1 Identification

- **Product identifier**
  - **Trade name:** PANAVIA 21 ; OXYGUARD II
  - **Article number:** CA050-O

- **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 curing promotion and surface protection

- **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**
  - The product is not classified according to the Globally Harmonized System (GHS).

- **Label elements**
  - **GHS label elements** Void
  - **Hazard pictograms** Void
  - **Signal word** Void
  - **Hazard statements** Void

3 Composition/information on ingredients

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

- **Dangerous components:**
  - 56-81-5 glycerol 50-70% w/w

- **Other ingredients:**
  - Polyethyleneglycol
  - Catalysts
  - Accelerators
  - Dyes

4 First-aid measures

- **Description of first aid measures**
  - **After inhalation:** Supply fresh air; consult doctor in case of complaints.
  - **After skin contact:** Generally the product does not irritate the skin.
  - **After eye contact:** Rinse opened eye for several minutes under running water.
  - **After swallowing:** If symptoms persist consult doctor.
Trade name: PANAVIA 21 ; OXYGUARD II

5 Fire-fighting measures

- Extinguishing media
  - Suitable extinguishing agents: Use fire fighting measures that suit the environment.
  - 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).
- Reference to other sections
  - No dangerous substances are released.
  - 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 measures required.
  - 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:
  - Store in cool, dry conditions in well sealed receptacles.
  - Keep receptacle tightly sealed.
  - 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:
    56-81-5 glycerol
    - EL Long-term value: 10* 3** mg/m³
      *mist; **mist, resirable
    - EV Long-term value: 10 mg/m³
46.0.15

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
  The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.

- **Protection of hands:**
  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

<table>
<thead>
<tr>
<th>Information on basic physical and chemical properties</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Information</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Appearance:</strong></td>
<td>Gel</td>
</tr>
<tr>
<td><strong>Form:</strong></td>
<td>Gel</td>
</tr>
<tr>
<td><strong>Color:</strong></td>
<td>Green</td>
</tr>
<tr>
<td><strong>Odor:</strong></td>
<td>Odorless</td>
</tr>
<tr>
<td><strong>pH-value:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Change in condition</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Melting point/Melting range:</strong></td>
<td>18.2 °C (glycerol)</td>
</tr>
<tr>
<td><strong>Boiling point/Boiling range:</strong></td>
<td>290 °C (glycerol)</td>
</tr>
<tr>
<td><strong>Flash point:</strong></td>
<td>177 °C (glycerol)</td>
</tr>
<tr>
<td><strong>Ignition temperature:</strong></td>
<td>393°C (glycerol)</td>
</tr>
<tr>
<td><strong>Danger of explosion:</strong></td>
<td>Product does not present an explosion hazard.</td>
</tr>
<tr>
<td><strong>Explosion limits:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Lower:</strong></td>
<td>0.9 Vol % (glycerol)</td>
</tr>
<tr>
<td><strong>Upper:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Vapor pressure:</strong></td>
<td>0.1 hPa (20°C, glycerol)</td>
</tr>
<tr>
<td><strong>Density:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Vapor density</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Solubility in / Miscibility with Water:</strong></td>
<td>Fully miscible.</td>
</tr>
<tr>
<td><strong>Partition coefficient (n-octanol/water):</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Other information</strong></td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>
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:
  Primary irritant effect:
  - on the skin: No irritant effect.
  - on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:
  The product is not subject to classification according to internally approved calculation methods for preparations:
  When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.
- 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: Smaller quantities can be disposed of with household waste.
Safety Data Sheet
According to HPR

Trade name: PANAVIA 21 ; OXYGUARD II

- 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, TDG, ADN, IMDG, IATA: Void

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

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%)
    - 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.

- * Data compared to the previous version altered.