1 Identification

- **Product identifier**
  - **Trade name:** CLEARFIL MAJESTY ES-2; Classic and Premium
  - **Article number:** CA178-CP
  - **Relevant identified uses of the substance or mixture and uses advised against**
    No further relevant information available.
  - **Application of the substance / the mixture** Dental filling 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**
  - GHS07
  - Skin Irritation - Category 2  H315  Causes skin irritation.
  - Eye Irritation - Category 2A  H319  Causes serious eye irritation.

- **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 statements**
    H315 Causes skin irritation.
    H319 Causes serious eye irritation.

- **Precautionary statements**
  - P264  Wash thoroughly after handling.
  - 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).
  - P332+P313  If skin irritation occurs: Get medical advice/attention.
  - P337+P313  If eye irritation persists: Get medical advice/attention.
  - P362+P364  Take off contaminated clothing and wash it before reuse.

- **Hazard-determining components of labeling:** bisphenol A diglycidylmethacrylate

(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 Name</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1565-94-2 bisphenol A diglycidylmethacrylate</td>
<td>5-15% w/w</td>
</tr>
</tbody>
</table>

**Other ingredients:**
- Silanated barium glass filler
- Pre-polymerized organic filler
- Hydrophobic aromatic dimethacrylate
- Hydrophobic aliphatic dimethacrylate
- dl-Camphorquinone
- Accelerators
- Initiators
- Initiators
- Pigments

4 First-aid measures

- **Description of first aid measures**
  - **After inhalation:** Supply fresh air; consult doctor in case of complaints.
  - **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.
    - **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:** 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.

(Contd. of page 3)
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: 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: 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:
9 Physical and chemical properties

- Information on basic physical and chemical properties
  - General Information
  - Appearance:
    - Form: Pasty
    - Color: Different according to coloring
  - 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

- 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 at 20 °C: 1.8 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: 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:

- Primary irritant effect:
  - on the skin: Irritating effect

(Contd. on page 5)
46.0.15

· on the eye: 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:
· 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.

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
  · DOT, TDG, IMDG, IATA Void
Trade name: CLEARFIL MAJESTY ES-2; Classic and Premium

| Environmental hazards: | No |
| Special precautions for user | Not applicable |
| Transport in bulk according to Annex II of MARPOL 73/78 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.