

## Safety Data Sheet

according to 29 CFR 1910.1200(g)

### VITAVM LC SEPARATOR

Revision date: 20.02.2017

Product code: 152-US

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## 1. Identification

### Product identifier

VITAVM LC SEPARATOR

### 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 &amp; Co. KG

Post-office box: 1338

79704 Bad Säckingen

Telephone: +49(0)7761-562-0

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e-mail: info@vita-zahnfabrik.com

Internet: www.vita-zahnfabrik.com

**Emergency phone number:** +49-(0)761-19240

## 2. Hazard(s) identification

### Classification of the chemical

#### 29 CFR Part 1910.1200

Hazard categories:

Flammable liquids: Flam. Liq. 2

Aspiration hazard: Asp. Tox. 1

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Dam. 1

Reproductive toxicity: Repr. 2

Specific target organ toxicity single exposure: STOT SE 3

Specific target organ toxicity repeated or prolonged exposure: STOT RE 2

Hazard Statements:

Highly flammable liquid and vapor

May be fatal if swallowed and enters airways

Causes skin irritation

Causes serious eye damage

Suspected of damaging fertility or the unborn child

May cause drowsiness or dizziness

May cause damage to organs through prolonged or repeated exposure

### Label elements

#### 29 CFR Part 1910.1200

**Signal word:** Danger**Pictograms:**

### **Hazard statements**

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Suspected of damaging fertility or the unborn child

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May cause damage to organs through prolonged or repeated exposure

#### Precautionary statements

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

Do not breathe dust/fume/gas/mist/vapors/spray.

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

Call a poison center/doctor if you feel unwell.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

#### Hazards not otherwise classified

No information available.

### 3. Composition/information on ingredients

#### Mixtures

##### Hazardous components

CAS No	Components	Quantity
110-82-7	cyclohexane	54.5 %
108-88-3	toluene	10 %
4253-34-3	methylsilanetriyl triacetat	3 %
1067-33-0	dibutyltin diacetate	0.5 %

### 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

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

#### 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 (CO<sub>2</sub>), 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

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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. Provide adequate ventilation. 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 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 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.

#### **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 <sup>3</sup>	f/cc	Category	Origin
110-82-7	Cyclohexane	300	1050		TWA (8 h)	PEL
		300	1050		TWA (8 h)	REL
		100			TWA (8 h)	ACGIH-2016
108-88-3	Toluene	200	-		TWA (8 h)	PEL
		100	375		TWA (8 h)	REL
		20			TWA (8 h)	ACGIH-2016
		150	560		STEL (15 min)	REL
		500	-		Peak	PEL
		C 300	-		Ceiling	PEL

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#### Biological Exposure Indices (BEI-ACGIH)

CAS No.	Substance	Determinant	Value	Test material	Sampling time
108-88-3	TOLUENE	Toluene	0.02 mg/L	blood	Prior to last shift of workweek

#### 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

Suitable eye protection: goggles.

##### 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 Dermatril P Breakthrough time (maximum wearing time) 60 min NBR (Nitrile rubber)

##### Skin protection

Wear suitable protective clothing.

##### Respiratory protection

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

## 9. Physical and chemical properties

#### Information on basic physical and chemical properties

Physical state:	liquid
Color:	translucent
Odor:	characteristic

#### Test method

pH-Value: not determined

#### Changes in the physical state

Melting point/freezing point: not determined

Initial boiling point and boiling range: 77 °C

Flash point: < 5 °C

#### Flammability

Solid: not applicable

Gas: not applicable

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Lower explosion limits: 1,2 vol. %  
Upper explosion limits: 8,3 vol. %  
Ignition temperature: 260 °C DIN 51794

**Auto-ignition temperature**

Solid: not applicable  
Gas: not applicable

Decomposition temperature: not determined

**Oxidizing properties**

Not oxidizing.

Vapor pressure: <=1100 hPa  
(at 50 °C)Density: 0,86700 g/cm<sup>3</sup>

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 %

## 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. 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.

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CAS No	Components				
	Exposure route	Dose	Species	Source	Method
110-82-7	cyclohexane				
	dermal	LD50 mg/kg	12705		
108-88-3	toluene				
	dermal	LD50 mg/kg	12124		
4253-34-3	methylsilanetriyl triacetat				
	oral	ATE mg/kg	500		
1067-33-0	dibutyltin diacetate				
	oral	LD50	32 mg/kg		
	dermal	LD50 mg/kg	2320		

#### Irritation and corrosivity

- Causes skin irritation
- Causes serious eye damage

#### Sensitizing effects

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

#### Carcinogenic/mutagenic/toxic effects for reproduction

- Suspected of damaging fertility or the unborn child (toluene)
- Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- Carcinogenicity: Based on available data, the classification criteria are not met.

#### Specific target organ toxicity (STOT) - single exposure

May cause drowsiness or dizziness (cyclohexane)

#### Specific target organ toxicity (STOT) - repeated exposure

May cause damage to organs through prolonged or repeated exposure (toluene)  
 Carcinogenicity (IARC): Toluene (CAS 108-88-3) is listed in group 3.

#### Aspiration hazard

May be fatal if swallowed and enters airways (cyclohexane; toluene)

#### Additional information on tests

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP]. Special hazards arising from the substance or mixture!

## 12. Ecological information

#### Ecotoxicity

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### 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.

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## 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

This material and its container must be disposed of as hazardous waste. Handle contaminated packages in the same way as the substance itself.

## 14. Transport information

### Marine transport (IMDG)

**UN number:** UN 1993  
**UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (cyclohexane)  
**Transport hazard class(es):** 3  
**Packing group:** II  
 Hazard label: 3



Limited quantity: 1 L  
 Excepted quantity: E2  
 EmS: F-E, S-E

### Air transport (ICAO-TI/IATA-DGR)

**UN number:** UN 1993  
**UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (cyclohexane)  
**Transport hazard class(es):** 3  
**Packing group:** II  
 Hazard label: 3



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: yes



Danger releasing substance: cyclohexane

### Special precautions for user

Warning: Combustible liquid.

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#### 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:

Cyclohexane (110-82-7): Reportable quantity = 1,000 (454) lbs. (kg)

Toluene (108-88-3): Reportable quantity = 1,000 (454) lbs. (kg)

SARA Section 311/312 Hazards:

Cyclohexane (110-82-7): Fire hazard, Immediate (acute) health hazard

Toluene (108-88-3): Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard

methylsilanetriyl triacetat (4253-34-3): Immediate (acute) health hazard

dibutyltin diacetate (1067-33-0): Immediate (acute) health hazard

SARA Section 313 Toxic release inventory:

Cyclohexane (110-82-7): De minimis limit = 1.0 %, Reportable threshold = Standard

Toluene (108-88-3): De minimis limit = 1.0 %, Reportable threshold = Standard

Clean Air Act Section 112(b):

Toluene (108-88-3)

#### State Regulations

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

WARNING: This product contains the following chemical(s) known to the State of California to cause cancer, birth defects or other reproductive harm: Toluene (developmental).

### 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 information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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