1. Identification

Product identifier

VITA TITANKERAMIK

CAS No: 66402-68-4

Relevant identified uses of the substance or mixture and uses advised against

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 telephone number: +49-(0)7761-562-0

Further Information
medical device

2. Hazard identification

Classification of the substance or mixture

WHMIS 2015
This mixture is not classified as hazardous in accordance with WHMIS 2015.

Label elements

Other hazards
No information available.

3. Composition/information on ingredients

Mixtures
Chemical characterization
Ceramic

Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>66402-68-4</td>
<td>ceramics materials and frits</td>
<td>80 - 100% (*)</td>
</tr>
</tbody>
</table>

(*) The actual concentration is withheld as a trade secret.

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.
5. Fire-fighting measures

Extinguishing media

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

Specific hazards arising from the hazardous product
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: 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.

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. NBR (Nitrile rubber) Recommended glove articles KCL Dermatril P

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>Powder</td>
</tr>
<tr>
<td>Colour</td>
<td></td>
</tr>
<tr>
<td>Odour</td>
<td>odourless</td>
</tr>
<tr>
<td>pH-Value</td>
<td>not determined</td>
</tr>
</tbody>
</table>

Changes in the physical state

Melting point: not determined
Initial boiling point and boiling range: not determined
Flash point: not applicable

Flammability
Solid: not determined
Gas: not determined

Explosive properties
The product is not: Explosive.
Lower explosive limits: not determined
Upper explosive limits: not determined

Auto-ignition temperature
Solid: not determined
Gas: not applicable

Decomposition temperature: not determined

Oxidizing properties
Not oxidising.

Vapour pressure: <=1100 hPa (at 50 °C)
Density: 2.4 g/cm³
Water solubility: No

Solubility in other solvents
not determined
Partition coefficient: not determined
Vapour density: not determined
Evaporation rate: not determined

Other information
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

**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.

- **STOT-single exposure**
  Based on available data, the classification criteria are not met.

- **STOT-repeated exposure**
  Based on available data, the classification criteria are not met.

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

**Additional information on tests**
The mixture 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.

**Other adverse effects**
No information available.
Further information

Avoid release to the environment.

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. Waste codes/waste designations according to EWC/AVV

Contaminated packaging
Wash with plenty of water. Completely emptied packages can be recycled. Waste codes/waste designations according to EWC/AVV

14. Transport information

Marine transport (IMDG)

UN number: No dangerous good in sense of this transport regulation.

United Nations 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.

United Nations 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

15. Regulatory information

Canadian regulations

16. Other information

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
SVHC: Substance of Very High Concern
For abbreviations and acronyms, see table at http://abbrev.esdscom.eu

Further Information
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.)