

Safety Data Sheet

acc. to OSHA HCS

Printing date 08/27/2015

Reviewed on 08/27/2015

1 Identification

- **Product identifier**
- **Trade name:** Liquichek™ Serum Volatiles Control
- **Catalog or product number:** 383, 384, 385X
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use** SU20 Health services
- **Application of the substance / the mixture** In-vitro laboratory reagent or component
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Bio-Rad Laboratories, Diagnostic Group
9500 Jeronimo Road
Irvine, California 92618-2017 1(949) 598-1200
- **Information department:** Technical services, customer support
- **Emergency telephone number:**
1(800) 424-9300 Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION, or ACCIDENT.

2 Hazard(s) identification

- **Classification of the substance or mixture**
The product is not classified according to the Globally Harmonized System (GHS).

- **Label elements**
- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Emergency overview:**
- **Routes of exposure:**
Inhalation
Skin
Ingestion
- **Classification system**
- **NFPA ratings (scale 0-4)**
Health = 0
Fire = 0
Reactivity = 0
- **Special Hazards** Contains human sourced and/or potentially infectious components.
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with non-hazardous additions.

- **Listing of dangerous and non-hazardous components:**

EINECS: 268-338-3 Human Source Material	35-50%
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	Proprietary Reagent AB	35-50%
	Proprietary Reagent T	0.1-1.0%
CAS: 26628-22-8 EINECS: 247-852-1	sodium azide	0.01-0.1%
	Proprietary Reagent KB	.001-.01%

Additional information

Contains human sourced and/or potentially infectious components.

Contains added constituents of animal origin.

4 First-aid measures

Description of first aid measures
General information

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation Supply fresh air; consult doctor in case of complaints.

After skin contact

Immediately wash with water and soap and rinse thoroughly.

Generally the product does not irritate the skin.

After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing

Rinse mouth with water. Seek medical attention and appropriate follow-up.

Immediately call a doctor.

Information for doctor

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

Extinguishing media
Suitable extinguishing agents

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture No further relevant information available.

Advice for firefighters

Protective equipment: No special measures required.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Handle as potentially infectious.

Environmental precautions:

Keep contaminated washing water and dispose of appropriately.

Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up:

Absorb liquid components with liquid-binding material.

Pick up mechanically.

Clean the affected area carefully; suitable cleaners are:

Disinfectant

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 · **Reference to other sections** See Section 13 for disposal information.

7 Handling and storage

- **Handling**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Refer to package insert for additional information regarding storage conditions.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

 · **Components with limit values that require monitoring at the workplace:**
64-17-5 ethanol

PEL (United States)	Long-term value: 1900 mg/m ³ , 1000 ppm
REL (United States)	Long-term value: 1900 mg/m ³ , 1000 ppm
TLV (United States)	Short-term value: 1880 mg/m ³ , 1000 ppm

26628-22-8 sodium azide

REL (United States)	Short-term value: C 0.3** mg/m ³ , C 0.1* ppm *as HN ₃ ; **as NaN ₃ ; Skin
TLV (United States)	Short-term value: C 0.29** mg/m ³ , C 0.11* ppm *as HN ₃ vapor **as NaN ₃

67-64-1 acetone

PEL (United States)	Long-term value: 2400 mg/m ³ , 1000 ppm
REL (United States)	Long-term value: 590 mg/m ³ , 250 ppm
TLV (United States)	Short-term value: (1782) NIC-1187 mg/m ³ , (750) NIC-500 ppm Long-term value: (1188) NIC-475 mg/m ³ , (500) NIC-200 ppm BEI

67-56-1 methanol

PEL (United States)	Long-term value: 260 mg/m ³ , 200 ppm
REL (United States)	Short-term value: 325 mg/m ³ , 250 ppm Long-term value: 260 mg/m ³ , 200 ppm Skin
TLV (United States)	Short-term value: 328 mg/m ³ , 250 ppm Long-term value: 262 mg/m ³ , 200 ppm Skin; BEI

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67-63-0 propan-2-ol

PEL (United States)	Long-term value: 980 mg/m ³ , 400 ppm
REL (United States)	Short-term value: 1225 mg/m ³ , 500 ppm Long-term value: 980 mg/m ³ , 400 ppm
TLV (United States)	Short-term value: 984 mg/m ³ , 400 ppm Long-term value: 492 mg/m ³ , 200 ppm BEI

107-21-1 ethane-1,2-diol

TLV (United States)	Short-term value: C 100 mg/m ³ H
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Proprietary Reagent KB

WEEL (United States)	Long-term value: 0.5 mg/m ³
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· **Ingredients with biological limit values:**

67-64-1 acetone

BEI (United States)	50 mg/L Medium: urine Time: end of shift Parameter: Acetone (nonspecific)
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67-56-1 methanol

BEI (United States)	15 mg/L Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific)
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67-63-0 propan-2-ol

BEI (United States)	40 mg/L Medium: urine Time: end of shift at end of workweek Parameter: Acetone (background, nonspecific)
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· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment**

· **General protective and hygienic measures**

Follow the usual biosafety practices for handling potentially infectious materials.
The usual precautionary measures for handling chemicals should be followed.

· **Breathing equipment:** Not required.

· **Protection of hands:** Protective gloves.

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Synthetic gloves

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** Safety glasses

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· **Body protection:** Protective work clothing.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

· Form:	Liquid
· Color:	Light yellow
· Odor:	Light

· **pH-value at 20 °C:** 7.4-8.0

· **Change in condition**

Melting point/Melting range: undetermined

Boiling point/Boiling range: undetermined

· **Flash point:** Not applicable

· **Danger of explosion:** Product does not present an explosion hazard.

· **Density:** Not determined

· **Solubility in / Miscibility with**

Water: Fully miscible

· **Solvent content:**

Organic solvents: 0.4 %

Solids content: 0.6 %

· **Other information** No further relevant information available.

10 Stability and reactivity

· **Reactivity** No further relevant information available.

· **Chemical stability**

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

· **Possibility of hazardous reactions**

This product contains sodium azide. Sodium azide can react with copper, brass, lead, and solder in piping systems to form explosive compounds of lead azide and copper azide.

· **Conditions to avoid** No further relevant information available.

· **Incompatible materials:** No further relevant information available.

· **Hazardous decomposition products:** No dangerous decomposition products known

11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

· **Primary irritant effect:**

· **on the skin:** No irritant effect.

· **on the eye:** Irritant effect.

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- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Harmful

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

64-17-5	ethanol	1
67-63-0	propan-2-ol	3
	Proprietary Reagent KB	2A
	Proprietary Reagent T	

- **NTP (National Toxicology Program)**

Proprietary Reagent KB	R
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- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Dispose of waste in accordance to applicable national, regional, or local regulations.
Flush pipes with water frequently if discarding solutions containing sodium azide into metal piping systems.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

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14 Transport information

· UN-Number	
· DOT, ADR, ADN, IMDG, IATA	Void
· UN proper shipping name	
· DOT, ADR, ADN, IMDG, IATA	Void
· Transport hazard class(es)	
· ADR, ADN, IMDG, IATA	
· Class	Void
· Packing group	
· DOT, ADR, IMDG, IATA	Void
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	Void

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **SARA (Superfund Amendments and Reauthorization Act of 1986 - USA)**

- **Section 302/304 (40CFR355.30 / 40CFR355.40):**

26628-22-8	sodium azide
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- **Section 313 (40CFR372.65):**

26628-22-8	sodium azide
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67-56-1	methanol
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67-63-0	propan-2-ol
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107-21-1	ethane-1,2-diol
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- **TSCA (Toxic Substances Control Act):**

	Proprietary Reagent T
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64-17-5	ethanol
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26628-22-8	sodium azide
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67-64-1	acetone
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67-56-1	methanol
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67-63-0	propan-2-ol
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107-21-1	ethane-1,2-diol
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	Proprietary Reagent KB
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- **California Proposition 65:**

- **Developmental Toxicity**

64-17-5	ethanol
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67-56-1 | methanol

· Carcinogenic categories
· EPA (Environmental Protection Agency)

67-64-1 | acetone

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· TLV (Threshold Limit Value established by ACGIH)

64-17-5 | ethanol

A3

26628-22-8 | sodium azide

A4

67-64-1 | acetone

A4

67-63-0 | propan-2-ol

A4

107-21-1 | ethane-1,2-diol

A4

Proprietary Reagent T

· MAK (German Maximum Workplace Concentration)

64-17-5 | ethanol

5

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· National regulations
· Technical instructions (air):

Class	Share in %
NK	0.1-1.0

· Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: Environmental Health and Safety.

· Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

· Date of preparation / last revision 08/27/2015 / -

· 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

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

· * Data compared to the previous version altered.