

## Safety Data Sheet

according to 29 CFR 1910.1200(g)

### VITA ZETA HLC BOND LIQUID

Revision date: 16.08.2019

Product code: 047

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## 1. Identification

### Product identifier

VITA ZETA HLC BOND 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	
Street:	Spitalgasse 3	
Place:	D-79713 Bad Säckingen	
Post-office box:	1338	
	D-79704 Bad Säckingen	
Telephone:	+49(0)7761-562-0	Telefax: +49(0)7761-562-299
e-mail:	info@vita-zahnfabrik.com	
Contact person:	regulatory affairs	
e-mail:	info@vita-zahnfabrik.com	
Internet:	www.vita-zahnfabrik.com	
Responsible Department:	Regulatory Affairs	

**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. 4

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:** Warning

**Pictograms:**



### Hazard statements

Combustible liquid

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.

Use only outdoors or in a well-ventilated area.

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

If on skin: Wash with plenty of water.

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#### Hazards not otherwise classified

No information available.

### 3. Composition/information on ingredients

#### Mixtures

##### Hazardous components

CAS No	Components	Quantity
141-97-9	ethyl acetoacetat	66.7 %
97-90-5	ethylene dimethacrylate	11.1 %

### 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 skin, wash immediately with plenty of water and soap.

##### **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**

Co-ordinate fire-fighting measures to the fire surroundings.

#### Specific hazards arising from the chemical

Non-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/vapors/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

##### **General advice**

Provide adequate ventilation. Do not breathe gas/fume/vapor/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

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#### Environmental precautions

Do not allow to enter into surface water or drains.

#### Methods and material for containment and cleaning up

##### Other information

Absorb with liquid-binding material (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/vapor/spray.

##### Advice on protection against fire and explosion

No special fire protection measures are necessary.

##### Advice on general occupational hygiene

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.

#### 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.

##### Hints on joint storage

No special measures are necessary.

## 8. Exposure controls/personal protection

#### Control parameters

#### Exposure controls



##### Appropriate engineering controls

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

#### Individual protection measures, such as personal protective equipment

##### 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 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

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supplier of these gloves. Recommended glove articles KCL Camatril velour Breakthrough time: NBR (Nitrile rubber) 120 min

#### Skin protection

Use of protective 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:  
 Odor: characteristic

#### Changes in the physical state

Melting point/freezing point: not determined  
 Boiling point or initial boiling point and boiling range: 240 °C  
 Flash point: 73 °C

#### Flammability

Solid/liquid: not applicable  
 Gas: not applicable

#### Explosive properties

The product is not: Explosive.

Lower explosion limits: 1 vol. %  
 Upper explosion limits: 10,4 vol. %  
 Auto-ignition temperature: 350 °C

#### Self-ignition temperature

Solid: not applicable  
 Gas: not applicable

Decomposition temperature: not determined

pH-Value: not determined

Water solubility: No

#### Solubility in other solvents

not determined

Partition coefficient n-octanol/water: not determined

Vapor pressure: <=1100 hPa  
 (at 50 °C)

Density: 1,03000 g/cm<sup>3</sup>

Relative vapour density: not determined

### Other information

#### Information with regard to physical hazard classes

Oxidizing properties  
 Not oxidising.

#### Other safety characteristics

Solid content: 0,0 %

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Evaporation rate:

not determined

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### 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

#### 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
141-97-9	ethyl acetoacetat				
	oral	ATE 2500 mg/kg			
	dermal	LD50 3980 mg/kg			
97-90-5	ethylene dimethacrylate				
	dermal	LD50 3300 mg/kg			

##### Irritation and corrosivity

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

##### Sensitizing effects

May cause an allergic skin reaction (ethylene dimethacrylate)

##### 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

##### 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): No ingredient of this mixture is listed.

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

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#### 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.

#### Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

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

## 14. Transport information

#### Marine transport (IMDG)

##### UN number or ID 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-TI/IATA-DGR)

##### UN number or ID 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

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## 15. Regulatory information

### U.S. Regulations

#### National regulatory information

SARA Section 311/312 Hazards:

ethyl acetoacetat (141-97-9): Fire hazard, Immediate (acute) health hazard

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

### 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

### Changes

Revision date:

Revision No: 2

This data sheet contains changes from the previous version in section(s): 1,2,4,6,7,8,9,11,13,14,16.

### 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

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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 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.)*