Printing date 08/07/2015 Reviewed on 08/07/2015

1 Identification

- · Product identifier
- · Trade name: VITA VM LC OPAQUE PASTE and VM LC GINGIVA OPAQUE PASTE
- · Article number: C44..
- · Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Auxiliary for manufacture of dental prothesis
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

VITA Zahnfabrik

H. Rauter GmbH & Co. KG

Postfach 1338 D 79704 Bad Säckingen e-mail: info@vita-zahnfabrik.com

· Emergency telephone number: Tel.: ++49-(0)761-19240

Tel.: 07761/562-0 Fax: 07761/562299

2 Hazard(s) identification

· Classification of the substance or mixture



GHS08 Health hazard

Repr. 2 H361 Suspected of damaging fertility or the unborn child.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

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



X Irritant

May cause sensitization by skin contact.

· 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 was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- · Label elements
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms





GHS07

· Signal word Warning

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· Hazard-determining components of labeling:

2-dimethylaminoethyl methacrylate

 $diphenyl(2,4,6-trimethylbenzoyl)phosphine\ oxide$

· Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H361 Suspected of damaging fertility or the unborn child.

· Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P280 Wear protective gloves.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P321 Specific treatment (see on this label).

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· Classification system

· NFPA ratings (scale 0-4)



Health = 1 Fire = 1Reactivity = 0

- · 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 the substances listed below with nonhazardous additions.

Dangerous of	components:	
72869-86-4	7,7,9-Trimethyl-4,13-dioxo-3,14-dioxa-5,12-diaza-hexadecan-1,16-diol-dimethacrylat (mixture of isomers) R52/53	10-<25%
2867-47-2	2-dimethylaminoethyl methacrylate Xn R21/22; Xi R36/38-43 ♦ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; Flam. Liq. 4, H227	2.5-<10%
10373-78-1	Camphorquinone X Xi R36/37/38 ♦ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	2.5-<10%
75980-60-8	diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide Xn R62 Repr. Cat. 3	2.5-<5%
	♦ Repr. 2, H361	

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

- USA

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4 First-aid measures

- · Description of first aid measures
- · After inhalation

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.

Immediately rinse with water.

- · After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing 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 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents Use fire fighting measures that suit the environment.
- · For safety reasons unsuitable extinguishing agents Water.
- · 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 Not required.
- · 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

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- · Information about protection against explosions and fires: No special measures required.
- · 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: Not required.
- · Further information about storage conditions: None.
- · Storage class 6.1 A
- · Specific end use(s) No further relevant information available.

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8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components 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 that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

- · Breathing equipment: Use ventilation hood
- · Protection of hands:



Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

e.g. Dermatril P, KCL Nr. 743

Nitrile rubber, NBR

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

KCL Dermatril P 480 min

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: Pasty

Color: According to product specification

Odor: Ester-likeOdour threshold: Not determined.

· pH-value: Not determined.

· Change in condition

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

• Flash point: $151 \, ^{\circ}C \, (304 \, ^{\circ}F)$

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		(Contd. of page
· Flammability (solid, gaseous)	Not applicable.	
· Ignition temperature:	255 °C (491 °F)	
· Decomposition temperature:	Not determined.	
· Auto igniting:	Product is not selfigniting.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Oxidizing properties	None	
· Vapor pressure:	Not determined.	
· 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	
· Partition coefficient (n-octanol/wa	ter): Not determined.	
· 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 No decomposition if used and stored according to specifications.
- · Chemical stability No decomposition if used and stored according to specifications.
- · 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:
- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

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· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

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

Water danger class 3 (Self-assessment): extremely hazardous for water.

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely 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** Disposal must be made according to official regulations.
- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

· UN-Number	
· DOT, ADR, IMDG, IATA	UN3243
· UN proper shipping name	
·DOT	Solids containing toxic liquid, n.o.s. (2-Dimethylaminoethy methacrylate)
· ADR	UN3243 Solids containing toxic liquid, n.o.s. (2 Dimethylaminoethyl methacrylate)
· IMDG, IATA	SOLIDS CONTAINING TOXIC LIQUID, N.O.S. (2 DIMETHYLAMINOETHYL METHACRYLATE)

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	(Contd. of page
Transport hazard class(es)	
DOT, IMDG	
Class	6.1 Toxic substances
ADR	
Class	6.1 Toxic substances
Label	6.1
Packing group	
ADR, IMDG, IATA	II
Environmental hazards:	
Marine pollutant:	No
Special precautions for user	Warning: Toxic substances
Danger code (Kemler):	60
Transport in bulk according to Annex	
MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
ADR	
Excepted quantities (EQ)	Code: E4
	Maximum net quantity per inner packaging: 1 ml Maximum net quantity per outer packaging: 500 ml
	maximum nei quantity per outer packaging. 500 mi
IMDG Limited quantities (LQ)	500 g
Excepted quantities (EQ)	Code: E4
Zarepieu quammes (Eg)	Maximum net quantity per inner packaging: 1 ml
	Maximum net quantity per outer packaging: 500 ml
UN "Model Regulation":	UN 3243 SOLIDS CONTAINING TOXIC LIQUID, N.O.S. (2
-	DIMETHYLAMINOETHYL METHACRYLATE), 6.1, II

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture

	on 355 (extremely hazardous substances) ingredients is listed.
	on 313 (specific toxic chemical listings)
	ingredients is listed.
TSCA (Toxi	c Substances Control Act)
	Bisphenol-A-bis(hydroxipropylmethacrylat)
72869-86-4	7,7,9-Trimethyl- $4,13$ -dioxo- $3,14$ -dioxa- $5,12$ -diaza-hexadecan- $1,16$ -diol-dimethacrylat (mixtur of isomers)
2867-47-2	2-dimethylaminoethyl methacrylate
	VIP ZSG50
10373-78-1	Camphorquinone
	diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide

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· Prop 65 - Chemicals known to cause cancer

None of the ingredients is listed.

- · Cancerogenity categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

- · National regulations
- · Water hazard class: Water danger class 3 (Self-assessment): extremely 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.

- · Date of preparation / last revision 08/07/2015 / 1
- · 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)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 4: Flammable liquids, Hazard Category 4

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Repr. 2: Reproductive toxicity, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

· * Data compared to the previous version altered.

USA