according to 29 CFR 1910.1200(g)

VITA ZETA HLC BOND LIQUID

Revision date: 27.01.2017

Product code: 047-US

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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

Further Information

medical device

2. Hazard(s) identification

Classification of the chemical

29 CFR Part 1910.1200

Hazard categories: Flammable liquids: Flam. Liq. 4 Respiratory or skin sensitization: Skin Sens. 1 Specific target organ toxicity single exposure: STOT SE 3 Hazard Statements: Combustible liquid May cause an allergic skin reaction May cause respiratory irritation

Label elements

29 CFR Part 1910.1200

Signal word: Pictograms: Warning



Hazard statements

Combustible liquid May cause an allergic skin reaction May cause respiratory irritation

Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray. Wear protective gloves/protective clothing/eye protection/face protection. If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. 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
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. 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. 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

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

Specific hazards arising from the chemical

Non-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

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

Environmental precautions

Do not allow to enter into surface water or drains.

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: see section 8

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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

No special fire protection measures are necessary.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.

Advice on storage compatibility

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/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

Recommended glove articles KCL Camatril velour Breakthrough time (maximum wearing time) NBR (Nitrile rubber) 120 min 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.

Skin protection

Wear suitable protective clothing.

Respiratory protection

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

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state: liquid

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Odor:	characteristic		
			Test method
pH-Value:		not determined	
Changes in the physical s	state		
Melting point/freezing point	::	not determined	
Initial boiling point and boili	ing range:	240 °C	
Flash point:		73 °C	
Flammability			
Solid:		not applicable	
Gas:		not applicable	
Lower explosion limits:		1 vol. %	
Upper explosion limits:		10,4 vol. %	
Ignition temperature:		350 °C	
Auto-ignition temperature)		
Solid:		not applicable	
Gas:		not applicable	
Decomposition temperature	e:	not determined	
Oxidizing properties Not oxidizing.			
Vapor pressure: (at 50 °C)		<=1100 hPa	
Density:		1,03000 g/cm³	
Water solubility:		No	
Solubility in other solvent not determined	S		
Partition coefficient:		not determined	
Vapor density:		not determined	
Evaporation rate:		not determined	
Other information			
Solid content:		0,0 %	

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.

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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 mg/kg	2500			
	dermal	LD50 mg/kg	3980			
97-90-5	ethylene dimethacrylate					
	dermal	LD50 mg/kg	3300			

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 (ethylene dimethacrylate)

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.

Aspiration hazard

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

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

Avoid release to the environment.

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13. Disposal considerations

Waste treatment methods

Advice on disposal

Advice on disposal

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

Contaminated packaging

Wash with plenty of water. Handle contaminated packages in the same way as the substance itself.

14. Transport information

Marine transport (IMDG)

<u>UN number:</u>	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)	
<u>UN number:</u>	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

not applicable

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 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

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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.)