allergic skin reaction.</td>
</tr>
</tbody>
</table>

**Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

- **Irritant**
  - Irritating to eyes and skin. May cause sensitisation by skin contact.

**Information concerning particular hazards for human and environment**:

The product has to be labelled due to the calculation procedure of international guidelines.

**Classification system**:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- **Label elements**
  - **GHS label elements**
    The product is classified and labelled according to the Globally Harmonized System (GHS).
  - **Hazard pictograms GHS07**
  - **Signal word** Warning
Trade name: PANAVIA F 2.0 ; ED PRIMER II Liquid A

- **Hazard-determining components of labelling:**
  - 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/protective clothing/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.
  - P321 Specific treatment (see on this label).
  - P362 Take off contaminated clothing and wash before reuse.
  - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**

  - **NFPA ratings (scale 0 - 4)**
    - Health = 1
    - Fire = 1
    - Reactivity = 0

  - **HMIS-ratings (scale 0 - 4)**
    - Health = 1
    - Fire = 1
    - Reactivity = 0

- **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.

- **Firefighting measures**
  - **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.
  - **Protective equipment:**
    - Wear self-contained respiratory protective device.
    - Wear fully protective suit.

- **Accidental release measures**
  - **Personal precautions, protective equipment and emergency procedures**
    - Not required.
  - **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

- **Handling:**
  - **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.

- **Storage:**
  - **Requirements to be met by storerooms and receptacles:** Store in a refrigerator (2-8°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.
- **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.
- **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:**
    Protection 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
Trade name: PANAVIA F 2.0 ; ED PRIMER II  Liquid A

(Contd. of page 3)

- 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

- General Information
- Appearance:
  Form: Liquid
  Color: Transparent
  Odor: Odorless
- pH-value: Not applicable
- 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 applicable
- Danger of explosion: Product does not present an explosion hazard.
- Explosion limits:
  Lower: Not applicable
  Upper: Not applicable
- Vapor pressure: Not applicable
- Density: 1.1 g/cm³ (9.18 lbs/gal)
- Vapour density: Not applicable
- Solubility in / Miscibility with Water: Partly miscible.
- Segregation coefficient (n-octonol/water): Not applicable
- Other information: No further relevant information available.

10 Stability and reactivity

- Thermal decomposition / conditions to be avoided:
  No decomposition if used and stored according to specifications.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: Carbon monoxide and carbon dioxide

(Contd. on page 5)
11 Toxicological information

- 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

12 Ecological information

- 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.
- 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.

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
Trade name: PANAVIA F 2.0 ; ED PRIMER II Liquid A

- Environmental hazards: No
- 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": -

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.
  - 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.
    - 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.
    - IARC (International Agency for Research on Cancer): 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.
    - OSHA-Ca (Occupational Safety & Health Administration): 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.

- Version: 5
- Relevant phrases:
  - Not applicable
  - H315 Causes skin irritation.
  - H317 May cause an allergic skin reaction.
  - H319 Causes serious eye irritation.