

Safety Data Sheet

according to the European Parliament and Council Regulation (EC) No 1907/2006 (REACH), Article 31, Annex II

Date of issue: 18.05.2015

Date of review:

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Version: 1.0

Name of the mixture: Reagent for INDOL test

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

| Reagent for INDOL test | |
|------------------------|-----------------|
| Pack Name | Reagent for IND |
| Cat. No. | 10003372 |
| Reagent 1 | 1×18 ml |

1.2 Relevant identified uses of the substance or mixture and uses advised against

Reagent for INDOL test is auxiliary colour forming reagent for the test for indol production, included in the set of tests of diagnostic kits of the series MIKRO-LA-TEST®.

1.3 Details of the supplier of the safety data sheet

Name of manufacturer: Erba Lachema s.r.o.
 Place of business: Brno, Karásek 1d, postcode 621 00, CZ
 ID no: 26918846
 Phone: +420 517 077 111
 E-mail: msds@erbalachema.com

1.4 Emergency telephone number

Erba Lachema s.r.o.

Phone: +420 517 077 556 (*service only during business hours*)

Toxicological Information Centre (TIS), Na Bojišti 1, 128 01 Prague 2

Phone: +420 224 919 293 or +420 224 915 402 (*service available 24 hours a day*)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Reagent 1

Classification according to Regulation (EC) No 1272/2008

Flam. Liq. 2 H225
 Skin Irrit. 2 H315
 Eye Irrit. 2 H319
 STOT SE 3 H335
 STOT SE 2 H371

Classification according to 67/548/EEC or 1999/45/EC

– R11
 Xi R36/37/38
 Xn R20/21/22
 Xn R68/20/21/22

For a full text of R-phrases and H-statements see Section 16.

2.2 Label elements

Reagent 1



Pictogram:

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Signal word: Danger

Hazard-determining components of labelling:
Methanol, Hydrochloric acid

Hazard statement(s):

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H371 May cause damage to organs (eyes).

Precautionary statement(s):

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280 Wear protective gloves/protective clothing/eye protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P309+P311 IF exposed or if you feel unwell: Call a POISON CENTER or doctor.

2.3 Other hazards

Reagent 1 is not classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

The product is a mixture.

3.2 Mixtures

Reagent 1 contains following hazardous substances:

| Substance name | Content (% of weight) | CAS number EC number Index number | Classification according to | | |
|-----------------------------------|--------------------------|---|---|---|--------------------------------------|
| | | | 67/548/EEC | 1272/2008 | |
| Ethanol* | 71 | 64-17-5 200-578-6 603-002-00-5 | F; R11 | Flam. Liq. 2 | H225 |
| Hydrochloric acid 35-38 %* | 16 | 7647-01-0 231-595-7 017-002-01-X | C; R34 Xi; R37 | Skin Corr. 1B STOT SE 3 | H314 H335 |
| Methanol* | 4 | 67-56-1 200-659-6 603-001-00-X | F; R11 T; R23/24/25 T; R39/23/24/25 | Flam. Liq. 2 Acute Tox. 3 Acute Tox. 3 Acute Tox. 3 STOT SE 1 | H225 H301 H311 H331 H370 |

*) Substance with exposure limits (exposure limits are listed in Section 8.1)

For a full text of R-phrases and H-statements see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

Avoid contact with the mixture. If you have any doubts or when symptoms persist, seek medical attention.

Exposure by inhalation

Discontinue the exposure, remove casualty to fresh air, keep at rest and seek medical advice.

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Exposure by contact with skin

After contact with skin, wash immediately with soap and water. Consult a physician.

Exposure by contact with eyes

Rinse an open eye (hold eyelids with fingers) with plenty of water for about 15 minutes, transfer casualty to a specialist.

Exposure by ingestion

Rinse mouth with water, drink 1/2 l of lukewarm water, and do induce vomiting. Seek medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

Irritant effects, respiratory paralysis, dermatitis, dizziness, narcosis, inebriation, euphoria, nausea, vomiting, risk of eye damage.

4.3 Indication of any immediate medical attention and special treatment needed

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

SECTION 5: Firefighting measures

The mixture is flammable.

5.1 Extinguishing media

Suitable extinguishing media:

Spray, water mist, universal powder, inert gases, CO₂, foam.

Unsuitable extinguishing media:

Direct water stream.

5.2 Special hazards arising from the substance or mixture

When burning, reagent may generate an explosive mixture of gas and air or toxic gases.

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Isolate and mark the spill site, order all the people out of the place, who do not participate in the rescue work. Remove all possible sources of ignition, turn off vehicle engines, do not smoke and avoid open flames, use non-sparking tools and lamps. Use all recommended personal protective equipment during rescue work.

6.2 Environmental precautions

Due to amount of chemical substances in a mixture, an impact on the environment is not expected.

6.3 Methods and material for containment and cleaning up

Absorb spilled agent with a suitable inert material (sand, earth, vapex) and store contaminated material in containers for collection of hazardous waste. For waste disposal, see Section 13.

6.4 Reference to other sections

See section 7, 8 and 13.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

Observe the principles of work in laboratory. Observe the normal operating procedures for handling chemical substances and mixtures. Do not eat, drink or smoke. Use personal protective equipment, see Section 8.

7.2 Conditions for safe storage, including any incompatibilities

Store in dry and covered stores at a temperature between +2 °C and +8 °C.

7.3 Specific end use(s)

The kit is designed for *in vitro* diagnostic devices.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Control parameters according to Government Decree No 361/2007 Coll.

| CAS | Substance name | PEL | NPK-P | Note | Conversion factor for ppm |
|-----------|-------------------|-------------------|-------------------|------|---------------------------|
| | | mg/m ³ | mg/m ³ | | |
| 64-17-5 | Ethanol | 1000 | 3000 | – | 0.532 |
| 7647-01-0 | Hydrogen chloride | 8 | 15 | I | 0.679 |
| 67-56-1 | Methanol | 250 | 1000 | D | 0.754 |

Exposure limit values in the workplace according to Directive No 2006/15/EC.

| CAS | Substance name | Limit values | | | | Note |
|-----------|-------------------|-------------------|-----|-------------------|-----|------|
| | | 8 hrs | | Short term | | |
| | | mg/m ³ | ppm | mg/m ³ | ppm | |
| 7647-01-0 | Hydrogen chloride | 8 | 5 | 15 | 10 | – |
| 67-56-1 | Methanol | 260 | 200 | – | – | Skin |

Limit values for indicators of biological exposure tests according to Decree No 432/2003 Coll.

| Substance name | Indicator | Limit values | | Sampling time |
|----------------|-----------|--------------|-------------|----------------|
| Methanol | Methanol | 15 mg/l | 0.47 mmol/l | End of a shift |

8.2 Exposure controls

Appropriate engineering controls

Sufficient ventilation.

Personal protective equipment

a. Eye/face protection

Safety goggles.

b. Hand protection

Protective gloves - rubber, resistant to caustic substances.

c. Skin protection

Protective clothing.

d. Respiratory protection

Not required with adequate ventilation, otherwise breathing apparatus.

e. Thermal hazards

Observe the regulations for handlings flammable liquids.

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Environmental exposure controls

To eliminate the emergency conditions, have pre-prepared a decontamination mixture and appropriate collection vessels for reaction residues. Dispose of reaction residues and decontaminated mixtures as hazardous waste water in accordance with relevant legal regulations.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Reagent 1

- | | |
|---|---------------------------|
| a. Appearance | Clear orange liquid |
| b. Odour | Alcohol |
| c. Odour threshold | Information not available |
| d. pH (at 20 °C) | 2 |
| e. Melting point/freezing point | Information not available |
| f. Initial boiling point and boiling range (°C) | Information not available |
| g. Flash point (°C) | Information not available |
| h. Evaporation rate..... | Information not available |
| i. Flammability (solid, gas)..... | Flammable liquid |
| j. Upper/lower flammability or explosive limits..... | Information not available |
| k. Vapour pressure (hPa) | Information not available |
| l. Vapour density..... | Information not available |
| m. Relative density (kg m ⁻³)..... | Information not available |
| n. Water solubility | Information not available |
| o. Partition coefficient: n-octanol/water | Information not available |
| p. Autoignition temperature (°C)..... | Information not available |
| q. Decomposition temperature (°C)..... | Information not available |
| r. Viscosity | Information not available |
| s. Explosive properties | Information not available |
| t. Oxidizing properties | Information not available |

9.2 Other information

None.

SECTION 10: Stability and reactivity

Under normal conditions of use and storage the mixture is stable.

10.1 Reactivity

Vapours may form explosive mixtures with air.

10.2 Chemical stability

The mixture is stable at normal temperature and pressure.

10.3 Possibility of hazardous reactions

Danger of ignition or formation of inflammable gases with chromium trioxide, hydrogen peroxide, nitrogen dioxide, nitric acid, phosphorus oxides, permanganic acid, perchloric acid, sulphuric acid, potassium permanganate, perchlorates, fluorine, strong oxidizing agents, alkali oxides and alkaline metals.

10.4 Conditions to avoid

Strong heating.

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10.5 Incompatible materials

Rubber, various plastics.

10.6 Hazardous decomposition products

Carbon oxides when burning.

SECTION 11: Toxicological information**11.1 Information on toxicological effects****a) Acute toxicity**

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

b) Irritability

Reagent 1 causes irritation to skin, eyes and respiratory system.

c) Corrosion

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

d) Sensitization

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

e) Repeated dose toxicity

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

f) Carcinogenicity

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

g) Mutagenicity

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

h) Reproductive toxicity

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

SECTION 12: Ecological information**12.1 Toxicity**

The mixture is not classified as toxic to environmental.

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

The product does not have the properties of PBT and vPvB. Assessment based on the ingredients that do not have properties of PBT and vPvB.

12.6 Other adverse effects

There is no information about any special danger for environment.

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SECTION 13: Disposal considerations**13.1 Waste treatment methods**

Dispose of in compliance with applicable regulations for hazardous waste management. Do not drain into the wastewater. The mixture should be discarded as a laboratory waste. Incinerate residues of the mixture in a hazardous waste incinerator. Contaminated packaging must be treated as hazardous waste.

Waste code 15 01 10 packaging containing residues of or contaminated by dangerous substances
16 05 06 laboratory chemicals, consisting of or containing dangerous substances,
including mixtures of laboratory chemicals

SECTION 14: Transport information

Not governed by regulations for transport of dangerous goods (ADR).

14.1 UN number

Not specified.

14.2 UN proper shipping name

ADR/RID: –

IMDG: –

ICAO/IATA: –

14.3 Transport hazard class(es)

ADR/RID: –

IMDG: –

ICAO/IATA: –

14.4 Packing group

ADR/RID: –

IMDG: –

ICAO/IATA: –

14.5 Environmental hazards

The mixture is not hazardous to the environment during transport.

14.6 Special precautions for user

No data available.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not transported.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

This safety data sheet complies with the requirements of Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP).

15.2 Chemical safety assessment

Assessment was not carried out.

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SECTION 16: Other information**List of H, P-statements and R-phrases**

- H-statements: H225 Highly flammable liquid and vapour.
H301 Toxic if swallowed.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H335 May cause respiratory irritation.
H370 Causes damage to organs (eyes).
H371 May cause damage to organs (eyes).
- P-statements: P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280 Wear protective gloves/protective clothing/eye protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P309+P311 IF exposed or if you feel unwell: Call a POISON CENTER or doctor.
- R-phrases: R11 Highly flammable.
R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
R34 Causes burns.
R36/37/38 Irritating to eyes, respiratory system and skin.
R37 Irritating to respiratory system.
R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
R68/20/21/22 Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.

Recommended restrictions on use

This compound is designed for professional use. It should not be used for purposes other than those described in Section 1.2.

Information about data sources used to compile the Safety Data Sheet

Material Safety Data Sheets of raw material suppliers, ECHA (European Chemicals Agency), corporate documentation for products

Declaration

The safety data sheet contains basic data corresponding to the present state of our knowledge and experience, in accordance with applicable regulations. The foregoing information was gathered with the utmost care, but that does not mean that it is complete and should be used as the only correct information. Erba Lachema s.r.o. is not responsible for any damages caused by improper use and handling of the mixture.