

**Biodent Isolation K**

|               |               |               |                   |
|---------------|---------------|---------------|-------------------|
| material No.  |               | Version       | <b>3.0 / GB</b>   |
| specification | <b>142278</b> | Revision date | <b>04.03.2004</b> |
| VA-Nr         |               | Print Date    | <b>30.03.04</b>   |
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**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING****Product information**

|                                       |   |   |
|---------------------------------------|---|---|
| Trade name                            | : | Biodent Isolation K                             |
| Company                               | : | DequDent GmbH<br>Postfach 1364<br>D-63403 Hanau |
| Telephone                             | : | +49 (0)6181/59-5767                             |
| Telefax                               | : | +49 (0)6181/59-5879                             |
| Emergency telephone number            | : | +49 (0)180 / 23 24-555                          |
| Use of the Substance /<br>Preparation | : | For dental use only.                            |

**2. COMPOSITION/INFORMATION ON INGREDIENTS****Information on ingredients / Hazardous components**

|                           |            |        |           |
|---------------------------|------------|--------|-----------|
| • <b>ethanol</b>          |            | > 50%  |           |
| CAS-No.                   | 64-17-5    | EC-No. | 200-578-6 |
|                           | F; R11     |        |           |
| • <b>calcium chloride</b> |            | < 30%  |           |
| CAS-No.                   | 10043-52-4 | EC-No. | 233-140-8 |
|                           | Xi; R36    |        |           |

See chapter 16 for text of risk phrases

**3. HAZARDS IDENTIFICATION**

Highly flammable.  
Vapours can form explosive mixtures with air.

**4. FIRST AID MEASURES****General advice**

Remove contaminated or saturated clothing immediately and dispose off safely.

**Inhalation**

Bring affected person outside and ensure that he/she is comfortable.  
Obtain medical attention.

**Skin contact**

Wash off with plenty of water.

**Eye contact**

With eye held open, thoroughly rinse immediately with plenty of water for at last 10 minutes.  
Consult an ophthalmologist.

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**Ingestion**

Call a physician immediately.

Clean mouth with water and drink afterwards plenty of water.

Do not induce vomiting.

Should vomiting occur, be sure to keep victim's head below hips to avoid aspiration of vomitus into the lungs.

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**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

water spray, alcohol-resistant foam, CO<sub>2</sub>, dry powder

**Extinguishing media which must not be used for safety reasons**

high volume water jet

**Specific hazards during fire fighting**

Formation of flammable or explosive vapour/air mixtures possible.

In case of fire cool endangered containers with water.

**Special protective equipment for fire-fighters**

In the event of fire, wear self-contained breathing apparatus.

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**6. ACCIDENTAL RELEASE MEASURES****Personal precautions**

Ensure adequate ventilation.

Keep away from sources of ignition - No smoking.

**Environmental precautions**

Do not allow entrance in soil, stretches of water, drainage systems.

**Methods for cleaning up**

Take up mechanically or with an absorbent material.

Fill into marked, sealable containers.

Suitable binder: universal absorbent

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**7. HANDLING AND STORAGE****Handling****Safe handling advice**

Provide good ventilation or extraction.

Avoid contact with skin and eyes.

**Advice on protection against fire and explosion**

Take precautionary measures against static charges, keep away from sources of ignition.

Do not smoke.

Explosion protection equipment required.

**Storage****Requirements for storage areas and containers**

Keep containers tightly closed in a cool, well-ventilated place.

Keep at temperatures of between 10 °C and 25 °C.

Storage classification according to VCI (D): 3 A

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**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****Components with workplace control parameters**• **ethanol**

|                    |                                    |        |   |
|--------------------|------------------------------------|--------|---|
| CAS-No.            | 64-17-5                            | EC-No. | 200-578-6                               |
| Control parameters | 1000 ppm<br>1920 mg/m <sup>3</sup> |        | Time Weighted Average (TWA): (EH40 OES) |

**Engineering measures**

Provide good ventilation or extraction.

**Personal protective equipment****Respiratory protection**

If workplace exposure limit is exceeded apply Respirator with brown A-type filter.

**Hand protection**

Wear protective gloves made of the following materials: solvent-resistant material.

|                    |  |
|--------------------|--|
| Glove material     | butyl-rubber   |
| Material thickness | 0.5 mm   |
| Break through time | 480 min  |
| Method             | Source: GESTIS substance database (hazardous substance information system of commercial professional associations) |

|                    |  |
|--------------------|--|
| Glove material     | Fluorinated rubber (FKM)   |
| Material thickness | 0.4 mm   |
| Break through time | 480 min  |
| Method             | Source: GESTIS substance database (hazardous substance information system of commercial professional associations) |

The suitability for a specific workplace should be discussed with the producers of the protective gloves.

The exact break through time can be obtained from the protective glove producer and this has to be observed.

preventive skin protection

Use barrier cream regularly.

**Eye protection**

safety glasses with side-shields

**Hygiene measures**

Do not inhale vapours / aerosols.

Avoid contact with eyes.

Remove contaminated or saturated clothing.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Appearance**

|        |                |
|--------|----------------|
| Form   | liquid         |
| Colour | colourless     |
| Odour  | characteristic |

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**Safety data**

|                       |   |
|-----------------------|---|
| pH                    | ca. 7 (20 °C)<br>neutral  |
| Melting point/range   | -117 °C<br>related to substance: ethanol                        |
| Boiling point/range   | 78 °C (1013 hPa)<br>related to substance: ethanol               |
| Flash point           | 17 °C<br>Method: DIN 51 755<br>related to substance: ethanol    |
| Ignition temperature  | 425 °C<br>Method: DIN 51 794<br>related to substance: ethanol   |
| Lower explosion limit | 3.5 %(V)<br>related to substance: ethanol                       |
| Upper explosion limit | 28 %(V)<br>related to substance: ethanol                        |
| Vapour pressure       | ca. 60 hPa (20 °C)<br>related to substance: ethanol             |
| Density               | 0.81 g/cm <sup>3</sup> (20 °C)<br>related to substance: ethanol |
| Water solubility      | miscible (20 °C)  |

**10. STABILITY AND REACTIVITY**

|                                  |   |
|----------------------------------|---|
| Conditions to avoid              | Avoid temperatures above 40 °C                          |
| Hazardous decomposition products | no  |
| Thermal decomposition            | Distills without decomposition at atmospheric pressure. |
| Hazardous reactions              | Reacts violently with: strong oxidants.                 |

**11. TOXICOLOGICAL INFORMATION**

|                 |                       |
|-----------------|-----------------------|
| Skin irritation | not irritating        |
| Eye irritation  | no irritating effects |

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**12. ECOLOGICAL INFORMATION**
**Elimination information (persistence and degradability)**
**Behaviour in environmental compartments**
**Ecotoxicity effects**
**Further information on ecology**

Further Information                      Do not allow to enter waste water drains, watercourse or soil.

**13. DISPOSAL CONSIDERATIONS**
**Product**

Disposal according to local authority regulations.

**Uncleaned packaging**

Disposal according to local authority regulations.

**14. TRANSPORT INFORMATION**
**Land transport ADR/RID/GGVSE (Germany)**

|    |   |           |
|----|---|-----------|
| II | Class                                     | 3         |
|    | ADR/RID-Labels                            | 3         |
|    | UN-No                                     | 1170      |
|    | Packaging group                           | II        |
| II | orange warning plate                      | 33 / 1170 |
|    | Description of the goods (Technical name) |           |
|    | ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) |           |

**Sea transport IMDG-Code/GGVSee**

|    |  |          |
|----|--|----------|
| II | Class  | 3        |
|    | UN-No  | 1170     |
| II | Packaging group                              | II       |
|    | EmS  | F-E, S-D |
|    | Proper technical name (Proper shipping name) |          |
|    | ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)    |          |

**Air transport ICAO-TI/IATA-DGR**

|    |  |      |
|----|--|------|
| II | Class  | 3    |
|    | UN-No  | 1170 |
| II | Packaging group                              | II   |
|    | Proper technical name (Proper shipping name) |      |
|    | Ethanol solution                             |      |

**Loading instructions/Remarks**

|        |   |
|--------|---|
| IATA_C | ERG-Code 3L   |
| IATA_P | ERG-Code 3L   |
| ADR    | Observe listed materials regulation §7, paragraph 1 GGVSE |

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**15. REGULATORY INFORMATION****Labelling according to EEC Directive****hazard-defining component(s)**

- ethanol

|              |            |   |
|--------------|------------|---|
| Symbol(s)    | F          | Highly flammable  |
| R-phrases(s) | R11        | Highly flammable.   |
| S-phrases(s) | S 7<br>S16 | Keep container tightly closed.<br>Keep away from sources of ignition. - No smoking. |

**National legislation**

|                        |  |
|------------------------|--|
| employment restriction | The employment limitations under the protection of young persons act, the laws on pregnant women and young mothers and work at home is/are to be observed. |
|------------------------|--|

**16. OTHER INFORMATION****Risk phrase (R phrase) texts**

- ethanol  
R11 Highly flammable.
- calcium chloride  
R36 Irritating to eyes.

**Further information**

Changes since the last version will be highlighted in the margin. This version replaces all previous versions.

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