

Safety Data Sheet

according to 29 CFR 1910.1200(g)

VITA VM LC OPAQUE LIQUID

Revision date: 28.02.2017

Product code: 186-US

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1. Identification

Product identifier

VITA VM LC OPAQUE LIQUID

Recommended use of the chemical and restrictions on use

Details of the supplier of the safety data sheet

2. Hazard(s) identification

Classification of the chemical

29 CFR Part 1910.1200

Hazard categories:

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

Hazard Statements:

Highly flammable liquid and vapor

Causes skin irritation

May cause an allergic skin reaction

May cause respiratory 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.

Keep container tightly closed.

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

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

Store in a well-ventilated place. 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	57.2 %
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate	23.9 %
2867-47-2	2-dimethylaminoethyl methacrylate	2.3 %
10373-78-1	Camphorquinone	2.3 %

4. First-aid measures

Description of first aid measures

After inhalation

Provide fresh air. Medical treatment necessary.

After contact with skin

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. 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. Vapours can 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 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.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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

Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Danger of explosion

Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat

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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

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

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.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Advice on storage compatibility

Do not store together with: Oxidising 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
		50			TWA (8 h)	ACGIH-2016
		100			STEL (15 min)	ACGIH-2016

Exposure controls



Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/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 or drink.

Eye/face protection

Wear eye/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

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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

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

Test method

pH-Value:	not determined
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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
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

Oxidizing properties

Not oxidizing.

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

Solubility in other solvents

not determined

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

Other information

Solid content:	0,0 %
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10. Stability and reactivity

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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. Vapours can 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 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate				
	dermal	LD50 mg/kg	>5000		
2867-47-2	2-dimethylaminoethyl methacrylate				
	oral	ATE mg/kg	500		
	dermal	ATE mg/kg	1100		

Irritation and corrosivity

Causes skin irritation

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

Sensitizing effects

May cause an allergic skin reaction (ethylene dimethacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate; 2-dimethylaminoethyl methacrylate)

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 (ethylene dimethacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate)

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.

Aspiration hazard

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

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Additional information on tests

This 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

Advice on disposal

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

Handle contaminated packages in the same way as the substance itself.

14. Transport information

Marine transport (IMDG)

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



Marine pollutant: Nein
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



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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)

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

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

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

SARA Section 313 Toxic release inventory:

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

Clean Air Act Section 112(b):

Methyl methacrylate (80-62-6)

State Regulations

Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)

This product contains no chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other information

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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%

Other data

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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