



Revision date: 10.12.2019

# **Safety Data Sheet**

according to the Preparation of Safety data Sheets for Hazardous Chemicals Code of Practice

# VITA VM CC LIQUID Product Code 027

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

#### 1.1. Product identifier

VITA VM CC LIQUID

# 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 Telefax: +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 Telefax: Telefax

e-mail: email

Contact person: Contact person

Internet: ur

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

number:

# **Further Information**

medical device

# **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

# UN-GHS (Rev.3)

Hazard categories:

Flammable liquid: Flam. Liq. 2 Skin corrosion/irritation: Skin Irrit. 2

Respiratory or skin sensitisation: Skin Sens. 1

Specific target organ toxicity - single exposure: STOT SE 3 Specific target organ toxicity - repeated exposure: STOT RE 2

Hazard Statements:

Highly flammable liquid and vapour.

Causes skin irritation.

May cause an allergic skin reaction.

May cause respiratory irritation.

May cause damage to organs through prolonged or repeated exposure.

## 2.2. Label elements

# UN-GHS (Rev.3)

# Hazard components for labelling

methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate

ethylene dimethacrylate N,N-dimethyl-p-toluidine



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Signal word: Danger

Pictograms:







## **Hazard statements**

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

## **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smokina.

P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting equipment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water

or shower.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/doctor if you feel unwell.
P314 Get medical advice/attention if you feel unwell.

P233 Keep container tightly closed.

P403+P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

P501 Dispose of waste according to applicable legislation.

## 2.3. Other hazards

Vapours may form explosive mixtures with air.

# **SECTION 3: Composition/information on ingredients**

## 3.2. Mixtures

## **Hazardous components**

CAS No	Chemical name	Quantity
80-62-6	methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate	75 - < 80 %
97-90-5	ethylene dimethacrylate	15 - < 20 %
99-97-8	N,N-dimethyl-p-toluidine	1 - < 5 %
131-57-7	2-Hydroxy-4-methoxy benzophenone	< 1 %
2440-22-4	2-(2H-benzotriazol-2-yl)-p-cresol	< 1 %
868-77-9	2-hydroxyethyl methacrylate	< 1 %





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#### **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

#### General information

When in doubt or if symptoms are observed, get medical advice.

#### After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. 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. Remove contact lenses, if present and easy to do. Continue rinsing.

#### After ingestion

Rinse mouth immediately and drink plenty of water. Observe risk of aspiration if vomiting occurs. Never give anything by mouth to an unconscious person or a person with cramps. When in doubt or if symptoms are observed, get medical advice.

# 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

Carbon dioxide (CO2), Foam, Extinguishing powder.

## Unsuitable extinguishing media

Water.

## 5.2. Special hazards arising from the substance or mixture

Highly flammable. Vapours can form explosive mixtures with air.

Hazardous decomposition products formed under fire conditions.

# 5.3. Advice for firefighters

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

# Additional information

Use water spray jet to protect personnel and to cool endangered containers. 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

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

# 6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Explosion risk.

# 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.





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#### 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

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.

#### 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 as well as local exhaustion at critical locations. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

#### Hints on joint storage

Do not store together with: Oxidizing agent. Pyrophoric or self-heating substances.

#### 7.3. Specific end use(s)

Use as laboratory reagent

#### **SECTION 8: Exposure controls/personal protection**

## 8.1. Control parameters

## Additional advice on limit values

Value:

methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate: 50 ppm (208 mg/m³) TWA 100 ppm (416 mg/m³) STEL

Source Workplace exposure standards for airborne contaminants; Publication date: 27 April 2018

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

### Eye/face protection

Wear eye protection/face protection. Wear eye/face protection.

## Hand protection

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 Camatril, Butoject

Breakthrough time (maximum wearing time)

NBR (Nitrile rubber): 10 min



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Butyl caoutchouc (butyl rubber): 60 min

#### Skin protection

Wear suitable protective clothing.

## Respiratory protection

In case of inadequate ventilation wear respiratory protection.

## **Environmental exposure controls**

Do not allow uncontrolled discharge of product into the environment. Explosion risk.

## **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Physical state: Liquid
Colour: colourless
Odour: characteristic

pH-Value: not determined

Changes in the physical state

Melting point:

Initial boiling point and boiling range:

93 °C

Flash point:

<12 °C

<12 °C

**Flammability** 

Solid: not applicable
Gas: not applicable

## **Explosive properties**

The product is not: Explosive. Vapours may form explosive mixtures with air.

Lower explosion limits: 2,1 vol. %
Upper explosion limits: 12,5 vol. %
Ignition temperature: 430 °C

**Auto-ignition temperature** 

Solid: not applicable
Gas: not applicable

Decomposition temperature: not determined

**Oxidizing properties** 

Not oxidising.

Vapour pressure: <= 1100 hPa

(at 50 °C)

Vapour pressure: 64 hPa

(at 50 °C)

Density: not determined Water solubility: No

Solubility in other solvents

not determined

Partition coefficient:

Viscosity / dynamic:

Not determined

Viscosity / kinematic:

Not determined

Vapour density:

Evaporation rate:

not determined

not determined



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## 9.2. Other information

Solid content: 0,0 %

Odour threshold: not determined

# **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

Highly flammable.

## 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

## 10.3. Possibility of hazardous reactions

Vapours may form explosive mixtures with air.

## 10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

## 10.5. Incompatible materials

Oxidizing agent. Pyrophoric or self-heating substances.

## 10.6. Hazardous decomposition products

Hazardous decomposition products formed under fire conditions.

# **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

## **Acute toxicity**

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

CAS No	Chemical name						
	Exposure route	Dose		Species	Source	Method	
80-62-6	methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate						
	dermal	LD50 mg/kg	> 5000				
97-90-5	ethylene dimethacrylate						
	dermal	LD50 mg/kg	3300				
99-97-8							
	oral	ATE mg/kg	100				
	dermal	LD50 mg/kg	1650				
	inhalation vapour	ATE	3 mg/l				
	inhalation aerosol	ATE	0,5 mg/l				
2440-22-4	2-4 2-(2H-benzotriazol-2-yl)-p-cresol						
	dermal	LD50 mg/kg	2000				
868-77-9	2-hydroxyethyl methacrylate						
	oral	LD50 mg/kg	5050	Rat			

#### Irritation and corrosivity

Causes skin irritation.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.



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### Sensitising effects

May cause an allergic skin reaction. (methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; ethylene dimethacrylate; 2-(2H-benzotriazol-2-yl)-p-cresol; 2-hydroxyethyl methacrylate)

## Carcinogenic/mutagenic/toxic effects for reproduction

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

#### STOT-single exposure

May cause respiratory irritation. (methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate)

## STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure. (N,N-dimethyl-p-toluidine)

#### **Aspiration hazard**

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

# **SECTION 12: Ecological information**

#### 12.1. Toxicity

The product is not: Ecotoxic.

CAS No	Chemical name								
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method		
868-77-9	2-hydroxyethyl methacrylate								
	Acute fish toxicity	LC50	227 mg/l	96 h	Pimephales promelas				

### 12.2. Persistence and degradability

The product has not been tested.

## 12.3. Bioaccumulative potential

The product has not been tested.

### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
868-77-9	2-hydroxyethyl methacrylate	0,47

# 12.4. Mobility in soil

The product has not been tested.

### 12.5. 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.

## **SECTION 13: Disposal considerations**

# 13.1. 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.

# **SECTION 14: Transport information**

# Land transport (ADG)

**14.1. UN number:** UN 1247



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14.2. UN proper shipping name: METHYL METHACRYLATE MONOMER, STABILIZED

14.3. Transport hazard class(es):314.4. Packing group:IISpecial Provisions:386Limited quantity:1 LExcepted quantity:E2

Other applicable information (land transport)

HAZCHEM: 3YE

Marine transport (IMDG)

**14.1. UN number:** UN 1247

14.2. UN proper shipping name: METHYL METHACRYLATE MONOMER, STABILIZED

14.3. Transport hazard class(es):314.4. Packing group:IIHazard label:3Special Provisions:386Limited quantity:1 LExcepted quantity:E2EmS:F-E. S-D

Air transport (ICAO-TI/IATA-DGR)

**14.1. UN number:** UN 1247

**14.2. UN** proper shipping name: METHYL METHACRYLATE MONOMER, STABILIZED

14.3. Transport hazard class(es):314.4. Packing group:IIHazard label:3Special Provisions:A209Limited quantity Passenger:1 LPassenger LQ:Y341Excepted quantity:E2

IATA-packing instructions - Passenger: 353
IATA-max. quantity - Passenger: 5 L
IATA-packing instructions - Cargo: 364
IATA-max. quantity - Cargo: 60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Warning: Combustible liquid.

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:

2-Hydroxy-4-methoxy benzophenone: Yes.

2-hydroxyethyl methacrylate: Yes.





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2-(2H-benzotriazol-2-yl)-p-cresol: Yes.

N,N-dimethyl-p-toluidine: Yes.

ethylene dimethacrylate: Yes.

methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate: Yes.

SUSMP:

2-Hydroxy-4-methoxy benzophenone: No.

2-hydroxyethyl methacrylate: No.

2-(2H-benzotriazol-2-yl)-p-cresol: No.

N,N-dimethyl-p-toluidine: Yes.

ethylene dimethacrylate: No.

methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate: 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 TI: 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

SUSMP: 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.





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