

Safety Data Sheet

according to 29 CFR 1910.1200(g)

VITA SPRAY-ON INDICATOR LIQUID

Revision date:

Product code: 042

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1. Identification**Product identifier**

VITA SPRAY-ON INDICATOR 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

2. Hazard(s) identification**Classification of the chemical****29 CFR Part 1910.1200**

Flammable liquids: Flam. Liq. 2

Serious eye damage/eye irritation: Eye Irrit. 2A

Label elements**29 CFR Part 1910.1200****Signal word:** Danger**Pictograms:****Hazard statements**

Highly flammable liquid and vapor

Causes serious eye irritation

Precautionary statements

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

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

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

Continue rinsing.

Special labelling of certain mixtures

13 % of the mixture consists of ingredient(s) of unknown acute toxicity (inhalation).

Hazards not otherwise classified

No information available.

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3. Composition/information on ingredients**Mixtures****Hazardous components**

| CAS No | Components | Quantity |
|---------|---------------|----------|
| 64-17-5 | ethyl alcohol | 78.12 % |

4. First-aid measures**Description of first aid measures****After inhalation**

Provide fresh air. In case of inhalation of decomposition products, affected person should be moved into fresh air and kept still.

After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse. 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**

Carbon dioxide (CO₂), Foam, Extinguishing powder.

Unsuitable extinguishing media

Water.

Specific hazards arising from the chemical

Highly flammable. Vapors may form explosive mixtures with air.

Special protective equipment and precautions for fire-fighters

In case of fire: Wear self-contained breathing apparatus.

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**

Remove all sources of ignition. 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 uncontrolled discharge of product into the environment. Explosion risk.

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**

No special measures are necessary.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapors may form explosive mixtures with air.

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

Hints on joint storage

Do not store together with: Oxidizing 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 |
|---------|----------------------------------|------|-------------------|------|---------------|--------|
| 78-93-3 | 2-Butanone (Methyl ethyl ketone) | 200 | 590 | | TWA (8 h) | PEL |
| 78-93-3 | 2-Butanone | 200 | 590 | | TWA (8 h) | REL |
| | | 300 | 885 | | STEL (15 min) | REL |
| 64-17-5 | Ethyl alcohol (Ethanol) | 1000 | 1900 | | TWA (8 h) | PEL |
| 64-17-5 | Ethyl alcohol | 1000 | 1900 | | TWA (8 h) | REL |

Exposure controls

Individual protection measures, such as personal protective equipment

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Eye/face protection

Suitable eye 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 supplier of these gloves. Recommended glove articles KCL Dermatril P NBR (Nitrile rubber) Breakthrough time: 30 min

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 |
| Color: | pink |
| Odor: | characteristic |

Test method**Changes in the physical state**

| | |
|---|----------------|
| Melting point/freezing point: | not determined |
| Boiling point or initial boiling point and boiling range: | 78 °C |
| Flash point: | 15 °C |

Flammability

| | |
|---------------|----------------|
| Solid/liquid: | not applicable |
| Gas: | not applicable |

Explosive properties

The product is not: Explosive.

| | |
|----------------------------|------------|
| Lower explosion limits: | 3,5 vol. % |
| Upper explosion limits: | 15 vol. % |
| Auto-ignition temperature: | 425 °C |

Self-ignition temperature

| | |
|--------|----------------|
| Solid: | not applicable |
| Gas: | not applicable |

| | |
|----------------------------|----------------|
| Decomposition temperature: | not determined |
|----------------------------|----------------|

| | |
|-----------|----------------|
| pH-Value: | not determined |
|-----------|----------------|

Solubility in other solvents

not determined

| | |
|--|----------------|
| Partition coefficient n-octanol/water: | not determined |
|--|----------------|

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

| | | |
|-----------------|--------|-----------|
| Vapor pressure: | 57 hPa | DIN EN 12 |
|-----------------|--------|-----------|

| | |
|----------|-----------------------|
| Density: | 0,8 g/cm ³ |
|----------|-----------------------|

| | |
|--------------------------|----------------|
| Relative vapour density: | not determined |
|--------------------------|----------------|

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Other information**Information with regard to physical hazard classes**Oxidizing properties
Not oxidising.**Other safety characteristics**Solid content: 0 %
Evaporation rate: not determined**Further Information****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. Vapors may 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 |
| 64-17-5 | ethyl alcohol | | | | |
| | dermal | LD50 mg/kg | 7060 | | |

Irritation and corrosivity

Causes serious eye irritation

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitizing effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

Specific target organ toxicity (STOT) - single exposure

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

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.

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Carcinogenicity (IARC): Ethanol in alcoholic beverages (CAS 64-17-5) is listed in group 1.

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

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.

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

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

14. Transport information**Marine transport (IMDG)**

| | |
|---|--|
| <u>UN number or ID number:</u> | UN 1993 |
| <u>UN proper shipping name:</u> | FLAMMABLE LIQUID, N.O.S. (ethyl alcohol) |
| <u>Transport hazard class(es):</u> | 3 |
| <u>Packing group:</u> | II |
| Hazard label: | 3 |



| | |
|---------------------|----------|
| Special Provisions: | 274 |
| Limited quantity: | 1 L |
| Excepted quantity: | E2 |
| EmS: | F-E, S-E |

Air transport (ICAO-TI/IATA-DGR)

| | |
|--|--|
| <u>UN number or ID number:</u> | UN 1993 |
| <u>UN proper shipping name:</u> | FLAMMABLE LIQUID, N.O.S. (ethyl alcohol) |

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Transport hazard class(es): 3**Packing group:** II

Hazard label: 3



Special Provisions: A3

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: 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 ethyl ketone (78-93-3): Reportable quantity = 5,000 (2270) lbs. (kg)

SARA Section 311/312 Hazards:

ethyl alcohol (64-17-5): Fire hazard, Immediate (acute) health hazard

Methyl ethyl ketone (78-93-3): Fire hazard, Immediate (acute) health hazard

Clean Air Act Section 112(b):

Methyl ethyl ketone (78-93-3)

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

Revision date:

Revision No: 2

Abbreviations and acronymsADR: 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

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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

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.

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