1. Identification

Product identifier

VITA VM LC OPAQUE PASTE und VM LC GINGIVA OPAQUE PASTE

Recommended use of the chemical and restrictions on use

Use of the substance/mixture
Use as laboratory reagent

Details of the supplier of the safety data sheet

Company name: VITA Zahnfabrik H.Rauter GmbH & Co.KG
Post-office box: 1338
79704 Bad Säckingen
Telephone: +49(0)7761-562-0
Telex: +49(0)7761-562-299
E-mail: info@vita-zahnfabrik.com
Internet: www.vita-zahnfabrik.com

Emergency phone number:
+49-(0)761-19240

Further Information
medical device

2. Hazard(s) identification

Classification of the chemical

29 CFR Part 1910.1200
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Irrit. 2A
Respiratory or skin sensitization: Skin Sens. 1
Reproductive toxicity: Repr. 2

Label elements

29 CFR Part 1910.1200
Signal word: Warning

Pictograms:

Hazard statements
Causes skin irritation
May cause an allergic skin reaction
Causes serious eye irritation
Suspected of damaging fertility or the unborn child

Precautionary statements
Avoid breathing dust/fume/gas/mist/vapors/spray.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin: Wash with plenty of water.

Hazards not otherwise classified
No information available.

3. Composition/information on ingredients

Mixtures
Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Components</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>72869-86-4</td>
<td>7,7,9-Trimethyl-4,13-dioxo-3,14-dioxo-5,12-diaza-hexadecan-1,16-diol-dimethacrylat (mixture of isomers)</td>
<td>19.36 %</td>
</tr>
<tr>
<td>94108-97-1</td>
<td>Ditrimethylolpropane Tetraacrylate</td>
<td>6.79 %</td>
</tr>
<tr>
<td>2867-47-2</td>
<td>2-dimethylaminoethyl methacrylate</td>
<td>6.098 %</td>
</tr>
<tr>
<td>10373-78-1</td>
<td>Camphorquinone</td>
<td>4.53 %</td>
</tr>
<tr>
<td>75980-60-8</td>
<td>Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide</td>
<td>2.71 %</td>
</tr>
</tbody>
</table>

4. First-aid measures

**Description of first aid measures**

**After inhalation**
- Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

**After contact with skin**
- After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

**After contact with eyes**
- After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

**After ingestion**
- Rinse mouth immediately and drink plenty of water.

**Most important symptoms and effects, both acute and delayed**
- No information available.

**Indication of any immediate medical attention and special treatment needed**
- Treat symptomatically.

5. Fire-fighting measures

**Extinguishing media**
- Suitable extinguishing media
  - Co-ordinate fire-fighting measures to the fire surroundings.

**Specific hazards arising from the chemical**
- Non-flammable.

**Special protective equipment and precautions for fire-fighters**
- Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

**Additional information**
- Supress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
- Provide adequate ventilation. Do not breathe gas/fume/vapour/spray. Avoid contact with skin, eyes and clothes.
- Use personal protection equipment.

**Environmental precautions**
- Do not allow to enter into surface water or drains.

**Methods and material for containment and cleaning up**
- Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.
7. Handling and storage

Precautions for safe handling

Advice on safe handling
No special measures are necessary.

Advice on protection against fire and explosion
No special fire protection measures are necessary.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels
Keep container tightly closed.

Hints on joint storage
No special measures are necessary.

8. Exposure controls/personal protection

Control parameters

Exposure limits

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Substance</th>
<th>ppm</th>
<th>mg/m³</th>
<th>l/cc</th>
<th>Category</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>13463-67-7</td>
<td>Titanium dioxide Total dust</td>
<td>-</td>
<td>15</td>
<td></td>
<td>TWA (8 h)</td>
<td>PEL</td>
</tr>
</tbody>
</table>

Exposure controls

Protective and hygiene measures
Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

Eye/face protection
Suitable eye protection: goggles.

Hand protection
When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Recommended glove articles KCL DermatrilP NBR (Nitrile rubber) Breakthrough time (maximum wearing time) 480 min

Skin protection
Use of protective clothing.

Respiratory protection
Provide adequate ventilation as well as local exhaustion at critical locations. Technical ventilation of workplace.
9. Physical and chemical properties

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state:</th>
<th>not determined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color:</td>
<td></td>
</tr>
<tr>
<td>pH-Value:</td>
<td>not determined</td>
</tr>
</tbody>
</table>

Changes in the physical state

<table>
<thead>
<tr>
<th>Melting point/freezing point:</th>
<th>not determined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial boiling point and boiling range:</td>
<td>?</td>
</tr>
<tr>
<td>Flash point:</td>
<td>151 °C</td>
</tr>
</tbody>
</table>

Flammability

<table>
<thead>
<tr>
<th>Solid:</th>
<th>not determined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas:</td>
<td>not applicable</td>
</tr>
</tbody>
</table>

Explosive properties

The product is not: Explosive.

<table>
<thead>
<tr>
<th>Lower explosion limits:</th>
<th>not determined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper explosion limits:</td>
<td>not determined</td>
</tr>
</tbody>
</table>

Auto-ignition temperature

<table>
<thead>
<tr>
<th>Solid:</th>
<th>not determined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas:</td>
<td>not applicable</td>
</tr>
</tbody>
</table>

Decomposition temperature: not determined

Oxidizing properties

Not oxidising.

<table>
<thead>
<tr>
<th>Vapor pressure: (at 50 °C)</th>
<th>(\leq 1100) hPa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density:</td>
<td>not determined</td>
</tr>
<tr>
<td>Water solubility:</td>
<td>No</td>
</tr>
</tbody>
</table>

Solubility in other solvents

<table>
<thead>
<tr>
<th>not determined</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Partition coefficient:</td>
<td>not determined</td>
</tr>
<tr>
<td>Vapor density:</td>
<td>not determined</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>not determined</td>
</tr>
</tbody>
</table>

Other information

| Solid content:                   | 49.4 %           |

10. Stability and reactivity

Reactivity

No hazardous reaction when handled and stored according to provisions.

Chemical stability

The product is stable under storage at normal ambient temperatures.

Possibility of hazardous reactions

No known hazardous reactions.

Conditions to avoid

none/none
Incompatible materials
No information available.

Hazardous decomposition products
No known hazardous decomposition products.

11. Toxicological information

Information on toxicological effects

Acute toxicity
Based on available data, the classification criteria are not met.

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exposure route</td>
</tr>
<tr>
<td>2867-47-2</td>
<td>2-dimethylaminoethyl methacrylate</td>
</tr>
<tr>
<td></td>
<td>oral</td>
</tr>
<tr>
<td></td>
<td>dermal</td>
</tr>
</tbody>
</table>

Irritation and corrosivity
Causes skin irritation
Causes serious eye irritation

Sensitizing effects
May cause an allergic skin reaction
(7,7,9-Trimethyl-4,13-dioxo-3,14-dioxa-5,12-diaza-hexadecan-1,16-diol-dimethacrylat (mixture of isomers); 2-dimethylaminoethyl methacrylate; Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide)

Carcinogenic/mutagenic/toxic effects for reproduction
Suspected of damaging fertility or the unborn child (Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide)
Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.

Specific target organ toxicity (STOT) - single exposure
Based on available data, the classification criteria are not met.

Specific target organ toxicity (STOT) - repeated exposure
Based on available data, the classification criteria are not met.
Carcinogenicity (IARC): Titanium dioxide (CAS 13463-67-7) is listed in group 2B.

Aspiration hazard
Based on available data, the classification criteria are not met.

Additional information on tests
The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

12. Ecological information

Ecotoxicity
Harmful to aquatic life with long lasting effects.

Persistence and degradability
The product has not been tested.

Bioaccumulative potential
The product has not been tested.

Mobility in soil
The product has not been tested.

Other adverse effects
No information available.
Further information
Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

13. Disposal considerations

Waste treatment methods

Disposal recommendations
Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Contaminated packaging
Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself. Waste codes/waste designations according to EWC/AVV

14. Transport information

US DOT 49 CFR 172.101

UN/ID number: UN 3243
Proper shipping name: SOLIDS CONTAINING TOXIC LIQUID, N.O.S.
Transport hazard class(es): 6.1
Packing group: II
Hazard label: 6.1

Marine transport (IMDG)

UN number: UN 3243
UN proper shipping name: SOLIDS CONTAINING TOXIC LIQUID, N.O.S.
Transport hazard class(es): 6.1
Packing group: II
Hazard label: 6.1

Special Provisions:
Limited quantity: 500 g
Excepted quantity: E4
EmS: F-A, S-A

Air transport (ICAO-TI/IATA-DGR)

UN number: UN 3243
UN proper shipping name: SOLIDS CONTAINING TOXIC LIQUID, N.O.S.
Transport hazard class(es): 6.1
Packing group: II
Hazard label: 6.1

Special Provisions: A50
Limited quantity Passenger: 1 kg
according to 29 CFR 1910.1200(g)

Safety Data Sheet

VITA Zahnfabrik H.Rauter GmbH & Co.KG

VITA VM LC OPAQUE PASTE und VM LC GINGIVA OPAQUE PASTE

Revision date: 12.08.2019 Product code: 218 Page 7 of 8

Passenger LQ: Y644
Excepted quantity: E4
IATA-packing instructions - Passenger: 669
IATA-max. quantity - Passenger: 25 kg
IATA-packing instructions - Cargo: 676
IATA-max. quantity - Cargo: 100 kg

Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

Special precautions for user

No information available.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

15. Regulatory information

U.S. Regulations

National regulatory information

SARA Section 311/312 Hazards:
7,7,9-Trimethyl-4,13-dioxo-3,14-dioxo-5,12-diaza-hexadecan-1,16-diol-dimethacrylat (mixture of isomers) (72869-86-4): Immediate (acute) health hazard
Ditrimethylolpropane Tetraacrylate (94108-97-1): Immediate (acute) health hazard
2-dimethylaminoethyl methacrylate (2867-47-2): Immediate (acute) health hazard
Camphorquinone (10373-78-1): Immediate (acute) health hazard
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide (75980-60-8): Immediate (acute) health hazard

State Regulations

Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)
This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other information

Revision date: 12.08.2019
Revision No: 2

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
IATA: International Air Transport Association
GHS: Globally Harmonized 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
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
CLP: Classification, Labelling and Packaging
REACH: Registration, Evaluation and Authorization of Chemicals
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN: United Nations
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
RID: Regulations concerning the international carriage of dangerous goods by rail
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
( Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
EmS: Emergency Schedules
MFAG: Medical First Aid Guide
ICAO: International Civil Aviation Organization
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
VOC: Volatile Organic Compounds
SVHC: Substance of Very High Concern
For abbreviations and acronyms, see table at http://abbrev.esdscom.eu

Other data
The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor’s safety data sheet.)