SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
VITA VM OPAQUE FLUID

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture
Use as laboratory reagent

1.3. Details of the supplier of the safety data sheet
Manufacturer
Company name: VITA Zahnfabrik H.Rauter GmbH & Co.KG
Post-office box: 1338
79704 Bad Säckingen
Telephone: +49(0)7761-562-0
Fax: +49(0)7761-562-299
e-mail: info@vita-zahnfabrik.com
Internet: www.vita-zahnfabrik.com

Supplier
Company name: Company Name
Street: Street
Place: 79704 Town
Telephone: Phone
Fax: Telefax
e-mail: email
Contact person: Contact person
Internet: url

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

Further Information
medical device

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
UN-GHS (Rev.3)
Hazard categories:
Skin corrosion/irritation: Skin Corr. 1
Serious eye damage/eye irritation: Eye Dam. 1
Hazard Statements:
Causes severe skin burns and eye damage.
Causes serious eye damage.

2.2. Label elements
UN-GHS (Rev.3)
Hazard components for labelling
Ethanol
sodium hydroxide; caustic soda

Signal word: Danger

Pictograms:
Hazard statements

H314 Causes severe skin burns and eye damage.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P363 Wash contaminated clothing before reuse.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P405 Store locked up.
P501 Dispose of waste according to applicable legislation.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5</td>
<td>Ethanol</td>
<td>1 - &lt; 5 %</td>
</tr>
<tr>
<td>1310-73-2</td>
<td>sodium hydroxide; caustic soda</td>
<td>&lt; 1 %</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down.

After inhalation

Provide fresh air. Medical treatment necessary.

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. If skin irritation occurs: Get medical advice/attention.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

Never give anything by mouth to an unconscious person or a person with cramps. Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately. Do not allow a neutralisation agent to be drunk.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.
SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Non-flammable.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately.
Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Remove persons to safety.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. 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.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling
Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

Advice on protection against fire and explosion
Usual measures for fire prevention.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels
Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation.

Hints on joint storage
Keep away from: Acid, Oxidizing agent, Peroxides.

7.3. Specific end use(s)

Use as laboratory reagent

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
Exposure limits (EH40)

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Substance</th>
<th>ppm</th>
<th>mg/m³</th>
<th>fibres/ml</th>
<th>Category</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>1310-73-2</td>
<td>Sodium hydroxide</td>
<td>-</td>
<td>2</td>
<td></td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
</tbody>
</table>

Additional advice on limit values

Value:
- Ethanol
  - 1000 ppm (1880 mg/m³) TWA
- sodium hydroxide; caustic soda
  - 2 mg/m³ Peak limitation TWA

Source: Workplace exposure standards for airborne contaminants, Publication date: 16 December 2019

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation as well as local exhaustion at critical locations.

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. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes.

Eye/face protection

Suitable eye protection: goggles.

Hand protection

- Wear suitable gloves.
  - Suitable material: NBR (Nitrile rubber)
  - Breakthrough time (maximum wearing time): 480 min

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.

Skin protection

Use of protective clothing.

Respiratory protection

Provide adequate ventilation as well as local exhaustion at critical locations. Technical ventilation of workplace.

Environmental exposure controls

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state:</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour:</td>
<td>colourless</td>
</tr>
<tr>
<td>Odour:</td>
<td>characteristic</td>
</tr>
<tr>
<td>pH-Value:</td>
<td>12,7</td>
</tr>
</tbody>
</table>
### Changes in the physical state
- **Melting point:** not determined
- **Initial boiling point and boiling range:** 100 °C
- **Flash point:** not determined

### Flammability
- **Solid:** not applicable
- **Gas:** not applicable

### Explosive properties
- The product is not: Explosive.
- **Lower explosion limits:** not determined
- **Upper explosion limits:** not determined
- **Ignition temperature:** not determined

### Auto-ignition temperature
- **Solid:** not applicable
- **Gas:** not applicable
- **Decomposition temperature:** not determined

### Oxidizing properties
- Not oxidising.
- **Vapour pressure:** <= 1100 hPa
- **Density:** 1,00000 g/cm³
- **Water solubility:** easily soluble

### Solubility in other solvents
- not determined
- **Partition coefficient:** not determined
- **Viscosity / dynamic:** not determined
- **Viscosity / kinematic:** not determined
- **Vapour density:** not determined
- **Evaporation rate:** not determined

### Odour threshold: not determined

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity
- Possibility of hazardous reactions.

#### 10.2. Chemical stability
- The product is stable under storage at normal ambient temperatures.

#### 10.3. Possibility of hazardous reactions
- Exothermic reaction with: Acid, Peroxides, Oxidizing agent.

#### 10.4. Conditions to avoid
- No information available.

#### 10.5. Incompatible materials
- Keep away from: Acid, Oxidizing agent, Peroxides.
10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Exposure route</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1310-73-2</td>
<td>sodium hydroxide; caustic soda</td>
<td>dermal</td>
<td>LD50</td>
<td>2000 mg/kg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Irritation and corrosivity

Causes severe skin burns and eye damage.
Causes serious eye damage.

Sensitising 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.

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Aquatic toxicity</th>
<th>Dose</th>
<th>[h]</th>
<th>[d]</th>
<th>Species</th>
<th>Source</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1310-73-2</td>
<td>sodium hydroxide; caustic soda</td>
<td>Acute fish toxicity</td>
<td>LC50</td>
<td>45,4</td>
<td>96 h</td>
<td>Oncorhynchus mykiss (Rainbow trout)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

12.4. Mobility in soil

The product has not been tested.

12.5. Other adverse effects

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations
13.1. 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.

SECTION 14: Transport information

Land transport (ADG)

14.1. UN number: UN 1824
14.2. UN proper shipping name: SODIUM HYDROXIDE SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: II

- Limited quantity: 1 L
- Excepted quantity: E2

Other applicable information (land transport)

HAZCHEM: 2R

Marine transport (IMDG)

14.1. UN number: UN 1824
14.2. UN proper shipping name: SODIUM HYDROXIDE SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: II

- Hazard label: 8
- Special Provisions: -
- Limited quantity: 1 L
- Excepted quantity: E2
- EmS: F-A, S-B

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 1824
14.2. UN proper shipping name: SODIUM HYDROXIDE SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: II

- Hazard label: 8
- Special Provisions: A3 A803
- Limited quantity Passenger: 0.5 L
- Passenger LQ: Y840
- Excepted quantity: E2
- IATA-packing instructions - Passenger: 851
- IATA-max. quantity - Passenger: 1 L
- IATA-packing instructions - Cargo: 855
- IATA-max. quantity - Cargo: 30 L

14.5. Environmental hazards
ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user
Warning: strongly corrosive.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
not applicable

SECTION 15: Regulatory information

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

National regulatory information

Additional information

AICS
Ethanol: Yes.
sodium hydroxide; caustic soda: Yes.

SUSPM
Ethanol: Yes.
sodium hydroxide; caustic soda: Yes.

SECTION 16: Other information

Abbreviations and acronyms
ACGIH: American Conference of Governmental Industrial Hygienists
ADG: Australian Dangerous Goods
AICS: Australian Inventory of Chemical Substances
ICAO: International Civil Aviation Organization
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
CAS: Chemical Abstracts Service
STEL: Short-term exposure limit
TWA: time-weighted average
T: Technical Instructions
DGR: Dangerous Goods Regulations
UN: United Nations
ATE: Acute toxicity estimate
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
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
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
VOC: Volatile Organic Compounds
SUSPM: Standard for the Uniform Scheduling of Medicines and Poisons

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.)