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

· 1.1 Product identifier

· Trade name: ENA CEM Z PRIMER

· Article number: CPCZP

· 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 Dental bonding material

· 1.3 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
- · 1.4 Emergency telephone number:

Poison Control Center San Martino Hospital (Genoa, Italy) Tel.: +39-010-352808 (available 24 h)

SECTION 2: Hazards identification

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

Flam. Liq. 3 H226 Flammable liquid and vapour.

- · 2.2 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.

- · Labelling of packages where the contents do not exceed 125 ml
- · Hazard pictograms



GHS02

- · Signal word Warning
- · Hazard statements Void
- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.

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· vPvB: Not applicable.

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SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.
- · Dangerous components:

CAS: 64-17-5 ethanol

EINECS: 200-578-6

🅸 Flam. Liq. 2, H225

75-100%

· Additional information For the wording of the listed hazard phrases refer to section 16.

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 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.

- 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

Water spray

Carbon dioxide

Fire-extinguishing powder

Foam

- · For safety reasons unsuitable extinguishing agents Water with full jet.
- 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

Do not inhale vapours.

Wear protective equipment. Keep unprotected persons away.

Keep away from ignition sources

- $\cdot \textbf{ 6.2 Environmental precautions:} \ Do \ not \ allow \ to \ enter \ sewers/ \ surface \ or \ ground \ water.$
- · 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.

· 6.4 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.

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SECTION 7: Handling and storage

- · 7.1 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.

Protect against electrostatic charges.

- · 7.2 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
- \cdot 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:

64-17-5 ethanol

WEL Long-term value: 1920 mg/m³, 1000 ppm

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 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

 $0,1 - 0,2 \ mm$

Penetration time: 5 min.
• Eye protection: Safety glasses

SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information

· Appearance:

Form: Fluid
Colour: Colourless

Odour: Alcohol-like
Odour threshold: Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range: -114.5 °C
Boiling point/Boiling range: 78 °C

Flash point: 13 °C

· Flammability (solid, gaseous) Not applicable.

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Trade name: ENA CEM Z PRIMER

	(Contd. of page	
· Ignition temperature:	425 °C	
· Decomposition temperature:	Not determined.	
· Self-igniting:	Product is not selfigniting.	
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapoumixtures are possible.	
· Explosion limits:		
Lower:	3.5 Vol %	
Upper:	15 Vol %	
· Vapour pressure at 20 °C:	59 hPa	
· Density at 20 °C:	$0.79 \ g/cm^3$	
· Relative density	Not determined.	
· Vapour density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water at 20 °C:	1 g/l	
· Partition coefficient (n-octanol/w	ater): 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.
- $\cdot \textbf{10.5 Incompatible materials:} \ \textit{No further relevant information available}.$
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.
- · LD/LC50 values relevant for classification:

Ethanol LD-50 oral 10470 mg/kg rat OECD 401 LC-50 inhalativ 117 mg/l rat OECD 402

- · Primary irritant effect:
- · Skin corrosion/irritation Drying out of skin possible
- · 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 (carcinogenity, 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.

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· 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.
- · Other information: The product is biodegradable.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · 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

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.

· European waste catalogue

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.

SECTION	14: Trans	port in	<i>formation</i>

· 14.1 UN-Number · ADR, IMDG, IATA	UN1170
· 14.2 UN proper shipping name	
$\cdot ADR$	1170 ETHANOL SOLUTION (ETHYL ALCOHOL
	SOLUTION)
· IMDG	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
. IATA	ETHANOL SOLUTION

- · 14.3 Transport hazard class(es)
- $\cdot ADR$



· Class 3 (F1) Flammable liquids.

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Trade name: ENA CEM Z PRIMER

	(Contd. of page	
Label	3	
IMDG, IATA		
Class	3 Flammable liquids.	
Label	3	
14.4 Packing group		
ADR, IMDG, IATA	III	
14.5 Environmental hazards:		
Marine pollutant:	No	
14.6 Special precautions for user	Warning: Flammable liquids.	
Danger code (Kemler):	30	
EMS Number:	F-E,S-D A	
Stowage Category		
14.7 Transport in bulk according to Ann Marpol and the IBC Code	ex II of Not applicable.	
	ної аррисавіє.	
Transport/Additional information:		
ADR		
Limited quantities (LQ)	5L Code: E1	
Excepted quantities (EQ)	Coae: E1 Maximum net quantity per inner packaging: 30 ml	
	Maximum net quantity per timer packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml	
Transport category	3	
Tunnel restriction code	D/E	
<i>IMDG</i>		
Limited quantities (LQ)	5L	
Excepted quantities (EQ)	Code: E1	
	Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml	
UN ''Model Regulation'':	UN 1170 ETHANOL SOLUTION (ETHYL ALCOHO SOLUTION), 3, III	

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category P5c FLAMMABLE LIQUIDS
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- · National regulations
- · Technical instructions (air):

Class	Share in %
NK	75-100

· Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

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· 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

H225 Highly flammable liquid and vapour.

- · Department issuing SDS: 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 Organisation

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 Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids - Category 2

Flam. Liq. 3: Flammable liquids – Category 3

* * Data compared to the previous version altered.