# 1. Identification

**Product identifier**
VITAPM Investment Liquid

**Further trade names**
VITAPM Einbettmassen Anmischflüssigkeit, VITAPM Investment Liquid

**Recommended use of the chemical and restrictions on use**
- Use as laboratory reagent

## 2. Hazard(s) identification

### Classification of the chemical

29 CFR Part 1910.1200
This mixture 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

### Mixtures

**Chemical characterization**
Mixtures Product/Substance is inorganic.

## 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
Use personal protection equipment.

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

Methods and material for containment and cleaning up
Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). 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 limits

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Substance</th>
<th>ppm</th>
<th>mg/m³</th>
<th>f/cc</th>
<th>Category</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>7631-86-9</td>
<td>Silica, amorphous</td>
<td></td>
<td>6</td>
<td></td>
<td>TWA (8 h)</td>
<td>REL</td>
</tr>
</tbody>
</table>

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

Skin protection
Use of protective clothing.

Respiratory protection
In case of inadequate ventilation wear respiratory protection.

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>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>whitish</td>
</tr>
<tr>
<td>Odor</td>
<td>characteristic</td>
</tr>
<tr>
<td>pH-Value</td>
<td>9.5</td>
</tr>
</tbody>
</table>

#### Changes in the physical state

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point</td>
<td>not determined</td>
</tr>
<tr>
<td>Initial boiling point and boiling range:</td>
<td>100 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>X</td>
</tr>
</tbody>
</table>

#### Flammability

<table>
<thead>
<tr>
<th>State</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid</td>
<td>not applicable</td>
</tr>
<tr>
<td>Gas</td>
<td>not applicable</td>
</tr>
</tbody>
</table>

#### Explosive properties

The product is not: Explosive.

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

#### Auto-ignition temperature

<table>
<thead>
<tr>
<th>State</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid</td>
<td>not applicable</td>
</tr>
<tr>
<td>Gas</td>
<td>not applicable</td>
</tr>
</tbody>
</table>

#### Decomposition temperature

not determined

#### Oxidizing properties

Not oxidising.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapor pressure:</td>
<td>&lt;=1100 hPa</td>
</tr>
<tr>
<td>Density:</td>
<td>1,20000 g/cm³</td>
</tr>
<tr>
<td>Water solubility:</td>
<td>No</td>
</tr>
</tbody>
</table>

#### Solubility in other solvents

not determined

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid content:</td>
<td>30.00 %</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):
No ingredient of this mixture is listed.

Carcinogenicity (IARC):
Silica, amorphous (CAS 7631-86-9) is listed in group 3.

Carcinogenicity (NTP):
No ingredient of this mixture is listed.

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.

**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-TIIATA-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:** 09.08.2019

**Revision No:** 2

**Abbreviations and acronyms**

- ADR: Accord européen sur le transport des marchandises dangereuses par Route
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonized System of Classification and Labelling of Chemicals
## 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.

(For abbreviations and acronyms, see table at http://abbrev.esdscom.eu)

### 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)

(Other data)

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