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

1.1 Product identifier
- Trade name: KATANA Zirconia, KATANA Zirconia Block
- Article number: 828, 889
- Registration number: Not applicable

1.2 Relevant identified uses of the substance or mixture and uses advised against
- Application of the substance / the mixture: Dental ceramic block

1.3 Details of the supplier of the safety data sheet
- Manufacturer:
  Kuraray Europe GmbH
  Philipp-Reis-Str. 4,
  65795 Hattersheim am Main
  Germany
  Phone: +49 (0)69 305 35 840
  Fax: +49 (0)69 305 35 640
  E-mail: dental@kuraray.de
- Further information obtainable from: Manufacturer
- Emergency telephone number:
  Guy’s & St. Thomas’ NHS Fundation Trust
  Westminster Bridge Road
  London
  SE1 7EH
  Emergency telephone: +44 845 4647 or 111
  URL: www.guysandstthomas.nhs.uk/Home.aspx

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008
  The product is not classified according to the CLP regulation.

2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008
  Void
  - Hazard pictograms
  - Signal word
  - Hazard statements

2.3 Other hazards
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures
- Description: Mixture of substances listed below with nonhazardous additions.
- Dangerous components: Void
- Other ingredients:
  - Zirconium oxide
  - Yttrium oxide
  - Pigments

(Contd. on page 2)
SECTION 4: First aid measures

4.1 Description of first aid measures
- General information: No special measures required.
- 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.

4.2 Most important symptoms and effects, both acute and delayed
- No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media
- Suitable extinguishing agents: Product is not flammable

5.2 Special hazards arising from the substance or mixture
- No further relevant information available.

5.3 Advice for firefighters
- Protective equipment: No special measures required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
- Not required.

6.2 Environmental precautions
- Do not allow to enter sewers/surface or ground water.

6.3 Methods and material for containment and cleaning up
- Pick up mechanically.

6.4 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.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
- No special measures required.

7.2 Conditions for safe storage, including any incompatibilities
- Storage:
  - Requirements to be met by storerooms and receptacles: No special requirements.
  - Information about storage in one common storage facility: Not required.
  - Further information about storage conditions: Store at room temperature.

7.3 Specific end use(s)
- No further relevant information available.

SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
8.1 Control parameters

- Ingredients with limit values that require monitoring at the workplace:
  - 1314-23-4 zirconium dioxide
    - WEL (Great Britain) Short-term value: 10 mg/m³
    - Long-term value: 5 mg/m³
    - as Zr

- Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

- Personal protective equipment:
  - General protective and hygienic measures:
    - The usual precautionary measures are to be adhered to when handling chemicals.
  - Respiratory protection: Not required.
  - Protection of hands: Not required.
  - 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: Not required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- General Information
- Appearance:
  - Form: Solid
  - Colour: According to product specification.
- Odour:
  - Odourless
- Odour threshold:
  - Not determined
- pH-value:
  - Not determined

- Change in condition
  - Melting point/freezing point:
    - Not determined
  - Initial boiling point and boiling range:
    - Not determined

- Flash point:
  - Not determined

- Flammability (solid, gas):
  - Product is not flammable.

- Ignition temperature:
  - Decomposition temperature:
    - Not determined

- Auto-ignition temperature:
  - Not determined

- Explosive properties:
  - Product does not present an explosion hazard.

- Explosion limits:
  - Lower:
    - Not determined
  - Upper:
    - Not determined

- Oxidising properties:
  - Not determined

- Vapour pressure:
  - Not determined
Trade name: KATANA Zirconia, KATANA Zirconia Block

Density:
- Relative density: Not determined
- Vapour density: Not determined
- Evaporation rate: Not determined

Solubility in / Miscibility with water: Insoluble.

Partition coefficient: n-octanol/water: Not determined

Viscosity: Dynamic: Not determined, Kinematic: Not determined

9.2 Other information: No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity: No further relevant information available.
10.2 Chemical stability: Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
10.3 Possibility of hazardous reactions: No dangerous reactions known.
10.4 Conditions to avoid: No further relevant information available.
10.5 Incompatible materials: No further relevant information available.
10.6 Hazardous decomposition products: None

SECTION 11: Toxicological information

11.1 Information on toxicological effects:
- Acute toxicity: Based on available data, the classification criteria are not met.
- Primary irritant effect:
  - Skin corrosion/irritation: Based on available data, the classification criteria are not met.
  - Serious eye damage/irritation: Based on available data, the classification criteria are not met.
  - Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):
  - Germ cell mutagenicity: Based on available data, the classification criteria are not met.
  - Carcinogenicity: Based on available data, the classification criteria are not met.
  - Reproductive toxicity: Based on available data, the classification criteria are not met.
- STOT-single exposure: Based on available data, the classification criteria are not met.
- STOT-repeated exposure: Based on available data, the classification criteria are not met.
- Aspiration hazard: Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1 Toxicity:
- Aquatic toxicity: No further relevant information available.
12.2 Persistence and degradability: No further relevant information available.
12.3 Bioaccumulative potential: No further relevant information available.
12.4 Mobility in soil: No further relevant information available.
12.5 Results of PBT and vPvB assessment:
- PBT: Not applicable.

Water hazard class 1 (German Regulation) (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.
Trade name: KATANA Zirconia, KATANA Zirconia Block

- vPrB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

### SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
  - Recommendation: Smaller quantities can be disposed of with household waste.

- Uncleaned packaging:
  - Recommendation: Disposal must be made according to official regulations.

### SECTION 14: Transport information

- 14.1 UN-Number
  - ADR, ADN, IMDG, IATA: Void

- 14.2 UN proper shipping name
  - ADR, ADN, IMDG, IATA: Void

- 14.3 Transport hazard class(es)
  - ADR, ADN, IMDG, IATA: Void

- 14.4 Packing group
  - ADR, IMDG, IATA: Void

- 14.5 Environmental hazards:
  - Marine pollutant: No

- 14.6 Special precautions for user
  - Not applicable.

- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
  - Not applicable.

- UN "Model Regulation": Void

### SECTION 15: Regulatory information

- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### SECTION 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.