

Safety Data Sheet

according to 29 CFR 1910.1200(g)

VITA VM LC OPAQUE LIQUID

Revision date: 09.08.2019

Product code: 186

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1. Identification

Product identifier

VITA VM LC OPAQUE LIQUID

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)761-19240

Further Information

medical device

2. Hazard(s) identification

Classification of the chemical

29 CFR Part 1910.1200

Flammable liquids: Flam. Liq. 2

Skin corrosion/irritation: Skin Irrit. 2

Respiratory or skin sensitization: Skin Sens. 1

Specific target organ toxicity single exposure: STOT SE 3 (respiratory tract irritation)

Label elements

29 CFR Part 1910.1200

Signal word: Danger**Pictograms:**

Hazard statements

Highly flammable liquid and vapor

Causes skin irritation

May cause an allergic skin reaction

May cause respiratory irritation

Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Avoid breathing dust/fume/gas/mist/vapors/spray.

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

Keep container tightly closed.

Hazards not otherwise classified

No information available.

3. Composition/information on ingredients

Mixtures

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Hazardous components

CAS No	Components	Quantity
97-90-5	ethylene dimethacrylate	55.48 %
80-62-6	methyl methacrylate	23.88 %
72869-86-4	7,7,9-Trimethyl-4,13-dioxo-3,14-dioxo-5,12-diaza-hexadecan-1,16-diol-dimethacrylat (mixture of isomers)	13.59 %
10373-78-1	Camphorquinone	2.3 %
2867-47-2	2-dimethylaminoethyl methacrylate	2.277 %
868-77-9	2-hydroxyethyl methacrylate	1.144 %
80-62-6	methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate	0.572 %

4. First-aid measures

Description of first aid measures

After inhalation

Provide fresh air. 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.

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

Carbon dioxide (CO₂), Foam, Extinguishing powder.

Unsuitable extinguishing media

Water.

Specific hazards arising from the chemical

Highly flammable. Vapors may form explosive mixtures with air.

Special protective equipment and precautions for fire-fighters

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

Additional information

Use water spray/stream 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.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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

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Environmental precautions

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

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

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fume/vapour/spray.

Advice on protection against fire and explosion

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

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.

8. Exposure controls/personal protection

Control parameters

Exposure limits

CAS No.	Substance	ppm	mg/m ³	f/cc	Category	Origin
80-62-6	Methyl methacrylate	100	410		TWA (8 h)	PEL
		100	410		TWA (8 h)	REL

Exposure controls



Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fume/vapour/spray.

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.

Eye/face protection

Wear eye protection/face protection.

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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 Vitoject Breakthrough time (maximum wearing time) 30 min FKM (fluoro rubber)

Skin protection

Flame-retardant protective clothing. Wear anti-static footwear and clothing .

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Provide adequate ventilation as well as local exhaust at critical locations. Technical ventilation of workplace

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state:	Liquid	
Color:	light yellow	
Odor:	characteristic	
pH-Value:		not determined

Changes in the physical state

Melting point/freezing point:		not determined
Initial boiling point and boiling range:		101 °C
Flash point:		10 °C

Flammability

Solid:		not applicable
Gas:		not applicable

Explosive properties

The product is not: Explosive.

Lower explosion limits:		2,1 vol. %
Upper explosion limits:		12,5 vol. %

Auto-ignition temperature

Solid:		not applicable
Gas:		not applicable

Decomposition temperature:		not determined
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Oxidizing properties

Not oxidising.

Vapor pressure: (at 50 °C)		<=1100 hPa
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Density:		not determined
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Water solubility:		No
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Solubility in other solvents

not determined

Partition coefficient:		not determined
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Vapor density:		not determined
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Evaporation rate:		not determined
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Other information

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Solid content:

0,0 %

10. Stability and reactivity

Reactivity

Highly flammable.

Chemical stability

The product is stable under storage at normal ambient temperatures.

Possibility of hazardous reactions

No known hazardous reactions.

Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapors may form explosive mixtures with air.

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.

CAS No	Components				
	Exposure route	Dose	Species	Source	Method
97-90-5	ethylene dimethacrylate				
	dermal	LD50 mg/kg	3300		
80-62-6	methyl methacrylate				
	dermal	LD50 mg/kg	> 5000		
2867-47-2	2-dimethylaminoethyl methacrylate				
	oral	ATE mg/kg	500		
	dermal	ATE mg/kg	1100		
868-77-9	2-hydroxyethyl methacrylate				
	oral	LD50 mg/kg	5050	Rat	
80-62-6	methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate				
	dermal	LD50 mg/kg	>5000		

Irritation and corrosivity

Causes skin irritation

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

Sensitizing effects

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May cause an allergic skin reaction (ethylene dimethacrylate; methyl methacrylate; 7,7,9-Trimethyl-4,13-dioxo-3,14-dioxo-5,12-diaza-hexadecan-1,16-diol-dimethacrylat (mixture of isomers); 2-dimethylaminoethyl methacrylate; 2-hydroxyethyl methacrylate; methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate)

Carcinogenic/mutagenic/toxic effects for reproduction

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

Specific target organ toxicity (STOT) - single exposure

May cause respiratory irritation (methyl methacrylate; ethylene dimethacrylate)

Specific target organ toxicity (STOT) - repeated exposure

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

Carcinogenicity (IARC): Methyl methacrylate (CAS 80-62-6) is listed in group 3. Methyl methacrylate (CAS 80-62-6) is listed in group 3.

Aspiration hazard

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

Additional information on tests

The mixture is classified as 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

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

13. Disposal considerations

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.

14. Transport information

Marine transport (IMDG)

<u>UN number:</u>	UN 1247
<u>UN proper shipping name:</u>	METHYL METHACRYLATE MONOMER, STABILIZED
<u>Transport hazard class(es):</u>	3
<u>Packing group:</u>	II
Hazard label:	3

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Special Provisions: 386
 Limited quantity: 1 L
 Excepted quantity: E2
 EmS: F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

UN number: UN 1247
UN proper shipping name: METHYL METHACRYLATE MONOMER, STABILIZED
Transport hazard class(es): 3
Packing group: II
 Hazard label: 3



Special Provisions: A209
 Limited quantity Passenger: 1 L
 Passenger LQ: Y341
 Excepted quantity: E2
 IATA-packing instructions - Passenger: 353
 IATA-max. quantity - Passenger: 5 L
 IATA-packing instructions - Cargo: 364
 IATA-max. quantity - Cargo: 60 L

Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

Special precautions for user

Warning: Combustible liquid.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

15. Regulatory information

U.S. Regulations

National regulatory information

SARA Section 304 CERCLA:

Methyl methacrylate (80-62-6): Reportable quantity = 1,000 (454) lbs. (kg)

Methyl methacrylate (80-62-6): Reportable quantity = 1,000 (454) lbs. (kg)

SARA Section 311/312 Hazards:

ethylene dimethacrylate (97-90-5): Immediate (acute) health hazard

Methyl methacrylate (80-62-6): Fire hazard, Immediate (acute) health hazard

7,7,9-Trimethyl-4,13-dioxo-3,14-dioxa-5,12-diaza-hexadecan-1,16-diol-dimethacrylat (mixture of isomers)

(72869-86-4): Immediate (acute) health hazard

Camphorquinone (10373-78-1): Immediate (acute) health hazard

2-dimethylaminoethyl methacrylate (2867-47-2): Immediate (acute) health hazard

2-hydroxyethyl methacrylate (868-77-9): Immediate (acute) health hazard

Methyl methacrylate (80-62-6): Fire hazard, Immediate (acute) health hazard

SARA Section 313 Toxic release inventory:

Methyl methacrylate (80-62-6): De minimis limit = 1.0 %, Reportable threshold = Standard

Methyl methacrylate (80-62-6): De minimis limit = 1.0 %, Reportable threshold = Standard

Clean Air Act Section 112(b):

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Methyl methacrylate (80-62-6), Methyl methacrylate (80-62-6)

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

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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
 VOC: Volatile Organic Compounds
 SVHC: Substance of Very High Concern
 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.

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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.)