Printing date 02.01.2014 Revision: 02.01.2014

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

- · Product details
- · Trade name: Cimara Opaquer LC
- · Application of the substance / the preparation Pigment varnish
- · Manufacturer/Supplier:

VOCO GmbH

Anton-Flettner-Str. 1-3 D-27472 Cuxhaven

- · Further information obtainable from: Scientific department tel. +49 (0)4721-719-0
- · Information in case of emergency: Poison Control Center Mainz +49 (0)6131-19240

2 Hazards identification

· Hazard description:

Xi Irritant

· 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.

R 36/38 Irritating to eyes and skin.

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

· Additional information: Use only for intended scope of application

3 Composition/information on ingredients

- · Chemical characterization
- $\cdot \textit{Description:} \ \textit{Mixture of substances listed below with nonhazardous additions.}$

· Dangerous components:			
CAS: 1565-94-2	BIS-GMA	Xi; R 36/38	10-25%
CAS: 72869-86-4 EINECS: 276-957-5	Urethanedimethacrylate 1	R 52/53	10-25%
CAS: 6606-59-3	HEDMA	Xi, N; R 36/37/38-51/53	10-25%
	Catalyst	Xn, Xi, N; R 20/22-36/38-50	≤ 2.5%
	Benzotriazole derivate	Xi; R 43-53	≤ 2.5%

4 First aid measures

- · After inhalation: Seek medical treatment 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: If symptoms persist consult doctor.

5 Fire-fighting measures

- · Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- · Protective equipment: No special measures required.

6 Accidental release measures

- · Person-related safety precautions: Not required.
- · Measures for environmental protection: Do not allow to enter sewers/ surface or ground water.

(Contd. on page 2)

Printing date 02.01.2014 Revision: 02.01.2014

Trade name: Cimara Opaquer LC

· Measures for cleaning/collecting:

(Contd. of page 1)

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

7 Handling and storage

- · Handling:
- · Information for safe handling: For dental use only.
- · Information about fire and explosion protection: No special measures required.
- · Storage:
- · Requirements to be met by storerooms and receptacles: See storage instructions on package
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep container tightly sealed.

8 Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · 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.
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- · Respiratory protection: Not required.
- · Protection of hands:



Protective gloves

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· 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

· General Information

Form: Pasty
Colour: Whitish
Odour: Characteristic

· Change in condition

Melting point/Melting range: Undetermined. Boiling point/Boiling range: Undetermined.

• Flash point: 169°C

(Contd. on page 3)

Printing date 02.01.2014 Revision: 02.01.2014

Trade name: Cimara Opaquer LC

	(Contd. of page 2)
· 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:	Not miscible or difficult to mix.

10 Stability and reactivity

- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Dangerous reactions No dangerous reactions known.
- · Dangerous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

12 Ecological information

- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow product to reach ground water, water course or sewage system.

13 Disposal considerations

- · Product:
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information

- · Land transport ADR/RID (cross-border)
- · ADR/RID class:
- · Maritime transport IMDG:
- · IMDG Class: -
- · Marine pollutant: No

(Contd. on page 4)

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Trade name: Cimara Opaquer LC

(Contd. of page 3)

- · Air transport ICAO-TI and IATA-DGR:
- · ICAO/IATA Class: -

15 Regulatory information

· Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· Code letter and hazard designation of product:



Xi Irritant

· Risk phrases:

36/38 Irritating to eyes and skin.

· Safety phrases:

24/25 Avoid contact with skin and eyes.

37 Wear suitable gloves.

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: Scientific departement
- · Contact: Tel.: +49 (0)4721-719-0

GB

Printing date 02.01.2014 Revision: 02.01.2014

1 Identification of the substance/preparation and of the company/undertaking

- · Product details
- · Trade name: Cimara coupling silane
- · Application of the substance / the preparation Dental bonding material
- · Manufacturer/Supplier:

VOCO GmbH

Anton-Flettner-Str. 1-3 D-27472 Cuxhaven

- · Further information obtainable from: Scientific department tel. +49 (0)4721-719-0
- · Information in case of emergency: Poison Control Center Mainz +49 (0)6131-19240

2 Hazards identification

· Hazard description:

Xi Irritant

F 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.

R 11 Highly flammable.

R 36 Irritating to eyes.

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

· Additional information: Use only for intended scope of application

3 Composition/information on ingredients

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

· 1	Dangerous	components:
-----	-----------	-------------

CAS: 67-63-0 propan-2-ol Xi, F; R 11-36-67 50-100% EINECS: 200-661-7

4 First aid measures

- · After inhalation: Seek medical treatment in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact:

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

· After swallowing: If symptoms persist consult doctor.

5 Fire-fighting measures

- · Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Protective equipment: No special measures required.

6 Accidental release measures

- Person-related safety precautions: Wear protective equipment. Keep unprotected persons away.
- Measures for environmental protection: Do not allow to enter sewers/surface or ground water.
- · Measures for cleaning/collecting:

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

(Contd. on page 2)

Printing date 02.01.2014 Revision: 02.01.2014

Trade name: Cimara coupling silane

Do not flush with water or aqueous cleansing agents

(Contd. of page 1)

7 Handling and storage

- · Handling:
- · Information for safe handling:

For dental use only.

Ensure good ventilation/exhaustion at the workplace.

- · Information about fire and explosion protection: Keep ignition sources away Do not smoke.
- · Storage:
- · Requirements to be met by storerooms and receptacles: See storage instructions on package
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep container tightly sealed.

See storage instructions on package

8 Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · Ingredients with limit values that require monitoring at the workplace:

67-63-0 propan-2-ol

WEL Short-term value: 1250 mg/m³, 500 ppm Long-term value: 999 mg/m³, 400 ppm

- · Additional information: The lists valid during the making were used as basis.
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· Protection of hands:



Protective gloves

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· 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

· General Information

Form: Fluid
Colour: Colourless
Odour: Characteristic

· Change in condition

Melting point/Melting range: Undetermined.

(Contd. on page 3)

Printing date 02.01.2014 Revision: 02.01.2014

Trade name: Cimara coupling silane

	(Contd. of page 2)
Boiling point/Boiling range:	Undetermined.
· Flash point:	13°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.
· Density at 20°C:	0.79 g/cm^3
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.

10 Stability and reactivity

- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Dangerous reactions No dangerous reactions known.
- · Dangerous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Acute toxicity:

· LD/LC50 values relevant for classification:			
67-63-0 propan-2-ol			
Oral	LD50	5045 mg/kg (rat)	
Dermal	LD50	12800 mg/kg (rabbit)	
Inhalative	LC50/4 h	30 mg/l (rat)	

- Primary irritant effect:
- · on the skin: No irritant effect.
- on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

12 Ecological information

- · 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.

13 Disposal considerations

- · Product:
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

(Contd. on page 4)

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Trade name: Cimara coupling silane

(Contd. of page 3)

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information

· Land transport ADR/RID (cross-border)



· ADR/RID class: 3 Flammable liquids.

· Danger code (Kemler): 33 · UN-Number: 1219 · Packaging group: II · Hazard label: 3

· Description of goods: 1219 ISOPROPANOL (ISOPROPYL ALCOHOL), mixture

· Limited quantities (LQ) LQ4 · Transport category 2 · Tunnel restriction code D/E

· Maritime transport IMDG:



· IMDG Class: 3
· UN Number: 1219
· Label 3
· Packaging group: II
· EMS Number: F-E,S-D
· Marine pollutant: No

· Proper shipping name: ISOPROPANOL (ISOPROPYL ALCOHOL), mixture

· Air transport ICAO-TI and IATA-DGR:



· ICAO/IATA Class: 3 · UN/ID Number: 1219 · Label 3 · Packaging group: II

· Proper shipping name: ISOPROPANOL (ISOPROPYL ALCOHOL), mixture

15 Regulatory information

· Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· Code letter and hazard designation of product:





Xi Irritant

F Highly flammable

· Risk phrases:

11 Highly flammable.

36 Irritating to eyes.

(Contd. on page 5)

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Trade name: Cimara coupling silane

(Contd. of page 4)

· Safety phrases:

- 7 Keep container tightly closed.
- 16 Keep away from sources of ignition No smoking.
- 24/25 Avoid contact with skin and eyes.
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 43 In case of fire, use sand, carbon dioxide or powdered extinguishing agent. Never use water.

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: Scientific departement
- · Contact: Tel.: +49 (0)4721-719-0

GB

Printing date 02.01.2014 Revision: 02.01.2014

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

- · Product details
- · Trade name: Cimara adhesive
- · Application of the substance / the preparation Dental bonding material
- · Manufacturer/Supplier:

VOCO GmbH

Anton-Flettner-Str. 1-3 D-27472 Cuxhaven

- Further information obtainable from: Scientific department tel. +49 (0)4721-719-0
- · Information in case of emergency: Poison Control Center Mainz +49 (0)6131-19240

2 Hazards identification

· Hazard description:

Xi Irritant

F 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.

R 11 Highly flammable.

R 36/38 Irritating to eyes and skin.

R 43 May cause sensitisation by skin contact.

Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data

· Additional information: Use only for intended scope of application

3 Composition/information on ingredients

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

· Dangerous components:			
CAS: 67-64-1 EINECS: 200-662-2		Xi, F; R 11-36-66-67	50-100%
CAS: 1565-94-2	BIS-GMA	Xi; R 36/38	10-25%
CAS: 868-77-9 EINECS: 212-782-2		Xi; R 36/38	5-10%
	Catalyst	Xn, Xi, N; R 20/22-36/38-50	<i>≤</i> 2.5%

4 First aid measures

· After inhalation:

Seek medical treatment in case of complaints.

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- · 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: If symptoms persist consult doctor.

5 Fire-fighting measures

- · Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- · For safety reasons unsuitable extinguishing agents: Water with full jet

(Contd. on page 2)

Printing date 02.01.2014 Revision: 02.01.2014

Trade name: Cimara adhesive

· Protective equipment: No special measures required.

(Contd. of page 1)

6 Accidental release measures

- · Person-related safety precautions: Wear protective equipment. Keep unprotected persons away.
- Measures for environmental protection: Do not allow to enter sewers/surface or ground water.
- Measures for cleaning/collecting:

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

Do not flush with water or aqueous cleansing agents

7 Handling and storage

- · Handling:
- · Information for safe handling: For dental use only.
- Information about fire and explosion protection: Keep ignition sources away Do not smoke.
- · Storage:
- Requirements to be met by storerooms and receptacles: See storage instructions on package
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep container tightly sealed.

8 Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · Ingredients with limit values that require monitoring at the workplace:

67-64-1 acetone

WEL Short-term value: 3620 mg/m³, 1500 ppm Long-term value: 1210 mg/m³, 500 ppm

- · Additional information: The lists valid during the making were used as basis.
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- · Respiratory protection: Not required.
- · Protection of hands:



Protective gloves

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· 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

- Gl

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Trade name: Cimara adhesive

(Contd. of page 2)

General Information	
Form:	Fluid
Colour:	Yellowish
Odour:	Characteristic
Change in condition Melting point/Melting range Boiling point/Boiling range:	
Flash point:	-12°C
Ignition temperature:	465°C
Self-igniting:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapou mixtures are possible.
	Not determined.

10 Stability and reactivity

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Dangerous reactions No dangerous reactions known.
- · Dangerous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Acute toxicity:

· LD/LC50 values relevant for classification:		
67-64-1 acetone		
Oral	LD50	5800 mg/kg (rat)
Dermal	<i>LD50</i>	20000 mg/kg (rabbit)

- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- on the eye: Irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

· Sensitisation May cause sensitisation by skin contact.

12 Ecological information

- · 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.

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Trade name: Cimara adhesive

(Contd. of page 3)

13 Disposal considerations

- · Product:
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information

· Land transport ADR/RID (cross-border)



· ADR/RID class: 3 Flammable liquids.

Danger code (Kemler): 33
UN-Number: 1090
Packaging group: II
Hazard label: 3

· Description of goods: 1090 ACETONE

Limited quantities (LQ) LQ4
 Transport category 2
 Tunnel restriction code D/E

· Maritime transport IMDG:



· IMDG Class: 3
· UN Number: 1090
· Label 3
· Packaging group: II
· EMS Number: F-E,S-D
· Marine pollutant: No
· Proper shipping name: ACETONE

· Air transport ICAO-TI and IATA-DGR:



· ICAO/IATA Class: 3
 · UN/ID Number: 1090
 · Label 3
 · Packaging group: II

· Proper shipping name: ACETONE

15 Regulatory information

· Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

(Contd. on page 5)

Printing date 02.01.2014 Revision: 02.01.2014

Trade name: Cimara adhesive

(Contd. of page 4)

· Code letter and hazard designation of product:



Xi Irritant

F Highly flammable

· Hazard-determining components of labelling:

2-hydroxyethyl methacrylate

· Risk phrases:

11 Highly flammable.

36/38 Irritating to eyes and skin.

43 May cause sensitisation by skin contact.

· Safety phrases:

16 Keep away from sources of ignition - No smoking.

- 24 Avoid contact with skin.
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 28 After contact with skin, wash immediately with plenty of water.
- 37 Wear suitable gloves.
- 43 In case of fire, use sand, carbon dioxide or powdered extinguishing agent. Never use water.

· Special labelling of certain preparations:

Contains 2-hydroxyethyl methacrylate. May produce an allergic reaction.

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: Scientific departement
- · Contact: Tel.: +49 (0)4721-719-0

- GI