1. Identification

Product identifier

VITA VM 13
CAS No: 66402-68-4

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
Telefax: +49(0)7761-562-299
e-mail: info@vita-zahnfabrik.com
Internet: www.vita-zahnfabrik.com
Emergency phone number: +49-(0)7761-562-0

Further Information
medical device

2. Hazard(s) identification

Classification of the chemical

29 CFR Part 1910.1200
This substance is not classified as hazardous in accordance with Regulation 29 CFR 1910.1200(d).

Label elements

Hazards not otherwise classified
No information available.

3. Composition/information on ingredients

Substances

Chemical characterization
Ceramic

Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Components</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>66402-68-4</td>
<td>ceramics materials and frits</td>
<td>100 %</td>
</tr>
</tbody>
</table>

4. First-aid measures

Description of first aid measures

After inhalation
Provide fresh air.

After contact with skin
Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

After contact with eyes
Rinse immediately carefully and thoroughly with eye-bath or water.

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
In case of fire: Wear self-contained breathing apparatus.

Additional information
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
Avoid dust formation. Do not breathe dust.

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.

Reference to other sections
Safe handling: see section 7
Personal protection equipment (PPE): see section 8
Disposal: see section 13

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 controls

Protective and hygiene measures
Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff.
Eye/face protection
Wear eye protection/face protection. Dust protection eye glasses

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 Dermatril P NBR (Nitrile rubber)

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>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state:</td>
<td>solid</td>
</tr>
<tr>
<td>Color:</td>
<td></td>
</tr>
<tr>
<td>Odor:</td>
<td>characteristic</td>
</tr>
<tr>
<td>pH-Value:</td>
<td>not determined</td>
</tr>
<tr>
<td>Changes in the physical state:</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point:</td>
<td>not determined</td>
</tr>
<tr>
<td>Initial boiling point and boiling range:</td>
<td>X</td>
</tr>
<tr>
<td>Flash point:</td>
<td>X</td>
</tr>
<tr>
<td>Flammability:</td>
<td></td>
</tr>
<tr>
<td>Solid:</td>
<td>not determined</td>
</tr>
<tr>
<td>Gas:</td>
<td>not applicable</td>
</tr>
<tr>
<td>Explosive properties:</td>
<td></td>
</tr>
<tr>
<td>The product is not: Explosive.</td>
<td></td>
</tr>
<tr>
<td>Lower explosion limits:</td>
<td>not determined</td>
</tr>
<tr>
<td>Upper explosion limits:</td>
<td>not determined</td>
</tr>
<tr>
<td>Auto-ignition temperature:</td>
<td></td>
</tr>
<tr>
<td>Solid:</td>
<td>not determined</td>
</tr>
<tr>
<td>Gas:</td>
<td>not applicable</td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>not determined</td>
</tr>
<tr>
<td>Oxidizing properties:</td>
<td></td>
</tr>
<tr>
<td>Not oxidising.</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure:</td>
<td>&lt;=1100 hPa</td>
</tr>
<tr>
<td>(at 50 °C)</td>
<td></td>
</tr>
<tr>
<td>Density:</td>
<td>2,50000 g/cm³</td>
</tr>
<tr>
<td>Water solubility:</td>
<td>No</td>
</tr>
<tr>
<td>Solubility in other solvents:</td>
<td>not determined</td>
</tr>
<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>
<tr>
<td>Other information:</td>
<td></td>
</tr>
</tbody>
</table>
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.

Irritation and corrosivity
Based on available data, the classification criteria are not met.

Sensitizing effects
Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction
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 (OSHA): Not listed.
Carcinogenicity (IARC): Not listed.
Carcinogenicity (NTP): Not listed.

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

Additional information on tests
The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

12. Ecological information

Ecotoxicity
The product is not: Ecotoxic.

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.
13. Disposal considerations

Waste treatment methods

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

Contaminated packaging
Wash with plenty of water. Completely emptied packages can be recycled.

14. Transport information

Marine transport (IMDG)

UN number: No dangerous good in sense of this transport regulation.
UN proper shipping name: No dangerous good in sense of this transport regulation.
Transport hazard class(es): No dangerous good in sense of this transport regulation.
Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

UN number: No dangerous good in sense of this transport regulation.
UN proper shipping name: No dangerous good in sense of this transport regulation.
Transport hazard class(es): No dangerous good in sense of this transport regulation.
Packing group: No dangerous good in sense of this transport regulation.

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

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: 07.08.2019
Revision No: 2

Abbreviations and acronyms
ADR: Accord européen sur le transport des marchandises dangereuses par Route
(IMDG: International Maritime Code for Dangerous Goods by Road)
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
Safety Data Sheet

VITA Zahnfabrik H. Rauter GmbH & Co. KG

according to 29 CFR 1910.1200(g)

VITA VM 13

Revision date: 07.08.2019
Product code: 164

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS:</td>
<td>European Inventory of Existing Commercial Chemical Substances</td>
</tr>
<tr>
<td>ELINCS:</td>
<td>European List of Notified Chemical Substances</td>
</tr>
<tr>
<td>CAS:</td>
<td>Chemical Abstracts Service</td>
</tr>
<tr>
<td>LC50:</td>
<td>Lethal concentration, 50%</td>
</tr>
<tr>
<td>LD50:</td>
<td>Lethal dose, 50%</td>
</tr>
<tr>
<td>CLP:</td>
<td>Classification, labelling and Packaging</td>
</tr>
<tr>
<td>REACH:</td>
<td>Registration, Evaluation and Authorization of Chemicals</td>
</tr>
<tr>
<td>GHS:</td>
<td>Globally Harmonised System of Classification, Labelling and Packaging of Chemicals</td>
</tr>
<tr>
<td>UN:</td>
<td>United Nations</td>
</tr>
<tr>
<td>DNEL:</td>
<td>Derived No Effect Level</td>
</tr>
<tr>
<td>DMEL:</td>
<td>Derived Minimal Effect Level</td>
</tr>
<tr>
<td>PNEC:</td>
<td>Predicted No Effect Concentration</td>
</tr>
<tr>
<td>ATE:</td>
<td>Acute toxicity estimate</td>
</tr>
<tr>
<td>LL50:</td>
<td>Lethal loading, 50%</td>
</tr>
<tr>
<td>EL50:</td>
<td>Effect loading, 50%</td>
</tr>
<tr>
<td>EC50:</td>
<td>Effective Concentration 50%</td>
</tr>
<tr>
<td>ErC50:</td>
<td>Effective Concentration 50%, growth rate</td>
</tr>
<tr>
<td>NOEC:</td>
<td>No Observed Effect Concentration</td>
</tr>
<tr>
<td>BCF:</td>
<td>Bio-concentration factor</td>
</tr>
<tr>
<td>PBT:</td>
<td>persistent, bioaccumulative, toxic</td>
</tr>
<tr>
<td>vPvB:</td>
<td>very persistent, very bioaccumulative</td>
</tr>
<tr>
<td>RID:</td>
<td>Regulations concerning the international carriage of dangerous goods by rail</td>
</tr>
<tr>
<td>ADN:</td>
<td>European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways</td>
</tr>
<tr>
<td>EmS:</td>
<td>Emergency Schedules</td>
</tr>
<tr>
<td>MFAG:</td>
<td>Medical First Aid Guide</td>
</tr>
<tr>
<td>ICAO:</td>
<td>International Civil Aviation Organization</td>
</tr>
<tr>
<td>MARPOL:</td>
<td>International Convention for the Prevention of Marine Pollution from Ships</td>
</tr>
<tr>
<td>IBC:</td>
<td>Intermediate Bulk Container</td>
</tr>
<tr>
<td>SVHC:</td>
<td>Substance of Very High Concern</td>
</tr>
</tbody>
</table>

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.