| EU Safety Data Sheet  |  | Total Etch   |   | ivoclar                  |  |
|---|--|--|---|--------------------------|--|
| Date of issue / Reference<br>Replaces version of<br>Date of printing<br>Company |  | 11.07.2006 hot   24.03.2005 11.07.2006   Sheet No. 1262  |   | vıvadent <sup>.</sup>    |  |
|   |  |  |   | Page 1 of 5              |  |
|   |  | Ivoclar Vivadent AG, Bendererstrasse 2, FL - 9494 Schaan<br>Principality of Liechtenstein  |   |                          |  |
| 1   | Commercial product name and supp         | lier   |   |                          |  |
| 1.1   | Commercial product name /<br>Designation | Total Etch   |   |                          |  |
| 1.2   | Application / Use                        | Etching gel  |   |                          |  |
| 1.3   | Producer                                 | Ivoclar Vivadent AG, Bendererstrasse 2, FL - 9494<br>Fürstentum Liechtenstein  |   | L - 9494 Schaan          |  |
| 1.4   | Supplier                                 |  |   |                          |  |
| 1.5   | TOX emergency number                     |  | Emergency-Call: +423 / 235 35 35 or 373 40 40<br>Ivoclar Vivadent AG, FL-9494 Schaan, Liechtenstein |                          |  |
| 2   | Composition                              |  |   |                          |  |
| 2.1   | Chemical characterization                | Phosphoric a   | cid - Gel   |                          |  |
| 2.2   | Hazardous components                     |  |   |                          |  |
|   | CAS No. 7664-38-2                        | 37 % Phosph<br>C: Corrosive. R3  | oric acid, Solution in Water<br>4: Causes burns.  |                          |  |
| 2.3   | Further information                      | None.  |   |                          |  |
| 3   | Hazards identification                   | Corrosive.   |   |                          |  |
| 4   | First aid measures                       |  |   |                          |  |
| 4.1   | Eye contact                              |  | flowing water immediately an sult a physician.  | nd continuously for 15   |  |
| 4.2   | Skin contact                             | Wash thoroug   | ghly with soap and water.   |                          |  |
| 4.3   | Ingestion                                | After ingestion call a physician immediately and show this safety data sheet. Do not induce vomiting. Give large amounts of water. |   |                          |  |
| 4.4   | Inhalation                               | Remove to fr<br>physician.   | esh air. If respiratory irritation  | n is experienced, call a |  |
| 4.5   | Further information                      | Remove contaminated clothing.  |   |                          |  |
| 5   | Fire-fighting measures                   |  |   |                          |  |
| 5.1   | Suitable extinguishing media             | Non-combust  | ible product.   |                          |  |
| 5.1   |  | Not required since not combustible.  |   |                          |  |
| 5.2   | Extinguishing media to avoid             | Not required   | since not combustible.  |                          |  |

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| 6                                       | Accidental release measures    | Clean area with large amounts of water.<br>Prevent skin and eye contact.<br>Dispose of according to local and national regulations.<br>Clean up with absorbent material. |   |                        |
| 7                                       | Handling and storage           |  |   |                        |
| 7.1                                     | Handling                       |  | ely trained personnel should l<br>well ventilated area. | handle this product.   |
| 7.2                                     | Industrial hygiene             | Usual hygienic measures for dental practice.<br>Practice care and caution to avoid skin and eye contact.<br>Keep out of reach of children.                               |   |                        |
| 7.3                                     | Storage                        | U  | of (2-8°C / 36-46 °F) is indic<br>°C / 36-82 °F         | ated for larger stock. |
| 7.4                                     | Place of storage               | Do not store   | in open sunshine.                                       |                        |
| 7.5                                     | Fire- and explosion-protection | Keep away from heat source.<br>Not combustible.  |   |                        |

## 8 Exposure controls / Personal protection

| 8.1   | Technical measures            | Use only with adequate ventilation.   |
|-------|-------------------------------|---|
| 8.2   | Control of threshold limits   | MAK-Value = TLV (USA): 1 mg/m3  |
| 8.3   | Personal protective equipment |   |
| 8.3.1 | Respiratory protection        | Respiratory Protection.   |
| 8.3.2 | Hand protection               | Rubber gloves.  |
| 8.3.3 | Eye protection                | Eye wash fountain should be located in immediate work area.<br>Safety goggles or face-shield. |
| 8.3.4 | Other                         | Remove contaminated clothing immediately, wash skin area with water, and launder clothing.    |

| 9   | Physical and chemical properties |                       |              |
|-----|----------------------------------|-----------------------|--------------|
| 9.1 | Appearance                       | liquid                |              |
| 9.2 | Colour                           | blue                  |              |
| 9.3 | Odour                            | practically odourless |              |
| 9.4 | Change of physical state         |                       | Test method: |
|     |                                  | not applicable        |              |
| 9.5 | Density                          |                       |              |
|     |                                  | not determined        |              |

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| 9.6   | Vapour pressure                  |  |  |                        |
|   |                                  | not applicable                                   |  |                        |
| 9.7   | Viscosity                        | not known  |  |                        |
| 9.8   | Solubility                       | not known  |  |                        |
|   | Solubility in                    |  |  |                        |
|   |                                  | soluble  |  |                        |
|   |                                  |  |  |                        |
|   |                                  |  |  |                        |
| 9.9   | рН                               | < 1  |  |                        |
| 9.10  | Flash point                      | not flammable                                    |  |                        |
| 911   | Ignition temperature             |  |  |                        |
| <i>,</i>  |                                  | not applicable                                   |  |                        |
| 9.12  | Explosion limits                 | Lower:   |  |                        |
|   |                                  | Upper:<br>not applicable                         |  |                        |
| 9.13  | Further information              | None.  |  |                        |
| 10  | Stability and reactivity         |  |  |                        |
| 10.1  | Thermal decomposition            | None, if used                                    | in accordance to instructions.                                       |                        |
| 10.2  | Hazardous decomposition products | None under normal conditions of storage and use. |  |                        |
| 10.3  | Hazardous reactions              | Avoid excess                                     | ive heat and direct sunlight.  |                        |
| 10.4  | Further information              | None.  |  |                        |
| 11  | Toxicological information        |  |  |                        |
| 11.1  | Acute toxicity                   | Ingestion may                                    | v cause burns of mouth and throat.                                   |                        |
|   |                                  | May cause se<br>measures).                       | vere eye irritation. Eye Contact: (s                                 | see 4.1., First aid    |
|   |                                  | Due to the pH                                    | I of this material, it is assumed that                               | at exposure will cause |
|   |                                  | skin burns.<br>The oral LD5                      | 0 for rats is 4135 mg/kg   |                        |
| 11.2  | Subacute / Chronic toxicity      | not known  |  |                        |
| 11.3  | Further information              | None.  |  |                        |
| 12  | Ecological information           | the soil.  | nust not enter effluent, ground wa<br>ssergefaehrdungs Klasse (WGK)" |                        |

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| 13  | Disposal considerations | Take to a special w regulations.   |           | incineration plant, in line with local      |                       |
| 13.1  | EU waste key            | 16 05 04   |           |   |                       |
| 14  | Transport information   |  |           |   |                       |
| 14.1  | Transport at land       | ADR  | 8         | RID   | 8                     |
|   |                         | UN Number<br>Packing Grou<br>Proper shippi   | -         | Kemler Numb<br>III<br>Phosphoric acid solut |                       |
| 14.2  | Transport at sea        | ADNR   | 8         | IMDG  | 32-04                 |
|   |                         | UN Number<br>EMS<br>Packing Grou<br>Proper shippi  | -         | MFAG<br>III<br>Phosphoric acid, solu        | 700<br>tion           |
| 14.3  | Air transport           | ICAO / IATA<br>UN Number<br>Proper shippi  |           | Class 8<br>1805<br>Phosphoric acid, solu    | tion                  |
|   | Passenger airplane      | Subsidiary Ri<br>Labels<br>Packing Grou<br>Packing Instru  | p         | <br>Corrosive<br>III<br>819                 |                       |
|   | Cargo Airplane          | max.<br>Packing Instr  | uctions   | 5 L<br>821                                  |                       |
|   |                         | max.   |           | 60 L  |                       |
| 14.4  | Further information     | Sample shipment not allowed by mail.   |           |   |                       |
| 15  | Regulatory information  | The product is a medical device according to the EC-directive<br>93/42/EEC.<br>This product is classified as a medical device under US and<br>Canadian regulations and has been reviewed by the US Food and<br>Drug Administration and Health Canada.<br>This product requires classification according to the criteria of the<br>"Gefahrstoffverordnung". |           |   |                       |
| 15.1  | UN number               | 1805   |           |   |                       |
| 15.2  | National regulations    |  |           |   |                       |
|   |                         |  |           |   |                       |

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| 15.4 Hazard symbols  | C   |  | 14600010         |
| 15.5 Hazard designation  | rd designation C: Corrosive. Contains Phosphoric acid, Solution in Water. |  |                  |
| 15.6 Risk phrases  | R: 34   |  |                  |
|  | 34  | Causes burns.  |                  |
| 15.7 Safety phrases  | S: 2-26-45-1  | /2-37/39   |                  |
|  | 2   | Keep out of the reach of children.                                       |                  |
|  | 26  | In case of contact with eyes, rinse<br>plenty of water and seek medical  | immediately with |
|  | 45  | In case of accident or if you feel u<br>advise immeditely (show the labe |                  |
|  | 1/2   | Keep locked up and out of reach  | of children.     |
|  | 37/39   | Wear suitable gloves and eye/face  | e protection.    |
| 15.8 MAK value   | 1 mg/m <sup>3</sup>   |  |                  |
| 15.9 BVD classification (CH)   |   |  |                  |
| 15.10 VbF (D)  |   |  |                  |
| 15.11 Further information  | None.   |  |                  |
| 16 Other information   | Version: 4<br>Changes: 14   |  |                  |

The above mentioned data correspond to our present state of knowledge and experience. The safety data sheet serves as description of the products in regard to necessary safety measures. The indications do not have the meaning of guarantees on properties.

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