The RAQP4/96/2R Human Aquaporin-4 Autoantibody ELISA Version 2 kit is an enzyme immunoassay for the quantitative determination of AQP4 autoantibodies in human serum. For professional use only. Users should have a thorough understanding of the Product Data Sheet prior to their use of this kit.

Kit Components:

A) AQP4 Coated Wells  
B) Calibrators  
C) Positive Controls I, II  
D) Negative Control  
E) AQP4–Biotin  
F) Reconstitution Buffer  
G) Streptavidin Peroxidase  
H) Diluent  
I) Concentrated Wash Solution  
J) Peroxidase Substrate  
K) Stop Solution

Streptavidin Peroxidase containing ProClin 300 and Peroxidase Substrate containing N-Methyl-2-pyrrolidone are hazardous mixtures according to CLP Regulation (EC) as amended. Safety Data Sheets for ProClin 300 and N-Methyl-2-pyrrolidone according to actual Regulations (EC/EU) are attached. The other components do not contain any hazardous mixture according to CLP Regulation (EC) as amended. Safety Data Sheet for the Sulphuric Acid < 5% (present in Stop Solution) according to actual Regulations (EC/EU) is attached too.
MATERIAL SAFETY DATA SHEET
in accordance with Regulation (EC) No. 1907/2006 of the European Parliament
and the Council (REACH) and Commission Regulation (EU) No. 830/2015

ProClin 300 < 0.06%

Date of issue: 4.8.2015
Supersedes date:

SECTION 1  IDENTIFICATION OF THE PREPARATION AND OF COMPANY/UNDERTAKING

1.1 Product identifier

Trade name: ProClin 300 < 0.06%
Additional identification: Mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H -
isothiazol-3-one (3:1), solution with conc. < 0.06%

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

Preservative compound

1.3 Details of the supplier of the safety data sheet

BioVendor - Laboratorní medicína a.s.
Karásek 1767/1
621 00 Brno
Czech Republic
Identification number: 63471507

Tel: +420 549 124 185
E-mail: info@biovendor.com

1.4 Emergency telephone number

Toxicology information centre, Na Bojišti 1, 128 21 Prague, Czech Republic, Tel: +420 224 919
293 or +420 224 915 402 (non-stop service).

SECTION 2  HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation 1272/2008/EC:
Mixtures containing ProClin 300 (< 0.06%) are considered hazardous according to Regulation

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram:

!!

Signal word: Warning
Hazard statements: H317
Precautionary statements: P261, P264, P272, P280 and P305+P351+P338: IF IN EYES

For full text of H- and P-phrases see section 16.
2.3 Supplemental hazards statements

None

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures

Description: ProClin 300 is a mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H -isothiazol-3-one (3:1)

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Conc. %</th>
<th>CAS-Nr.</th>
<th>Index-Nr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProClin 300</td>
<td>&lt; 0.06</td>
<td>55965-84-9</td>
<td>613-167-00-5</td>
</tr>
</tbody>
</table>

Classification according to regulation 1272/2008/EC:
Skin Sens. 1, H317
Specific concentration limits: Skin Corr. 1B, H314: C≥0,6 %; Skin Irrit. 2, H315: 0,06 %≤C<0,6 %; Eye Irrit. 2, H319: 0,06 %≤C<0,6 %; Skin Sens. 1, H317: C≥0,0015 %, EUH208: C≥0,00015 %

For full text of H-phrases see section 16.

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures

If in eyes: Rinse thoroughly with water for at least 15 minutes and immediately consult a physician.
If on skin (or hair): Immediately take off contaminated clothing or shoes. Wash with plenty of soap and water. Consult a physician.
If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
If swallowed: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Immediately consult a physician.

SECTION 5 FIRE-FIGHTING MEASURES

5.1 Suitable extinguishing agents
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special precautions for fire-fighters
Self contained breathing apparatus and full protective clothing must we worn in case of fire.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Person-related safety precautions
Use appropriate personal protective equipment to prevent contamination of skin, eyes and personal clothing. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.2 Measures for environmental protection
Keep away from drains.
6.3 Measures for containment and cleaning
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

SECTION 7 HANDLING AND STORAGE

7.1 Precautions for safe handling:
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use normal measures for preventive fire protection.

7.2 Conditions for safe storage:
Store in a cool and dry place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters
Contains no substances with occupational exposure limit values.

8.2 Individual protection measures
Wash hands thoroughly after handling chemical products and before eating, smoking or using the toilet. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.
Eye/face protection: Wear approved safety goggles.
Skin/hand protection: Handle with protective gloves, plastic or rubber. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Body protection: Wear suitable protective clothing as protection against splashing or contamination.
Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved.
Respiratory protection: In case of inadequate ventilation, use a suitable respirator. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties
Appearance: Clear Liquid
Odor: Not available
Odor threshold: Not available
pH: Not available
Melting point/freezing point: -40°C
Boiling point/Boiling range: 189°C
Flash point: 118°C – closed cup
Evaporation rate: Not available
Flammability (solid, gas): Not available
Upper/lower flammability or explosive limits: Not available
Vapor density: Not available
Vapor pressure: Not available
Relative density: 1.03 g/cm³
Solubility in/Miscibility with Water: Soluble
Partition coefficient: Not available
Auto igniting: Not available
Decomposition temperature: Not available
Viscosity: Not available

SECTION 10   STABILITY AND REACTIVITY

10.1 Chemical Stability
Stable under recommended storage conditions.

10.2 Conditions to avoid
Strong oxidizing agents, reducing agents, Amines, Mercaptans

10.3 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions – Carbon oxides, nitrogen oxides (NOx), Sulphur oxides, Hydrogen chloride gas.

SECTION 11   TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
Acute toxicity:
LD50 Oral – rat – 862 mg/kg
LD50 Dermal – rabbit- 2800 mg/kg
Skin corrosion/irritation: Can cause severe burns. Skin – rabbit – Corrosive
Serious eye damage/irritation: Rabbit – Corrosive to eyes
Respiratory or skin sensitization: May cause allergic skin reaction.
Germ cell mutagenicity: No data available
Carcinogenicity: No data available
Reproductive toxicity: No data available
Specific target organ toxicity (STOT) -single exposure: No data available
Specific target organ toxicity (STOT) -repeated exposure: No data available
Aspiration hazard: Can cause severe burns.
Information on likely routes of exposure: Routes of entry anticipated; oral, dermal, inhalation.
Symptoms related to the physical, chemical and toxicological characteristics:
Inhalation: Harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
Ingestion: Harmful if swallowed. Causes burns.
Skin contact: Harmful if absorbed through skin. Causes burns.
Eye contact: Causes eye burns.
Delayed and immediate effects and also chronic effects from short and long term exposure:
   Short term exposure: Potential immediate effects: Not available. Potential delayed effects: Not available.
Effects of chronic exposure:
ProClin 300 at levels greater than or equal to 0.1% is not identified as probable, possible or a confirmed human carcinogen by IARC.
Numerical measures of toxicity:
Not available
Other Information: Not available

SECTION 12 ECOLOGICAL INFORMATION

12.1 Ecotoxicity
   No data available.

12.2 Biodegradability
   No data available.

12.3 Bioaccumulative potential
   No data available.

12.4 Mobility in soil
   No data available.

12.5 Other adverse effects
   Toxic to aquatic organisms.

SECTION 13 DISPOSAL CONSIDERATIONS

13.1 Disposal methods
   Dispose of waste in accordance to applicable national, regional, or local regulations.

13.2 Contaminated packaging
   Dispose in the same manner as unused product.
13.3 Special precautions
Dispose of small amounts of spilled material as described in section 6. Large spills must be dealt with separately by qualified disposal personnel. Avoid dispersal of spilled material to soil, waterways, drains and sewers.

SECTION 14 TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN Number</td>
<td>None</td>
</tr>
<tr>
<td>DOT regulations: Hazard class</td>
<td>None</td>
</tr>
<tr>
<td>Land transport ADR/RID (cross-border)</td>
<td>Not regulated.</td>
</tr>
<tr>
<td>Maritime transport IMDG:</td>
<td>Not regulated.</td>
</tr>
<tr>
<td>Marine pollutant:</td>
<td>No</td>
</tr>
<tr>
<td>Air transport ICAO-TI and IATA-DGR:</td>
<td>Not regulated.</td>
</tr>
<tr>
<td>Transport/Additional information:</td>
<td>Not dangerous according to the above specifications.</td>
</tr>
</tbody>
</table>

SECTION 15 REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SECTION 16 OTHER INFORMATION

Date of issue: 4.8.2015
Supersedes date:

Full text of H- and P-phrases:

H314: Causes severe skin burns and eye damage.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.

P261: Avoid breathing mist.
P264: Wash hands thoroughly after handling.
P272: Contaminated work clothing should not be allowed out of the workplace.
P280: Wear protective gloves and safety glasses.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
ProClin 300 < 0.06%

Date of issue: 4.8.2015
Supersedes date:

Note:
The safety data sheet contains data necessary for ensuring occupational health and safety and protection of the environment. The given data correspond to the current state of knowledge and experience and comply with valid legal regulations. The data cannot be considered a guarantee that the specific use of the product will be appropriate.
MATERIAL SAFETY DATA SHEET

N-Methyl-2-pyrrolidone < 5%

Date of issue: 26.4.2019
Supersedes date:

SECTION 1  IDENTIFICATION OF THE PREPARATION AND OF COMPANY/UNDERTAKING

1.1 Product identifier
Trade name: N-Methyl-2-pyrrolidone < 5%
Additional identification: N-Methyl-2-pyrrolidone < 5% w/w

1.2 Relevant identified uses of the substance or mixture and uses advised against
Component in TMB substrate solution (for use in ELISA)

1.3 Details of the supplier of the safety data sheet
BioVendor - Laboratorní medicína a.s.
Karásek 1767/1
621 00 Brno
Czech Republic
Identification number: 63471507
Tel: +420 549 124 185
E-mail: info@biovendor.com

1.4 Emergency telephone number
Toxicology information centre, Na Bojišti 1, 128 21 Prague, Czech Republic, Tel: +420 224 919 293 or +420 224 915 402 (non-stop service).

SECTION 2  HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
According the EU-edict (EC) 1272/2008 modified by (EC) 2016/1179 the mixtures are classified:
Reproductive toxic (Category 1B), H360D
For full text of H-phrases see section 16.

2.2 Label elements
Labelling according Regulation (EC) No 1272/2008
Pictogram

Signal word
Danger

Hazard statement(s)
H360D: May damage the unborn child.

Precautionary statement(s)
P280: Wear protective gloves/protective clothing/eye protection/face protection

Supplemental hazard statement
none

Note: According the EU-edict (EC) 1272/2008, article 1, 5 (d) the labelling shall not apply to IVD as defined in the Directive 98/79/EC.
MATERIAL SAFETY DATA SHEET
in accordance with Regulation (EC) No. 1907/2006 of the European Parliament
and the Council (REACH) and Commission Regulation (EU) No. 830/2015

N-Methyl-2-pyrrolidone < 5%

Date of issue: 26.4.2019
Supersedes date:

2.3 Other hazards
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Conc. %</th>
<th>EINECS</th>
<th>CAS-Nr.</th>
<th>Index-Nr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-Methyl-2-pyrrolidone</td>
<td>&lt; 5</td>
<td>212-828-1</td>
<td>872-50-4</td>
<td>01-2119472430-46-XXXX</td>
</tr>
</tbody>
</table>

Classification according to regulation 1272/2008/EC:
Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; Repr.1B, H315, H319, H335, H360D

For full text of H-phrases see section 16.

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled
If breathed in, move the concerned person to fresh air. In case of apnoea, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with plenty of water. Consult a physician.

In case of eye contact
Rinse the opened eye for several minutes with running water, if necessary remove contact lenses. Consult an ophthalmologist.

If swallowed
Never give anything by mouth to an unconscious person.
Rinse mouth with water, drink in maximum 2 drinking glasses of water, consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
No data available

4.3 Indication of any immediate medical attention and special treatment needed
No data available

SECTION 5 FIRE-FIGHTING MEASURES

5.1 Extinguishing media
Suitable extinguishing media
Use water spray, alcohol resistant foam, solid extinguishing agent or carbon dioxide.

5.2 Special hazards arising from the substance or mixture
The product itself is not inflammable; extinguishing measures should therefore be prepared for an environmental fire.
In case of fire toxic vapours, e.g. nitric oxide, can be released.

5.3 Advice for firefighters
Wear breath protective mask and protective clothes if necessary.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapour/mist/gas. Care for appropriate ventilation.

6.2 Environmental precautions
Keep away from drains, water or soil.

6.3 Methods and material for containment and cleaning up
Suck up with inert absorbance material and dispose as hazardous waste. Keep in a suitable, closed container.

6.4 Reference to other sections
For disposal considerations see chapter 13.

SECTION 7 HANDLING AND STORAGE

7.1 Precautions for safe handling
No smoking, eating, drinking, chewing gum or storage of food or beverages in the working laboratories. Wash hands after work. Remove safety clothing before entering a refreshment room.

7.2 Conditions for safe storage, including any incompatibilities
Store tightly closed on a cool dry place. Reseal opened bottles carefully and store in an upright position.

Recommended storage temperature: 2-8°C
Storage classification: 12 (non-flammable liquids)
segregate from:
    class 1 (explosives)
    class 4.1A (flammable solids)
    class 4.3 (dangerous when wet)
    class 6.2 (infectious)
    class 7 (radioactive)

Further information:
Store separated from foodstuffs. Protect from unauthorized access.

7.3 Specific end use(s)
Use only in accordance to the manual.
**SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**

8.1 Control parameters

*N-Methyl-2-pyrrolidone*

limit value according to MAK (TRGS 900):  82 mg/m$^3$ (urine at the end of a shift, parameter: 5-Hydroxy-N-Methyl-2-pyrrolidone)

limit value according to BGW (TRGS 903):  150 mg/l

If the products are used according to the instructions, no air pollution is to be expected.

8.2 Exposure controls

Consider the usual good hygiene and safety practice by handling chemicals. Pregnant women should strictly avoid inhalation or skin contact.

**Personal protective equipment**

**Eye/face protection**

Safety glasses with side shields conforming to EN 166 (EU), NIOSH (US)

**Skin protection**

Protective gloves of nitrile rubber or nature latex, satisfying the norm EN 374

**Body protection**

Impermeable protective clothing, the kind of protective equipment has to be selected depending from concentration and amount of dangerous substance at the specific workplace.

**Respiratory protection**

Not required if used according to the intended use. In case of a divergent risk assessment use a full-face respirator with multi-purpose combination respirator cartridge Type ABEK (EN 14387).

**Environmental exposure controls**

Keep away from drains. Avoid contamination of water or soil.

---

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

9.1 Information on basic physical and chemical properties

*N-Methyl-2-pyrrolidone in TMB substrate solution*

**Appearance**  liquid product, slight foaming when shaken

**Colour**  colourless to slightly bluish

**Odour**  characteristic

**pH-value**  3.6 – 3.8

**Boiling point**  100°C

**Flash point**  not applicable

**Explosive properties**  non

**Oxidizing properties**  non

**Vapour pressure**  not measured

**Relative density**  1.003 g/ml

**Solubility**  complete soluble/miscible in protic solvents
N-Methyl-2-pyrrolidone < 5%

Date of issue: 26.4.2019
Supersedes date:

9.2 Other safety information
No further dangerous properties known.

SECTION 10 STABILITY AND REACTIVITY

10.1 Reactivity
No data available

10.2 Chemical stability
store at 2–8°C

10.3 Possibility of hazardous reactions
If the products are used according to the instructions, no hazardous reactions are to be expected.

10.4 Conditions to avoid
Light, heat, moisture (will not cause a dangerous reaction, but destroys the quality of the products)
See storage conditions chapter 7.2.

10.5 Incompatible materials
heavy metal salts, complex forming agents and catalases (will not cause a dangerous reaction, but destroys the quality of the products)

10.6 Hazardous decomposition products
There are no dangerous decomposition products known.

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

\[ N\text{-Methyl-2-pyrrolidone} \]

LD50 (oral): 3598 mg/kg (rat)
LC50 (inhalativ): > 5.1 mg/l (rat)

Skin corrosion/irritation
LD50 (dermal): 8000 mg/kg (rabbit)
Risk of skin resorption

Serious eye damage/irritation
No information available

Respiratory or skin sensitization
No information available

Germ cell mutagenicity
No information available

Carcinogenicity
No information available
Reproductive toxicity
May damage the unborn child: N-Methyl-2-pyrrolidone (Repr. 1B)

Specific target organ toxicity - single exposure
May cause respiratory irritation.

Specific target organ toxicity - repeated exposure
No specific target organ toxicant, repeated exposure

Aspiration hazard
No information available

SECTION 12  ECOLOGICAL INFORMATION

12.1 Toxicity

N-Methyl-2-pyrrolidone

<table>
<thead>
<tr>
<th>Species</th>
<th>Effect Parameter</th>
<th>Toxicity LC50 (mg/l/96h)</th>
<th>Toxicity IC50 (mg/l/72h)</th>
<th>Toxicity EC50 (mg/l/48h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>bluegill (Lepomis macrochirus)</td>
<td>LC50</td>
<td>832</td>
<td></td>
<td></td>
</tr>
<tr>
<td>gold orfe (Leuciscus idus)</td>
<td>LC50</td>
<td>&gt; 500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>green alga (Desmodesmus subspicatus)</td>
<td>IC50</td>
<td>&gt; 500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>invertebrates (Daphnia magna)</td>
<td>EC50</td>
<td>4897</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12.2 Persistence and degradability
> 90%/20d easily biologically degradable

12.3 Bioaccumulative potential
Distribution: log P(o/w): ≤ 4
There is no Bioaccumulation expected

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects
No further effects known.
If used appropriately, no ecological problems are to be expected.

SECTION 13  DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product
Waste material must be disposed of in accordance with the national and local regulations.

Contaminated packaging
Emptied packaging can be given to local recycling or waste disposal
N-Methyl-2-pyrrolidone < 5%

Date of issue: 26.4.2019
Supersedes date:

SECTION 14 TRANSPORT INFORMATION

14.1 UN number
ADR/RID: - / IMDG: - / IATA: -

14.2 UN proper shipping name
ADR/RID: No dangerous goods / IMDG: No dangerous goods / IATA: No dangerous goods

14.3 Transport hazard class(es)
ADR/RID: - / IMDG: - / IATA: -

14.4 Packaging group
ADR/RID: - / IMDG: - / IATA: -

14.5 Environmental hazards
ADR/RID: no / IMDG Marine pollutant: no / IATA: no

14.6 Special precautions for user
A No data available.

SECTION 15 REGULATORY INFORMATION


15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
The calculated toxicity (ATE) of the mixtures according (EC) 1272/2008, Annex I: 65,900 mg/kg body weight, no classification as toxic
According EC 1272/2008, Annex I no classification as hazardous to water. (calculated L(E)C50 of the mixtures: 8,800 mg/l)

Employment limitations
Reference is made to the restrictions of employment specified in the Youth Employment Act and the Maternity Protection Act.

Other regulations, limitations and prohibitive regulations
Substance of very high concern (SVHC) according (EC) 1907/2006 (REACH), Article 57: N-Methyl-2-pyrrolidone (CAS 872-50-4)

15.2 Chemical Safety Assessment
No data available.

SECTION 16 OTHER INFORMATION

Date of issue: 26.4.2019
Supersedes date:
N-Methyl-2-pyrrolidone < 5%

Date of issue: 26.4.2019
Supersedes date:

Full text of H-Statements referred to under sections 2 and 3.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H334 May cause allergy or asthma symptoms of breathing difficulties if inhaled.
H360D May damage the unborn child.

Categories of the Acute Toxicity (ATE) according EC 1272/2008:

<table>
<thead>
<tr>
<th>Category</th>
<th>ATE Range</th>
<th>(oral in mg/kg body weight)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1</td>
<td>0&lt; ATE ≤5</td>
<td>(oral in mg/kg body weight)</td>
</tr>
<tr>
<td>Category 2</td>
<td>5&lt; ATE ≤50</td>
<td>(oral in mg/kg body weight)</td>
</tr>
<tr>
<td>Category 3</td>
<td>50&lt; ATE ≤300</td>
<td>(oral in mg/kg body weight)</td>
</tr>
<tr>
<td>Category 4</td>
<td>300&lt; ATE ≤2.000</td>
<td>(oral in mg/kg body weight)</td>
</tr>
</tbody>
</table>

Note:
The safety data sheet contains data necessary for ensuring occupational health and safety and protection of the environment. The given data correspond to the current state of knowledge and experience and comply with valid legal regulations. The data cannot be considered a guarantee that the specific use of the product will be appropriate.
SECTION 1  IDENTIFICATION OF THE PREPARATION AND OF COMPANY/UNDERTAKING

1.1 Product identifier

Trade name: Sulphuric Acid < 5%
Additional identification: Sulfuric Acid < 5%

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

Stop solution for the ELISA kit.

1.3 Details of the supplier of the safety data sheet

BioVendor - Laboratorní medicína a.s.
Karásek 1767/1
621 00 Brno
Czech Republic
Identification number: 63471507

Tel: +420 549 124 185
E-mail: info@biovendor.com

1.4 Emergency telephone number

Toxicology information centre, Na Bojišťi 1, 128 21 Prague, Czech Republic, Tel: +420 224 919 293 or +420 224 915 402 (non-stop service).

SECTION 2  HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation 1272/2008/EC:
Not classified as dangerous.

2.2 Label elements

Not applicable.
EUH210 Safety data sheet available on request.

2.3 Other hazards

Concentration limits for classification as dangerous are not met.

SECTION 3  COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Conc. in w/w%</th>
<th>EINECS</th>
<th>CAS-Nr.</th>
<th>Index-Nr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulphuric acid, 98%</td>
<td>&lt; 5</td>
<td>231-639-5</td>
<td>7664-93-9</td>
<td>016-020-00-8</td>
</tr>
</tbody>
</table>

Classification according to regulation 1272/2008/EC:

Skin Corr. 1A, H314
Specific concentration limits: Skin Corr. 1A, H314: C≥15 %; Skin Irrit. 2, H315: 5 %≤C<15%; Eye Irrit. 2, H319: 5 %≤C<15%.

For full text of H-phrases see section 16.
SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures

General information: If feeling unwell or unsure, inform a doctor and show information from this Safety Data Sheet. If unconscious, place the affected person in the recovery position on their side with their head slightly backwards and take care there is no obstruction in their respiratory tract, NEVER induce vomiting. If the affected person is vomiting, ensure that they do not choke on their own vomit.

If inhaled: Immediately stop the exposure, take the affected person to fresh air. Keep the affected person warm. Get medical attention if irritation, shortness of breath or other symptoms persists.

In case of skin contact: Take off contaminated clothing. Wash the affected area with plenty of lukewarm water, if possible. If skin is not irritated, soap, soap solution or shampoo can be used. Get medical attention if irritation persists.

In case of contact with eyes: Rinse the eyes immediately with plenty of running water keeping eyelids open; if the affected person wears contact lenses, remove them immediately. Continue rinsing for minimum 10 minutes. Get medical attention.

If ingested: DO NOT INDUCE VOMITING – even the act of inducing vomiting may cause complications. Rinse mouth, if possible, administer a small dose of activated carbon (1-2 crushed tablets); do not attempt neutralization. Get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: Possible respiratory tract irritation, cough, headache.

Skin contact: Painful reddening, irritation.

Eye contact: May cause irritation.

Ingestion: May cause irritation, sickness.

4.3 Indication of any immediate medical attention and special treatment needed

Immediate medical attention is not necessary.

SECTION 5 FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Alcohol resistant foam, carbon dioxide, powder, dispersed water, water spray.

Unsuitable extinguishing media: none known.

5.2 Special hazards arising from the substance or mixture

In case of fire sodium oxides can be released.

5.3 Advice for firefighters

Keep the contaminated fire-extinguishing media away from drains, surface and ground water. If necessary, wear a suitable self-contained breathing apparatus and full protective clothing.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ensure sufficient ventilation. Wear proper protective equipment, refer to Section 8.
6.2 Environmental precautions
Avoid soil contamination and keep away from surface and ground water. Avoid spills and keep away from drains.

6.3 Methods and material for containment and cleaning up
Cover spills with suitable (non-flammable) absorbent (sand, diatomaceous earth, soil, and other suitable absorbent material); collect in a tightly closed container and dispose of in compliance with Section 13. Dispose of the contained material in accordance with local regulations. After containment, wash the affected area with plenty of water or other suitable detergent.

6.4 Reference to other sections
See section 7 for handling, section 8 for personal protective equipment, section 13 for disposal.

SECTION 7 HANDLING AND STORAGE

7.1 Precautions for safe handling
Do not inhale gases and vapours. Avoid contact with the skin and the eyes. Wear suitable personal protective equipment according to Section 8. Comply with local and national regulations on occupational health and safety. Avoid long-term and repeated exposure.

7.2 Conditions for safe storage, including any incompatibilities
Keep in tightly closed containers and in cool, dry and well ventilated designated places. Open packaging must be carefully closed and kept in a vertical position to avoid release or spill. Keep away from alkaline materials.

7.3 Specific end use(s)
See Section 1.2., no other uses are identified.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters
Czech Republic (Government Decree no. 361/2007 Sb. as amended): Sulphuric acid, SO₃: long term 1 mg/m³, short term 2 mg/m³, note I (causes irritation of mucous membranes (eyes, respiratory tract) and skin irritation).

8.2 Exposure controls

8.2.1 Appropriate engineering controls
Use in a well ventilated area.

8.2.2 Individual protection measures, such as personal protective equipment
Take usual occupational health and safety measures. If it is impossible to meet exposition limits, suitable respiratory protective equipment must be used. When using, do not eat, drink and smoke. Wash hands carefully with water and soap after work and before breaks.

a) Eye/face protection: Use protective glasses (according to EN 166).

b) Skin protection: i) Hand protection: Use suitable protective gloves resistant to the product. Follow the recommendations of the gloves manufacturer when selecting the appropriate thickness, material and permeability. In the event of long-term or repeated dermal exposure, apply suitable hand
Sulphuric Acid < 5%

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cream to the parts of the skin in direct contact with the mixture. Follow other recommendations of the manufacturer.

ii) Other: Protective cotton clothing. Carefully wash the skin exposed to the product.

c) Respiratory protection: If necessary, wear a face respirator (according to EN 14387).

d) Thermal hazards: No information available.

8.2.3 Environmental exposure controls
Refer to Sections 6 and 12.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance (at 20°C):</td>
<td>Colourless liquid</td>
</tr>
<tr>
<td>Odour:</td>
<td>Odourless</td>
</tr>
<tr>
<td>Odour threshold:</td>
<td>Not determined</td>
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<tr>
<td>pH:</td>
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</tr>
<tr>
<td>Melting point/freezing point (°C):</td>
<td>No data available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range (°C):</td>
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</tr>
<tr>
<td>Flash point (°C):</td>
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</tr>
<tr>
<td>Evaporation rate:</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability:</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits:</td>
<td>No data available</td>
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<tr>
<td>Vapour pressure:</td>
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<tr>
<td>Vapour density:</td>
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<tr>
<td>Relative density:</td>
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<tr>
<td>Solubility(ies):</td>
<td>Soluble in water</td>
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<tr>
<td>Partition coefficient n-octanol/water:</td>
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<tr>
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<tr>
<td>Decomposition temperature:</td>
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<td>Viscosity:</td>
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<tr>
<td>Explosive properties:</td>
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</tr>
<tr>
<td>Oxidizing properties:</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2 Other information

None known.

SECTION 10 STABILITY AND REACTIVITY

10.1 Reactivity
No hazardous reactions occur under common conditions of use.

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
Reacts with strong bases.
MATERIAL SAFETY DATA SHEET
in accordance with Regulation (EC) No. 1907/2006 of the European Parliament
and the Council (REACH) and Commission Regulation (EU) No. 830/2015

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10.4 Conditions to avoid
No data available.

10.5 Incompatible materials
Not known under recommended conditions of use.

10.6 Hazardous decomposition products
They are not produced under normal use. In the event of fire: sulphur oxides

SECTION 11  TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:
No data available on the product itself.
Sulphuric acid:
LD50, oral, rat: 3140 mg/kg
LD50, inhalation, rat: 510 mg/m³/2 h

Corrosion/ irritation:
May cause mild irritation. Product is not classified as irritant.

Chronic toxicity
Sensitisation: No data available.
Narcotic effects: No data available.
Carcinogenity: No data available.
Mutagenity: No data available.
Reproduction toxicity: No data available.

SECTION 12  ECOLOGICAL INFORMATION

12.1 Toxicity
No data available on the product itself.
Sulphuric acid:
LC50, fish, Gambusia affinis, 96 h: 42 mg/l
LC50, crustaceans, Pandalus montagui, 48 h: 42.5 mg/l

12.2 Persistence and biodegradability
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
Does not meet the criteria for PBT and vPvB.

12.6 Other adverse effects
No data available.
SECTION 13  DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Proceed in accordance with Act No. 185/2001 Coll., the Waste Act, as amended, Act No. 188/2004 Coll., to amend Act No. 185/2001 Coll.; Act No. 477/2001 Coll., to regulate packaging and to amend some statutes (the Packaging Act), as amended and in accordance with implemented regulations on waste disposal.

Appropriate methods of waste treatment of both the substance or the mixture and any contaminated packaging:

The indicated waste, including the waste identification sheet, shall be handed over to a company authorized to treat and dispose of wastes according to the Waste Act and that the company producing waste has entered into a contract with.

Both completely empty and not completely empty packaging shall be placed in designated containers for waste collection and the indicated waste shall be handed over for disposal to a person authorized to dispose of the waste.

Waste type code 060101
Waste type sulphuric acid and sulphurous acid *
Waste subgroup waste from production, processing, distribution and use (VZDP) of acids
Waste group WASTE CREATED BY ANORGANIC CHEMICAL PROCESSES

Waste type code for packaging 150110
Waste type packaging containing residues of dangerous substances or packaging contaminated with these substances*
Waste subgroup Packaging (including separately collected household packaging material)
Waste group WASTE PACKAGING; ABSORPTION AGENTS; CLEANING CLOTHS; FILTRATION MATERIALS AND PROTECTIVE CLOTHING NOT SPECIFIED IN ANY OTHER MANNER

( * ) – hazardous waste according to Directive No. 91/689/EEC on hazardous waste

SECTION 14  TRANSPORT INFORMATION

14.1 UN number
Not regulated.

14.2 UN proper shipping name
Not regulated.

14.3 Transport hazard class(es)
Not regulated.

14.4 Packing group
Not regulated.

14.5 Environmental hazards
No data available.

14.6 Special precautions for user
No data available.
14.7 Transport in bulk according to Annex II of Marpol73/78 and the IBC Code

No data available.

SECTION 15 REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Act No. 350/2011 Coll., to regulate chemical substances and chemical mixtures and to amend some statutes, as amended. Implemented regulations to Act No. 350/2011 Coll., as amended

15.2 Chemical safety assessment

Chemical safety assessment has not been carried out.

SECTION 16 OTHER INFORMATION

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Full text of H-phrases:
H314 Causes severe skin burns and eye damage.

Advice on training
Workers shall receive appropriate training to acquaint them with the recommended use, mandatory protective equipment, first aid measures and banned manners of handling the mixture.

Note:
The safety data sheet contains data necessary for ensuring occupational health and safety and protection of the environment. The given data correspond to the current state of knowledge and experience and comply with valid legal regulations. The data cannot be considered a guarantee that the specific use of the product will be appropriate.