

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 21.06.2013

Version: 1

Revision: 21.06.2013

### 1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** ENA CEM Z PRIMER
- **Article number:** CPCZP
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the preparation** Dental bonding material
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Micerium spa., Via G. Marconi, 83 - 16036 Avegno (GE), Italy, Tel.: +39-0185-7887870, Fax: +39-0185-7887970
- **Further information obtainable from:** Dr. Eugenio Miceli
- **Emergency telephone number:**  
Poison Control Center San Martino Hospital (Genoa, Italy) Tel.: +39-010-352808 (available 24 h)

### 2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC not applicable**
- **Information concerning particular hazards for human and environment:**  
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system:**  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms** GHS02
- **Signal word** Warning
- **Hazard statements**  
H226 Flammable liquid and vapour.
- **Precautionary statements**

|                |  |
|----------------|--|
| P210           | Keep away from heat/sparks/open flames/hot surfaces. - No smoking.   |
| P241           | Use explosion-proof electrical/ventilating/lighting/equipment.   |
| P280           | Wear protective gloves/protective clothing/eye protection/face protection.                                 |
| P240           | Ground/bond container and receiving equipment.   |
| P303+P361+P353 | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P501           | Dispose of contents/container in accordance with local/regional/national/international regulations.        |
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

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

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**· Dangerous components:**

CAS: 64-17-5  
EINECS: 200-578-6

ethanol



F R11



Flam. Liq. 2, H225

75-100%

**· Additional information** For the wording of the listed risk phrases refer to section 16.**4 First aid measures****· Description of first aid measures****· After inhalation** Supply fresh air; consult doctor in case of complaints.**· After skin contact** Immediately wash with water and soap and rinse thoroughly.**· After eye contact**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

**· After swallowing**

Rinse out mouth and then drink plenty of water.

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 Firefighting measures****· Extinguishing media****· Suitable extinguishing agents**

Water spray

Carbon dioxide

Fire-extinguishing powder

Foam

**· For safety reasons unsuitable extinguishing agents** Water with full jet.**· Special hazards arising from the substance or mixture** No further relevant information available.**· Advice for firefighters****· Protective equipment:** No special measures required.**6 Accidental release measures****· Personal precautions, protective equipment and emergency procedures**

Do not inhale vapours.

Wear protective equipment. Keep unprotected persons away.

Keep away from ignition sources

**· Environmental precautions:** 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.

**7 Handling and storage****· Handling****· Precautions for safe handling** No special precautions are necessary if used correctly.**· Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.

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Protect against electrostatic charges.

- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** Storage between 10 °C and 25 °C.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
  - Keep receptacle tightly sealed.
  - Store in cool, dry conditions in well sealed receptacles.
- **Storage class** 3A
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

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

|  |
|--|
| · <b>Ingredients with limit values that require monitoring at the workplace:</b> |
|--|

|                        |
|------------------------|
| <b>64-17-5 ethanol</b> |
|------------------------|

|  |
|--|
| WEL Long-term value: 1920 mg/m <sup>3</sup> , 1000 ppm |
|--|

- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures** Wash hands before breaks and at the end of work.
- **Respiratory protection:** Not necessary if room is well-ventilated.
- **Protection of hands:** Protective gloves.
- **Material of gloves** Butyl rubber, BR
- **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.
- **Eye protection:** Safety glasses

## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

|                         |                 |
|-------------------------|-----------------|
| <b>Form:</b>            | Fluid           |
| <b>Colour:</b>          | Colourless      |
| <b>Odour:</b>           | Alcohol-like    |
| <b>Odour threshold:</b> | Not determined. |
- **pH-value:** Not determined.
- **Change in condition**

|                                     |           |
|-------------------------------------|-----------|
| <b>Melting point/Melting range:</b> | -114.5 °C |
| <b>Boiling point/Boiling range:</b> | 78 °C     |
- **Flash point:** 13 °C
- **Flammability (solid, gaseous)** Not applicable.
- **Ignition temperature:** 425 °C
- **Decomposition temperature:** Not determined.
- **Self-igniting:** Product is not selfigniting.

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|   |  |
|---|--|
| · <b>Danger of explosion:</b>                             | <i>Product is not explosive. However, formation of explosive air/vapour mixtures are possible.</i> |
| · <b>Explosion limits:</b>                                |  |
| <b>Lower:</b>   | 3.5 Vol %  |
| <b>Upper:</b>   | 15 Vol %   |
| · <b>Vapour pressure at 20 °C:</b>                        | 59 hPa   |
| · <b>Density at 20 °C:</b>                                | 0.79 g/cm <sup>3</sup>   |
| · <b>Relative density</b>                                 | <i>Not determined.</i>   |
| · <b>Vapour density</b>                                   | <i>Not determined.</i>   |
| · <b>Evaporation rate</b>                                 | <i>Not determined.</i>   |
| · <b>Solubility in / Miscibility with Water at 20 °C:</b> | 1 g/l  |
| · <b>Partition coefficient (n-octanol/water):</b>         | <i>Not determined.</i>   |
| · <b>Viscosity:</b>                                       |  |
| <b>dynamic:</b>   | <i>Not determined.</i>   |
| <b>kinematic:</b>   | <i>Not determined.</i>   |
| · <b>Other information</b>                                | <i>No further relevant information available.</i>  |

### 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** *No decomposition if used 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.*
- **Hazardous decomposition products:** *No dangerous decomposition products known*

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values relevant for classification:**

|         |                 |                |
|---------|-----------------|----------------|
| Ethanol | LD-50 oral      | 7060 mg/kg rat |
|         | LC-50 inhalativ | 20000 mg/l rat |
- **Primary irritant effect:**
- **on the skin:** *Drying out of skin possible*
- **on the eye:** *No irritating effect.*
- **Sensitization:** *Sensitizing effect by skin contact is possible by prolonged exposure.*

### 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** *No further relevant information available.*
- **Persistence and degradability** *No further relevant information available.*
- **Other information:** *The product is biodegradable.*
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** *No further relevant information available.*
- **Mobility in soil** *No further relevant information available.*

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- **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.
- **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**  
After prior treatment product has to be disposed of in an incinerator for hazardous waste adhering to the regulations pertaining to the disposal of particularly hazardous waste.

|                                   |
|-----------------------------------|
| · <b>European waste catalogue</b> |
|-----------------------------------|

|  |
|--|
| 07 01 04*   other organic solvents, washing liquids and mother liquors |
|--|

- **Uncleaned packaging:**
- **Recommendation:**  
Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

**14 Transport information**

- |   |  |
|---|--|
| · <b>UN-Number</b>  | UN1170   |
| · <b>ADR, IMDG, IATA</b>  |  |
| · <b>UN proper shipping name</b>  | 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) |
| · <b>ADR</b>  | ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)      |
| · <b>IMDG</b>   | ETHANOL SOLUTION                               |
| · <b>IATA</b>   |  |
| · <b>Transport hazard class(es)</b>   |  |
| · <b>ADR</b>  |  |
|  |  |
| · <b>Class</b>  | 3 (F1) Flammable liquids.                      |
| · <b>Label</b>  | 3  |
| -----   |  |
| · <b>IMDG, IATA</b>   |  |
|  |  |
| · <b>Class</b>  | 3 Flammable liquids.                           |
| · <b>Label</b>  | 3  |
| · <b>Packing group</b>  | III  |
| · <b>ADR, IMDG, IATA</b>  |  |
| · <b>Environmental hazards:</b>   |  |
| · <b>Marine pollutant:</b>  | No   |

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|  |  |
|--|--|
| · <b>Special precautions for user</b>  | Warning: <i>Flammable liquids.</i>                               |
| · <b>Danger code (Kemler):</b>   | 30   |
| · <b>EMS Number:</b>   | F-E,S-D  |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable.  |
| · <b>Transport/Additional information:</b>                                       |  |
| · <b>ADR</b>   |  |
| · <b>Limited quantities (LQ)</b>   | 5L   |
| · <b>Transport category</b>  | 3  |
| · <b>Tunnel restriction code</b>   | D/E  |
| · <b>UN "Model Regulation":</b>  | UN1170, <i>ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, III</i> |

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations**
- **Technical instructions (air):**

| Class | Share in % |
|-------|------------|
| NK    | 75-100     |

- **Waterhazard class:** *Water hazard class 1 (Self-assessment): slightly hazardous for water.*
- **Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

### 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**

*H225 Highly flammable liquid and vapour.*

*R11 Highly flammable.*

- **Department issuing MSDS:** *Micerium S.p.a.*

- **Contact:** *Dr. Eugenio Miceli*

- **Abbreviations and acronyms:**

*RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)*

*ICAO: International Civil Aviation Organization*

*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*

*IMDG: International Maritime Code for Dangerous Goods*

*IATA: International Air Transport Association*

*GHS: Globally Harmonized System of Classification and Labelling of Chemicals*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*