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

1.1 Product identifier
- Trade name: CARIES DETECTOR
- Article number: 043
- Registration number: Not applicable

1.2 Relevant identified uses of the substance or mixture and uses advised against
- No further relevant information available.
- Application of the substance / the mixture: Caries detection device

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
- Supplier:
  J & S Davis
  5 Whitworth Road, Stevenage,
  Hertfordshire, SG1 4QS
  Great Britain
  Tel: +44-(0) 1438 747344
  Fax: +44-(0) 1438 758909
  E-mail: jsdsales@js-davis.co.uk
- Further information obtainable from: Manufacturer or Supplier
- Emergency telephone number:
  National Poisons information Service (London Centre)
  Guy’s & St. Thomas’ Hospital Trust
  Medical Toxicology Unit
  Avonley Road
  LONDON
  SE14 5ER
  Emergency telephone: (local) 0870 600 6266 or +44 20 7771 5394
  Administrative telephone: +44 20 7 771 53 10
  Facsimile number: +44 20 7 771 53 09

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: Void
- Signal word: Void
- Hazard statements: Void

2.3 Other hazards

2.4 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:
  - CAS: 57-55-6 propanediol
    - Acute Tox. 4, H302 > 90%
  - EINECS: 200-338-0

- Other ingredients: Dyes

SECTION 4: First aid measures

4.1 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.

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: Use fire extinguishing methods suitable to surrounding conditions.

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
See Section 8.

6.2 Environmental precautions:
- Dilute with plenty of water.
- Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

6.4 Reference to other sections
No dangerous substances are released.

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: Store in a cool location (2-25 °C).
  - Information about storage in one common storage facility: Not required.
  - Further information about storage conditions:
    - Keep container tightly sealed.
    - Store in cool, dry conditions in well sealed receptacles.
    - Protect from heat and direct sunlight.

(Contd. on page 3)
SECTION 8: Exposure controls/personal protection

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

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

57-55-6 propane-1,2-diol

WEL Long-term value: 474* 10** mg/m³, 150* ppm

*total vapour and particulates **particulates

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

Ingredients with limit values that require monitoring at the workplace:

57-55-6 propane-1,2-diol

WEL Long-term value: 474* 10** mg/m³, 150* ppm

*total vapour and particulates **particulates

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

8.1 Control parameters

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: 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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form: Liquid
Colour: Red
Odour: Odourless

pH-value at 20 °C: 5.6

Change in condition

Melting point/Melting range: -68 °C (propane-1,2-diol)
Boiling point/Boiling range: 185 °C ((propane-1,2-diol))

Flash point: 101 °C ((propane-1,2-diol))

Ignition temperature: 371 °C ((propane-1,2-diol))

Decomposition temperature: Not determined

Danger of explosion: Product does not present an explosion hazard.
Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 05.10.2016
Revision: 05.10.2016
Version number 5

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· Explosion limits:
  Lower: 2.6 Vol % ((propane-1,2-diol))
  Upper: 12.6 Vol % ((propane-1,2-diol))

· Oxidising properties Not determined

· Vapour pressure at 20 °C: 0.1 hPa ((propane-1,2-diol))

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

· Solubility in / Miscibility with water: Fully miscible.

· Partition coefficient (n-octanol/water): Not determined

· Viscosity: 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: Carbon monoxide and carbon dioxide

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.
Trade name: CARIES DETECTOR

- Additional ecological information:
- General notes:
  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.
- 12.5 Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: 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.
  - Recommended cleansing agents: Water, if necessary together with cleansing agents.

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

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
  No further relevant information available.
- 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.

- Relevant phrases
  H302 Harmful if swallowed.

(Contd. on page 6)
Abbreviations and acronyms:
Acute Tox. 4: Acute toxicity – Category 4

* Data compared to the previous version altered.