1 Identification

- **Product identifier**
  - **Trade name:** CLEARFIL MAJESTY ES-2; Classic and Premium
  - **Article number:** US178-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 Sakaz, 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.

- **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 / 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.
  - **Other hazards**
    - **Results of PBT and vPvB assessment**
    - **PBT:** Not applicable.
3 Composition/information on ingredients

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

### Dangerous components:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Hazard Class</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1565-94-2 bisphenol A diglycidylmethacrylate</td>
<td>Skin Irrit. 2, H315; Eye Irrit. 2A, H319</td>
<td>2.5-10%</td>
</tr>
</tbody>
</table>

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

    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.
Trade name: CLEARFIL MAJESTY ES-2; Classic and Premium

- 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:** 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.
Trade name: CLEARFIL MAJESTY ES-2; Classic and Premium

- 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
    - 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.

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, ADR, ADN, IMDG, IATA: Void
Trade name: CLEARFIL MAJESTY ES-2; Classic and Premium

· UN proper shipping name
  DOT, ADR, ADN, IMDG, IATA  Void

· Transport hazard class(es)
  DOT, ADR, ADN, IMDG, IATA  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
  No further relevant information available.

· 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.
  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.
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.
  H319 Causes serious eye irritation.

- NFPA ratings (scale 0 - 4)

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<thead>
<tr>
<th>Health</th>
<th>Fire</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
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<td>1</td>
<td>0</td>
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- HMIS-ratings (scale 0 - 4)

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</table>

- Abbreviations and acronyms:
  Skin Irrit. 2: Skin corrosion/irritation – Category 2
  Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

* Data compared to the previous version altered.