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

- · Product identifier
- · Trade name: Enamel Plus HFO/-Flow/Stain Flow/Glass Connector
- · Article number: CHF../CHIM/CHO../CHU../COSVIT../COSHF../COSTAIN../ CHG.../COSHOBN/ CE.../CFF../CHF...
- · Relevant identified uses of the substance or mixture and uses advised against
- · Application of the substance / the preparation Dental filling material
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

GDF mbH, Dieselstrasse 5-6, D-61191 Rosbach v.d.H. (Germany)

Tel.: +49(0)6003/814-100, Fax: +49(0)6003/814-901

www.gdfmbh.com; e-mail: info@gdfmbh.com

Distributor:

Micerium spa., Via G. Marconi, 83 - 16036 Avegno (GE), Italy, Tel.: +39-0185-7887870, Fax: +39-0185-7887970

- · Further information obtainable from: F&E, Tel. +49 (0)6003/814-100
- Emergency telephone number: +49 (0)6003/814-0 (8:00-17:00 h)

### 2 Hazards identification

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

The product is not classified according to the CLP regulation.

- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC not applicable
- · Information concerning particular hazards for human and environment:

The product does not have 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 Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

### 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description:

1,4-Butandioldimethacrylate Urethandimethacrylate

Bis-GMA

- · Dangerous components: Void
- · Additional information For the wording of the listed risk phrases refer to section 16.

#### 4 First aid measures

- · Description of first aid measures
- · General information No special measures required.
- · After inhalation Supply fresh air; consult doctor in case of complaints.

(Contd. on page 2)

Trade name: Enamel Plus HFO/-Flow/Stain Flow/Glass Connector

(Contd. of page 1)

· After skin contact

If skin irritation continues, consult a doctor.

Immediately wash with water and soap and rinse thoroughly.

- · After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing Do not induce vomiting; call for medical help immediately.
- · 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

Foam

Fire-extinguishing powder

Water haze

Carbon dioxide

- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- **Protective equipment:** Wear self-contained respiratory protective device.

#### 6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures 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: Pick up mechanically.
- · Reference to other sections No dangerous substances are released.

#### 7 Handling and storage

- · Handling
- · Precautions for safe handling Keep receptacles tightly sealed.
- · Information about fire and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · Conditions for safe storage, including any incompatibilities
- ·Storage
- · Requirements to be met by storerooms and receptacles:

Close container immediately after use and protect product from light incidence.

- · Information about storage in one common storage facility: Store away from foodstuffs.
- · Further information about storage conditions: Protect from heat and direct sunlight.
- · 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
- · Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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

(Contd. on page 3)

Trade name: Enamel Plus HFO/-Flow/Stain Flow/Glass Connector

(Contd. of page 2)

- · Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

Keep away from foodstuffs, beverages and feed.

Avoid contact with the eyes and skin.

Wash hands before breaks and at the end of work.

- · Respiratory protection: Not required.
- · Protection of hands: Protective gloves and protective skin cream.
- · Material of gloves Natural rubber, NR
- · 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.

### 9 Physical and chemical properties

Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Viscous

Colour: Different according to colouring

· Odour: Weak, characteristic

· Change in condition

Melting point/Melting range: undetermined Boiling point/Boiling range: undetermined

· Flash point: 101°C

• **Ignition temperature:** 370°C

· Self-igniting: Product is not selfigniting.

• **Danger of explosion:** Product does not present an explosion hazard.

· Density: Not determined

· Solubility in / Miscibility with

Water: Insoluble

· Viscosity:

dynamic: Not determined. kinematic: Not determined.

· Solvent content:

Organic solvents: 0.0 %

*Other information* No further relevant information available.

### 10 Stability and reactivity

- · Reactivity
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions

Photoreactive

Danger of polymerization

- · Conditions to avoid No further relevant information available.
- · Incompatible materials:

In presence of radical formers (e. g. peroxides), deoxidizing substances, and/or heavy metal ions, polymerization with heat release is possible.

(Contd. on page 4)

Trade name: Enamel Plus HFO/-Flow/Stain Flow/Glass Connector

(Contd. of page 3)

· Hazardous decomposition products: No dangerous decomposition products known

### 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- Primary irritant effect:
- · on the skin: Not determined
- · on the eye: Not determined
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

#### 12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Do not allow product to reach ground water, water course or sewage system.

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.

Danger to drinking water if even small quantities leak into the ground.

- · 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 Must be specially treated adhering to official regulations.
- · European waste catalogue

08 04 10 waste adhesives and sealants other than those mentioned in 08 04 09

- · Uncleaned packaging:
- · Recommendation:

Disposal must be made according to official regulations.

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

· Recommended cleansing agents: Alcohol

#### 14 Transport information

- · UN-Number
- · ADR, ADN, IMDG, IATA Void
- · UN proper shipping name
- · ADR, ADN, IMDG, IATA Void

(Contd. on page 5)

Trade name: Enamel Plus HFO/-Flow/Stain Flow/Glass Connector

		(Contd. of page
· Transport hazard class(es)		
· ADR, ADN, IMDG, IATA		
· Class	Void	
· Packing group		
· ADR, IMDG, IATA	Void	
Environmental hazards:		
· Marine pollutant:	No	
· Special precautions for user	Not applicable.	
· Transport in bulk according to Annex	II of	
MARPOL73/78 and the IBC Code	Not applicable.	
· UN "Model Regulation":	-	

### 15 Regulatory information

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

Class	Share in %
III	2,5-10

- · Waterhazard class: Water hazard class 2 (Self-assessment): 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.

- · Department issuing MSDS: F&E GDF GmbH
- · Contact: Dr. U. Krichbaum
- · Abbreviations and acronyms:

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

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

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

\* Data compared to the previous version altered.

GB

Printing date 30.01.2012 Version: 9 Revision: 30.01.2012

I Identification of the substance/mixture and of the company/undertaking

· Product identifier

· Trade name: ENA Bond

· Article number: COSM300A/A2

- · Relevant identified uses of the substance or mixture and uses advised against
- · 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. 2 H225 Highly flammable liquid and vapour.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC



F; Highly flammable

R11: Highly flammable.

· 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 Danger
- · Hazard statements

H225 Highly 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.

GB

Trade name: ENA Bond

(Contd. of page 1)

### 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description:

Solution of modified acrylic acid, polyacrylic acid, methacrylate, catalysts and stabilisators in ethanol

· Dangerous components:

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

ethanol

F R11
Flam. Liq. 2, H225

50-75%

· 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 rinse with water.
- · After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing Call a doctor immediately.
- · 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.

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 8 for information on personal protection equipment.

See Section 13 for disposal information.

#### 7 Handling and storage

- · Handling
- · Precautions for safe handling No special measures required.
- · Information about fire and explosion protection:

Keep ignition sources away - Do not smoke.

(Contd. on page 3)

Trade name: ENA Bond

(Contd. of page 2)

Protect against electrostatic charges.

- · Conditions for safe storage, including any incompatibilities
- · Storage
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Store away from foodstuffs.
- · Further information about storage conditions: 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
- · 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.
- · 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: Solvent resistant gloves
- · Material of gloves Butyl rubber, BR
- · 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: Safety glasses

### 9 Physical and chemical properties

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

Form: Fluid Colour: Yellow

· Odour: Weak, characteristic

· pH-value at  $20^{\circ}C$ :

· Change in condition

Melting point/Melting range: undetermined

**Boiling point/Boiling range:** 78°C

Flash point: 12°C
 Ignition temperature: 425°C

· Self-igniting: Product is not selfigniting.

• Danger of explosion: Product is not explosive. However, formation of explosive air/vapour

mixtures are possible.

· Explosion limits:

 Lower:
 3.5 Vol %

 Upper:
 15.0 Vol %

• Vapour pressure at  $20^{\circ}C$ : 59 hPa

(Contd. on page 4)

Trade name: ENA Bond

(Contd. of page 3)

• Density at  $20^{\circ}C$ : 0.79 g/cm<sup>3</sup>

· Solubility in / Miscibility with

Water: Fully miscible

· Viscosity:

**dynamic at 20°C:** 1200 mPas

· Solvent content:

*Organic solvents:* 75.0 %

• Other information No further relevant information available.

### 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:

No irritant effect.

Drying out of skin possible

- · on the eye: Slightly irritating.
- · 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.
- · 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.

(Contd. on page 5)

Printing date 30.01.2012 Version: 9 Revision: 30.01.2012

Trade name: ENA Bond

· Other adverse effects No further relevant information available.

(Contd. of page 4)

### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation

On the basis of the necessary technical regulations and after consultation with the disposal agent and the relevant authorities, can be disposed of with domestic waste or incinerated with domestic waste.

· European waste catalogue

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

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.

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· ADR, IMDG, IATA

UN1170

· UN proper shipping name

· ADR

1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

· IMDG ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

ETHANOL SOLUTION

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

 $\cdot$  IATA



· Class 3 (F1) Flammable liquids.

· Label

· IMDG, IATA



· Class 3 Flammable liquids.

· Label

· Packing group

· ADR, IMDG, IATA II

· Environmental hazards:

· Marine pollutant: No

· Special precautions for user Warning: Flammable liquids.

· Danger code (Kemler): 33

· EMS Number: F-E,S-D

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

(Contd. on page 6)

Trade name: ENA Bond

	(Contd. of page 5)
· Transport/Additional information:	
· ADR · Tunnel restriction code	D/E
· UN ''Model Regulation'':	UN1170, ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II

### 15 Regulatory information

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

Class	Share in %
III	50-75

- · 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:

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

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

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

·\* Data compared to the previous version altered.

GB

Printing date 28.02.2012 Version: 2 Revision: 28.02.2012

I Identification of the substance/mixture and of the company/undertaking

· Product identifier

· Trade name: EnaPost

· Article number: CP02.. CP10..

- · Relevant identified uses of the substance or mixture and uses advised against
- · Application of the substance / the preparation

Resin

Auxiliary for manufacture of dental prothesis

- · 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

The product is not classified according to the CLP regulation.

- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC not applicable
- · Information concerning particular hazards for human and environment:

The product does not have 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 Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements

Safety data sheet available on request.

- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

### 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Resin mixture with colouring agents.
- · Dangerous components: Void
- · Additional information For the wording of the listed risk phrases refer to section 16.

### 4 First aid measures

- · Description of first aid measures
- · General information No special measures required.
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact If skin irritation continues, consult a doctor.
- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing

Rinse out mouth and then drink plenty of water.

(Contd. on page 2)

Trade name: EnaPost

(Contd. of page 1)

Call a doctor immediately.

- · 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

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant 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

Avoid eye and skin contact with the substance.

- · 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).

Dispose contaminated material as waste according to item 13.

· Reference to other sections No dangerous substances are released.

### 7 Handling and storage

- · Handling
- · Precautions for safe handling Keep away from heat and direct sunlight.
- · Information about fire and explosion protection: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles:

Close container immediately after use and protect product from light incidence.

- · Information about storage in one common storage facility: Store away from foodstuffs.
- · Further information about storage conditions: None.
- · 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
- · Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists valid during the making were used as basis.
- · 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 necessary if room is well-ventilated.
- · Protection of hands: Protective gloves.

(Contd. on page 3)

 Printing date 28.02.2012
 Version: 2
 Revision: 28.02.2012

Trade name: EnaPost

(Contd. of page 2)

- $\cdot \textit{Material of gloves} \ \textit{Butyl rubber, BR}$
- · 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: Safety glasses
- · Body protection: Protective work clothing.

9 Physical and chemical propert	ies
· Information on basic physical and cl	hemical properties
· General Information	tentical properties
· Appearance:	
Form:	Viscous
Colour:	Whitish
	Cloudy
· Odour:	Weak, characteristic
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	< - 20 ° C
Boiling point/Boiling range:	251°C
· Flash point:	101°C
· Flammability (solid, gaseous)	Not applicable.
· Ignition temperature:	
Decomposition temperature:	Not determined.
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure:	1,3 mbar (110 ° C)
· Density:	Not determined
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix
· Segregation coefficient (n-octanol/w	ater): Not determined.
· Viscosity:	
dynamic:	Not determined.
kinematic:	Not determined.
· Solvent content:	
Organic solvents:	0.0 %
· Other information	No further relevant information available.

Trade name: EnaPost

(Contd. of page 3)

### 10 Stability and reactivity

- · Reactivity
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions Exothermic polymerization
- · Conditions to avoid No further relevant information available.
- · Incompatible materials:

In presence of radical formers (e. g. peroxides), deoxidizing substances, and/or heavy metal ions, polymerization with heat release is possible.

· Hazardous decomposition products: No dangerous decomposition products known

### 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- LD/LC50 values relevant for classification: tetramethylene dimethacrylate oral 10120 mg/kg rat
- · Primary irritant effect:
- · on the skin: Slightly irritating.
- · on the eye: Slightly irritating.
- · Sensitization: Sensitizing effect by skin contact is possible by prolonged exposure.
- · Additional toxicological information:

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

#### 12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

- · 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.

Smaller quantities can be disposed of with household waste.

· European waste catalogue

08 04 10 waste adhesives and sealants other than those mentioned in 08 04 09

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Trade name: EnaPost

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- · Uncleaned packaging:
- · Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning. Packagings that may not be cleansed are to be disposed of in the same manner as the product.

· Recommended cleansing agents: Ethyl acetate

UN-Number	
· ADR, ADN, IMDG, IATA	Void
· UN proper shipping name	
ADR, ADN, IMDG, IATA	Void
· Transport hazard class(es)	
ADR, ADN, IMDG, IATA	
· Class	Void
Packing group	
· ADR, IMDG, IATA	Void
Environmental hazards:	
· Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex II o	f
MARPOL73/78 and the IBC Code	Not applicable.

### 15 Regulatory information

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

Class	Share in %
III	10-25

- · Waterhazard class: Water hazard class 2 (Self-assessment): 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.

- · Department issuing MSDS: Micerium S.p.a.
- · Contact: Dr. Eugenio Miceli
- · Abbreviations and acronyms:

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

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

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

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# Safety data sheet according to 1907/2006/EC, Article 31

Trade name: EnaPost

LD50: Lethal dose, 50 percent

(Contd. of page 5)

\* Data compared to the previous version altered.

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