

## SAFETY DATA SHEETS

**This SDS packet was issued with item:**

070114215

N/A

**Safety Data Sheet**  
**According to HPR**

Printing date 05/25/2018

Version 3

Reviewed on 05/25/2018

**1 Identification**

- **Product identifier**
- **Trade name:** CLEARFIL DC Activator
- **Article number:** CA196
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Dental bonding 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](http://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**



GHS02 Flame

Flammable Liquids - Category 2 H225 Highly flammable liquid and vapour.

- **Label elements**
- **GHS label elements**  
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms** GHS02
- **Signal word** Danger
- **Hazard statements**  
H225 Highly flammable liquid and vapour.
- **Precautionary statements**

|                |                                                                                                          |
|----------------|----------------------------------------------------------------------------------------------------------|
| P210           | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.           |
| P233           | Keep container tightly closed.                                                                           |
| P240           | Ground and bond container and receiving equipment.                                                       |
| P241           | Use explosion-proof [electrical/ventilating/lighting] equipment.                                         |
| P242           | Use non-sparking tools.                                                                                  |
| P243           | Take actions to prevent static discharges.                                                               |
| P280           | Wear protective gloves/protective clothing/eye protection/face protection.                               |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. |
| P403+P235      | Store in a well-ventilated place. Keep cool.                                                             |
| P501           | Dispose of contents/container in accordance with local/regional/national/international regulations.      |

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**3 Composition/information on ingredients**

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

· **Dangerous components:**

|                                                                                                                                                                                                                                               |         |          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|----------|
| 64-17-5                                                                                                                                                                                                                                       | ethanol | >90% w/w |
|  Flammable Liquids - Category 2, H225;  Carcinogenicity - Category 1A, H350 |         |          |

· **Other ingredients:**

Catalysts  
Accelerators

**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:**  
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:**  
CO<sub>2</sub>, 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** 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).  
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.

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**7 Handling and storage**

- **Handling:**
- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:**
  - Keep ignition sources away - Do not smoke.
  - Protect against electrostatic charges.
- **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:**
  - 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.
- **Control parameters**

**Components with limit values that require monitoring at the workplace:****64-17-5 ethanol**

|    |                                                      |
|----|------------------------------------------------------|
| EL | Short-term value: 1000 ppm                           |
| EV | Long-term value: 1,900 mg/m <sup>3</sup> , 1,000 ppm |

- **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.
- **Penetration time of glove material**
  - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· **Eye protection:**

Tightly sealed goggles

**9 Physical and chemical properties**· **Information on basic physical and chemical properties**· **General Information**· **Appearance:**

|                 |              |
|-----------------|--------------|
| · <b>Form:</b>  | Liquid       |
| · <b>Color:</b> | Transparent  |
| · <b>Odor:</b>  | Alcohol-like |

· **pH-value:** Not determined.· **Change in condition**

|                                       |                     |
|---------------------------------------|---------------------|
| · <b>Melting point/Melting range:</b> | -114.5 °C (ethanol) |
| · <b>Boiling point/Boiling range:</b> | 78 °C (ethanol)     |

· **Flash point:** 13°C (ethanol)· **Ignition temperature:** 425.0 °C (ethanol)· **Decomposition temperature:** Not determined.· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.· **Explosion limits:**

|                 |                      |
|-----------------|----------------------|
| · <b>Lower:</b> | 3.5 Vol % (ethanol)  |
| · <b>Upper:</b> | 15.0 Vol % (ethanol) |

· **Oxidizing properties** Not determined.· **Vapor pressure:** 59.0 hPa (20°C, ethanol)

|                           |                                        |
|---------------------------|----------------------------------------|
| · <b>Density:</b>         | 0.8 g/cm <sup>3</sup>                  |
| · <b>Relative density</b> | Not determined.                        |
| · <b>Vapor density</b>    | 1.6 g/cm <sup>3</sup> (ethanol, air=1) |
| · <b>Evaporation rate</b> | Not determined.                        |

· **Solubility in / Miscibility with**· **Water:** Fully miscible.· **Partition coefficient (n-octanol/water):** -0.32 (ethanol)· **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.

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**Trade name: CLEARFIL DC Activator**· **Hazardous decomposition products:** Carbon monoxide and carbon dioxide

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**11 Toxicological information**· **Information on toxicological effects**· **Acute toxicity:**· **LD/LC50 values that are relevant for classification:****64-17-5 ethanol**

|            |          |                                    |
|------------|----------|------------------------------------|
| Oral       | LD50     | 3450 mg/kg (mouse)                 |
|            |          | 7060 mg/kg (rat)                   |
| Inhalative | LC50/4 h | 20000 mg/l (rat)                   |
|            | LD50     | 3600 mg/kg (rat - intraperitoneal) |

· **Primary irritant effect:**· **on the skin:** No irritant effect.· **on the eye:** No irritating effect.· **Sensitization:** No sensitizing effects known.· **Additional toxicological information:**· **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.

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· Recommended cleansing agent: Water, if necessary with cleansing agents.

### 14 Transport information

|                                                                                     |                                                            |
|-------------------------------------------------------------------------------------|------------------------------------------------------------|
| · UN-Number                                                                         | UN1170                                                     |
| · DOT                                                                               | 1170                                                       |
| · TDG, IMDG, IATA                                                                   |                                                            |
| · UN proper shipping name                                                           | Ethanol solutions                                          |
| · DOT                                                                               | 1170 Ethanol solutions (Ethyl alcohol solutions)           |
| · TDG                                                                               | ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)                  |
| · IMDG                                                                              | ETHANOL SOLUTION                                           |
| · IATA                                                                              |                                                            |
| · Transport hazard class(es)                                                        |                                                            |
| · DOT                                                                               |                                                            |
|    |                                                            |
| · Class                                                                             | 3 Flammable liquids                                        |
| · Label                                                                             | 3                                                          |
| · TDG, IMDG, IATA                                                                   |                                                            |
|  |                                                            |
| · Class                                                                             | 3 Flammable liquids                                        |
| · Label                                                                             | 3                                                          |
| · Packing group                                                                     |                                                            |
| · DOT, TDG, IMDG, IATA                                                              | II                                                         |
| · Environmental hazards:                                                            |                                                            |
| · Marine pollutant:                                                                 | No                                                         |
| · Special precautions for user                                                      | Warning: Flammable liquids                                 |
| · Danger code (Kemler):                                                             | 33                                                         |
| · EMS Number:                                                                       | F-E,S-D                                                    |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code           | Not applicable.                                            |
| · UN "Model Regulation":                                                            | UN1170, Ethanol solutions (Ethyl alcohol solutions), 3, II |

### 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.

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**· 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%)**

All ingredients are 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.**

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