The RA19019R Porcine Interleukin-6 ELISA kit is based on a sandwich technique that may be used to measure pig Interleukin-6 (IL-6).
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) Antibody Coated Microtiter Strips  
B) Streptavidin Poly_HRP tracer  
C) IL-6 (pig) Biotin-Labelled Antibody  
D) IL-6 (pig) Standard  
E) Dilution Buffer (Poly_HRP EIA Buffer)  
F) Wash Buffer  
G) HRP Substrate Solution (TMB)  
H) Stop Solution  
I) Tween 20

Components B), D), E) and H) are hazardous mixtures according to CLP Regulation (EC) as amended. Safety Data Sheets according to actual Regulations (EC/EU) are attached.
Streptavidin Poly_HRP tracer (RA19019R Kit)

Date of issue: 25.1.2018
Supersedes date:

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product identifier
Trade name: Streptavidin Poly_HRP tracer (RA19019R Kit)

1.2 Relevant identified uses of the substance or mixture and uses advised against
Assay component – Streptavidin Poly-HRP tracer.

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:
Repr. 1A, H360D

2.2 Label elements
Hazard pictogram:

Signal word:
Danger

Hazard-determining components of labelling:
N-Methyl-2-pyrrolidone

Hazard statements:
H360D May damage the unborn child.

Precautionary statements:
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:
Restricted to professional users.
2.3 Other hazards

Results of PBT and vPvB assessment:
PBT: Not applicable.
vPvB: Not applicable.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Conc. in w/w%</th>
<th>EINECS</th>
<th>CAS-Nr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-Methyl-2-pyrrolidone</td>
<td>0.3 – ≤2.5</td>
<td>212-828-1</td>
<td>872-50-4</td>
</tr>
</tbody>
</table>

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

For full text of H-phrases see section 16.

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures

After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Generally, the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5 FIREFIGHTING MEASURES

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture

No further relevant information available.

5.3 Advice for firefighters

Protective equipment: No special measures required.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Not required.

6.2 Environmental precautions:

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

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13.

6.4 Reference to other sections

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
MATERIAL SAFETY DATA SHEET

Streptavidin Poly_HRP tracer (RA19019R Kit)

Date of issue: 25.1.2018
Supersedes date:

See Section 13 for disposal information.

SECTION 7 HANDLING AND STORAGE

7.1 Precautions for safe handling
No special precautions are necessary if used correctly.

Information about fire and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities
Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: None.

Recommended storage temperature: 4°C

7.3 Specific end use(s)
No further relevant information available.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Additional information about design of technical facilities: No further data; see item 7.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.

Respiratory protection: Not required.

Protection of hands:
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. 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 cannot be calculated in advance and has therefore to be checked prior to the application. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Goggles recommended during refilling.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form: Fluid
Colour: Red
Odour: Odourless.
Streptavidin Poly_HRP tracer (RA19019R Kit)

Date of issue: 25.1.2018
Supersedes date:

9.2 Other information
No further relevant information available.

SECTION 10 STABILITY AND REACTIVITY

10.1 Reactivity
No further relevant information available.

10.2 Chemical stability
Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions
No dangerous reactions known.

10.4 Conditions to avoid
No further relevant information available.

10.5 Incompatible materials
No further relevant information available.

10.6 Hazardous decomposition products
No dangerous decomposition products known.
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

Streptavidin Poly_HRP tracer (RA19019R Kit)
Date of issue: 25.1.2018
Supersedes date:

SECTION 11  TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
Acute toxicity:  Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:
CAS: 872-50-4, N-Methyl-2-pyrrolidone
Oral LD50  3598 mg/kg (rat)
Dermal LD50  8000 mg/kg (rabbit)

Primary irritant effect:
Skin corrosion/irritation:  Based on available data, the classification criteria are not met.
Serious eye damage/irritation:  Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation:  Based on available data, the classification criteria are not met.

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction):
Germ cell mutagenicity:  Based on available data, the classification criteria are not met.
Carcinogenicity:  Based on available data, the classification criteria are not met.
Reproductive toxicity:  May damage the unborn child.
STOT-single exposure:  Based on available data, the classification criteria are not met.
STOT-repeated exposure:  May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard:  Based on available data, the classification criteria are not met.

SECTION 12  ECOLOGICAL INFORMATION

12.1 Toxicity
Aquatic toxicity:
CAS: 872-50-4, N-Methyl-2-pyrrolidone
LC50, 96h  >500 mg/l (Leuciscus idus)
4897 mg/l (Daphnia magna)
IC50, 72h  >500 mg/l/72h (Desmodesmus subspicatus)

12.2 Persistence and degradability
No further relevant information available.

12.3 Bioaccumulative potential
No further relevant information available.

12.4 Mobility in soil
No further relevant information available.

Additional ecological information:
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

12.5 Results of PBT and vPvB assessment
PBT:  Not applicable.
vPvB:  Not applicable.
12.6 Other adverse effects
No further relevant information available.

SECTION 13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Recommendation:
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
European waste catalogue
HP 10 Toxic for reproduction
Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.

SECTION 14 TRANSPORT INFORMATION

14.1 UN-Number
ADR, ADN, IMDG, IATA not regulated

14.2 UN proper shipping name
ADR, ADN, IMDG, IATA not regulated

14.3 Transport hazard class(es)
ADR, ADN, IMDG, IATA Class not regulated

14.4 Packing group
ADR, IMDG, IATA not regulated

14.5 Environmental hazards:
Not applicable.

14.6 Special precautions for user
Not applicable.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable.

Transport/Additional information:
IATA Remarks: When sold in quantities of less than or equal to 1mL or 1g with an Excepted Quantity Code of E1, E2, E3, E4 or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10. Therefore, packaging does not have to be labeled as Dangerous Goods/Excepted Quantity

SECTION 15 REGULATORY INFORMATION

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

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

15.2 Chemical safety assessment
Chemical safety assessment has not been carried out.
SECTION 16 OTHER INFORMATION

Date of issue: 25.1.2018
Revision notes:

Full text of H-phrases:
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H360D May damage the unborn child.

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.
SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product identifier
Trade name: Standard (RA19019R Kit)

1.2 Relevant identified uses of the substance or mixture and uses advised against
Assay component – IL-6 (pig) Standard.

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 Bojiště 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:
STOT RE 2, H373

2.2 Label elements
Hazard pictogram:

Signal word:
Warning

Hazard-determining components of labelling:
Thimerosal

Hazard statements:
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P314 Get medical advice/attention if you feel unwell.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards
Results of PBT and vPvB assessment:
PBT: Not applicable.
vPvB: Not applicable.
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>
</tr>
</thead>
<tbody>
<tr>
<td>thimerosal</td>
<td>0.10 – &lt;0.25</td>
<td>200-210-4</td>
<td>54-64-8</td>
</tr>
</tbody>
</table>

Classification according to regulation 1272/2008/EC:
- Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 2, H330; STOT RE 2, H373; Aquatic Acute 1, H400; Aquatic Chronic 1, H410

For full text of H-phrases see section 16.

SECTION 4 FIRST AID MEASURES

4.1 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: Generally, the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5 FIREFIGHTING MEASURES

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture

No further relevant information available.

5.3 Advice for firefighters

Protective equipment: No special measures required.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Not required.

6.2 Environmental precautions:

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

6.3 Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

6.4 Reference to other sections

See Section 7 for information on safe handling. 
See Section 8 for information on personal protection equipment. 
See Section 13 for disposal information.
SECTION 7  HANDLING AND STORAGE

7.1 Precautions for safe handling
No special precautions are necessary if used correctly.
Information about fire and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required.
Further information about storage conditions: None.
Recommended storage temperature: 4°C

7.3 Specific end use(s)
No further relevant information available.

SECTION 8  EXPOSURE CONTROLS / PERSONAL PROTECTION

Additional information about design of technical facilities: No further data; see item 7.

8.1 Control parameters
Ingredients with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls
Personal protective equipment:
General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Respiratory protection: In case of brief exposure or low pollution use respiratory filter device.
In case of intensive or longer exposure use self-contained respiratory protective device.
Protection of hands: Protective gloves. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. 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 cannot be calculated in advance and has therefore to be checked prior to the application. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye protection: Tightly sealed goggles.

SECTION 9  PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties
Form: Solid
Colour: According to product specification
Odour: Characteristic
Odour threshold: Not determined
pH-value: Not applicable
Melting point/freezing point: Undetermined
Initial boiling point and boiling range: 1413°C
Flash point: Not applicable
Flammability (solid, gas): Not determined
Decomposition temperature: Not determined
Auto-ignition temperature: Product is not self-igniting
Explosive properties: Product does not present an explosion hazard
Explosion limits:
Lower: Not determined
Upper: Not determined
Vapour pressure: Not applicable
Density: Not determined
Relative density: Not determined
Vapour density: Not applicable
Evaporation rate: Not applicable
Solubility in / Miscibility with water: Insoluble
Partition coefficient: n-octanol/water: Not determined
Viscosity:
Dynamic: Not applicable
Kinematic: Not applicable
Solvent content:
Organic solvents: 0.0%
Solids content: 100.0%

9.2 Other information
No further relevant information available.

SECTION 10 STABILITY AND REACTIVITY

10.1 Reactivity
No further relevant information available.

10.2 Chemical stability
Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions
No dangerous reactions known.

10.4 Conditions to avoid
No further relevant information available.

10.5 Incompatible materials
No further relevant information available.

10.6 Hazardous decomposition products
No dangerous decomposition products known.
SECTION 11  TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

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

LD/LC50 values relevant for classification:
CAS: 54-64-8, thimerosal
Oral LD50  75 mg/kg (rat)
Dermal LD50  98 mg/kg (rat)
LC50 48h  21.2 mg/l (Oncorhynchus mykiss)

Primary irritant effect:
Skin corrosion/irritation: Based on available data, the classification criteria are not met.
Serious eye damage/irritation: Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):
Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure: Based on available data, the classification criteria are not met.

SECTION 12  ECOLOGICAL INFORMATION

12.1 Toxicity

Aquatic toxicity:
No further relevant information available.

12.2 Persistence and degradability

No further relevant information available.

12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

No further relevant information available.

Additional ecological information:
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.
12.6 Other adverse effects
No further relevant information available.

SECTION 13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Recommendation:
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.

SECTION 14 TRANSPORT INFORMATION

14.1 UN-Number
ADR, ADN, IMDG, IATA not regulated

14.2 UN proper shipping name
ADR, ADN, IMDG, IATA not regulated

14.3 Transport hazard class(es)
ADR, ADN, IMDG, IATA Class not regulated

14.4 Packing group
ADR, IMDG, IATA not regulated

14.5 Environmental hazards:
Not applicable.

14.6 Special precautions for user
Not applicable.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable.

Transport/Additional information:
IATA Remarks: When sold in quantities of less than or equal to 1mL or 1g with an Excepted Quantity Code of E1, E2, E3, E4 or E5, this item meets the De Minimis Quantites exemption, per IATA 2.6.10. Therefore, packaging does not have to be labeled as Dangerous Goods/Excepted Quantity

SECTION 15 REGULATORY INFORMATION

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

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 18

15.2 Chemical safety assessment
Chemical safety assessment has not been carried out.
Date of issue: 25.1.2018  
Revision notes:  

Full text of H-phrases:  
H300 Fatal if swallowed.  
H310 Fatal in contact with skin.  
H330 Fatal if inhaled.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  

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.
## SECTION 1  IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 **Product identifier**

**Trade name:** Dilution Buffer (RA19019R Kit)

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

Assay component – Poly-HRP EIA Buffer.

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:**

STOT RE 2, H373

2.2 **Label elements**

**Hazard pictogram:**

![Hazard Pictogram]

**Signal word:**

Warning

**Hazard-determining components of labelling:**

Thimerosal

**Hazard statements:**

H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements:**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P314 Get medical advice/attention if you feel unwell.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 **Other hazards**

**Results of PBT and vPvB assessment:**

PBT: Not applicable.
vPvB: Not applicable..
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

Dilution Buffer (RA19019R Kit)

Date of issue: 25.1.2018
Supersedes date:

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Mixtures
Ingredient Conc. in w/w% EINECS CAS-Nr.
thimerosal 0.10 – <0.25 200-210-4 54-64-8

Classification according to regulation 1272/2008/EC:
Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 2, H330; STOT RE 2, H373; Aquatic
Acute 1, H400; Aquatic Chronic 1, H410

For full text of H-phrases see section 16.

SECTION 4 FIRST AID MEASURES

4.1 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: Generally, the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing: If symptoms persist consult doctor.

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

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

SECTION 5 FIREFIGHTING MEASURES

5.1 Extinguishing media
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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

5.3 Advice for firefighters
Protective equipment: No special measures required.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Not required.

6.2 Environmental precautions:
Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:
Dispose contaminated material as waste according to item 13.

6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
SECTION 7  HANDLING AND STORAGE

7.1 Precautions for safe handling
No special precautions are necessary if used correctly.
Information about fire and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required.
Further information about storage conditions: None.
Recommended storage temperature: 4°C

7.3 Specific end use(s)
No further relevant information available.

SECTION 8  EXPOSURE CONTROLS / PERSONAL PROTECTION

Additional information about design of technical facilities: No further data; see item 7.

8.1 Control parameters
Ingredients with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls
Personal protective equipment:
General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Respiratory protection: In case of brief exposure or low pollution use respiratory filter device.
In case of intensive or longer exposure use self-contained respiratory protective device.
Protection of hands: Protective gloves. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. 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 cannot be calculated in advance and has therefore to be checked prior to the application. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye protection: Tightly sealed goggles.

SECTION 9  PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties
Form: Solid
Colour: According to product specification
**MATERIAL SAFETY DATA SHEET**


**Dilution Buffer (RA19019R Kit)**

Date of issue: 25.1.2018
Supersedes date:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odour:</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Odour threshold:</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH-value:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Melting point/freezing point:</td>
<td>Undetermined</td>
</tr>
<tr>
<td>Initial boiling point and boiling range:</td>
<td>Undetermined</td>
</tr>
<tr>
<td>Flash point:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability (solid, gas):</td>
<td>Not determined</td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Auto-ignition temperature:</td>
<td>Product is not self-igniting</td>
</tr>
<tr>
<td>Explosive properties:</td>
<td>Product does not present an explosion hazard</td>
</tr>
<tr>
<td>Explosion limits:</td>
<td></td>
</tr>
<tr>
<td>Lower:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Upper:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapour pressure:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Density:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Relative density:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapour density:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Solubility in / Miscibility with water:</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Partition coefficient:</td>
<td>Not determined</td>
</tr>
<tr>
<td>n-octanol/water:</td>
<td></td>
</tr>
<tr>
<td>Viscosity:</td>
<td></td>
</tr>
<tr>
<td>Dynamic:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Kinematic:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Solvent content:</td>
<td></td>
</tr>
<tr>
<td>Organic solvents:</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

**9.2 Other information**

No further relevant information available.

**SECTION 10 STABILITY AND REACTIVITY**

**10.1 Reactivity**

No further relevant information available.

**10.2 Chemical stability**

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

**10.3 Possibility of hazardous reactions**

No dangerous reactions known.

**10.4 Conditions to avoid**

No further relevant information available.

**10.5 Incompatible materials**

No further relevant information available.

**10.6 Hazardous decomposition products**

No dangerous decomposition products known.
SECTION 11  TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
Acute toxicity: Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:
CAS: 54-64-8, thimerosal
Oral LD50  75 mg/kg (rat)
Dermal LD50  98 mg/kg (rat)
LC50 48h  21.2 mg/l (Oncorhynchus mykiss)

Primary irritant effect:
Skin corrosion/irritation: Based on available data, the classification criteria are not met.
Serious eye damage/irritation: Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction):
Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure: Based on available data, the classification criteria are not met.
STOT-repeated exposure: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard: Based on available data, the classification criteria are not met.

SECTION 12  ECOLOGICAL INFORMATION

12.1 Toxicity
Aquatic toxicity:
No further relevant information available.

12.2 Persistence and degradability
No further relevant information available.

12.3 Bioaccumulative potential
No further relevant information available.

12.4 Mobility in soil
No further relevant information available.

Additional ecological information:
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

12.5 Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
12.6 Other adverse effects
No further relevant information available.

SECTION 13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Recommendation:
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.

SECTION 14 TRANSPORT INFORMATION

14.1 UN-Number
ADR, ADN, IMDG, IATA not regulated

14.2 UN proper shipping name
ADR, ADN, IMDG, IATA not regulated

14.3 Transport hazard class(es)
ADR, ADN, IMDG, IATA Class not regulated

14.4 Packing group
ADR, IMDG, IATA not regulated

14.5 Environmental hazards:
Not applicable.

14.6 Special precautions for user
Not applicable.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable.

Transport/Additional information:
IATA Remarks: When sold in quantities of less than or equal to 1mL or 1g with an Excepted Quantity Code of E1, E2, E3, E4 or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10. Therefore, packaging does not have to be labeled as Dangerous Goods/Excepted Quantity

SECTION 15 REGULATORY INFORMATION

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

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 18

15.2 Chemical safety assessment
Chemical safety assessment has not been carried out.
Date of issue: 25.1.2018
Revision notes:

Full text of H--phrases:
H300 Fatal if swallowed.
H310 Fatal in contact with skin.
H330 Fatal if inhaled.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

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.
SECTION 1  IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product identifier

Trade name: Stop Solution (RA19019R Kit)

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

Assay component – HRP stop solution.

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 Bojiště 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:

2.2 Label elements

Hazard pictogram:
Void

Signal word:
Warning

Hazard statements:
H290 May be corrosive to metals.

Precautionary statements:
P234 Keep only in original container.
P390 Absorb spillage to prevent material damage.
P406 Store in corrosive resistant container with a resistant inner liner.

2.3 Other hazards

Results of PBT and vPvB assessment:
PBT: Not applicable.
vPvB: Not applicable.

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>
</tr>
</thead>
<tbody>
<tr>
<td>sulphuric acid</td>
<td>≤5</td>
<td>231-639-5</td>
<td>7664-93-9</td>
</tr>
</tbody>
</table>

Classification according to regulation 1272/2008/EC:
Skin Corr. 1A, H314

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

4.1 Description of first aid measures
   After inhalation: Supply fresh air; consult doctor in case of complaints.
   After skin contact: Generally, the product does not irritate the skin.
   After eye contact: Rinse opened eye for several minutes under running water.
   After swallowing: If symptoms persist consult doctor.

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

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

SECTION 5  FIREFIGHTING MEASURES

5.1 Extinguishing media
   CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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

5.3 Advice for firefighters
   Protective equipment: No special measures required.

SECTION 6  ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
   Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:
   Dilute with plenty of water.
   Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:
   Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
   Use neutralising agent.
   Dispose contaminated material as waste according to item 13.

6.4 Reference to other sections
   See Section 7 for information on safe handling.
   See Section 8 for information on personal protection equipment.
   See Section 13 for disposal information.

SECTION 7  HANDLING AND STORAGE

7.1 Precautions for safe handling
   No special precautions are necessary if used correctly.
   Information about fire and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities
   Requirements to be met by storerooms and receptacles: No special requirements.
   Information about storage in one common storage facility: Not required.
   Further information about storage conditions: Keep container tightly sealed.
   Recommended storage temperature: 4°C
7.3 Specific end use(s)
No further relevant information available.

SECTION 8  EXPOSURE CONTROLS / PERSONAL PROTECTION

Additional information about design of technical facilities: No further data; see item 7.

8.1 Control parameters
Ingredients with limit values that require monitoring at the workplace:
CAS: 7664-93-9, sulphuric acid
WEL Long-term value: 0.05* mg/m³
*mist: defined as thoracic fraction.

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls
Personal protective equipment:
General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
Respiratory protection: Not required.
Protection of hands: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. 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 cannot be calculated in advance and has therefore to be checked prior to the application. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye protection: Tightly sealed goggles.

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>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>Odourless</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH-value at 20 °C</td>
<td>Not determined</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Undetermined</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>100°C</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Product is not self-igniting</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Product does not present an explosion hazard</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>Not determined</td>
</tr>
<tr>
<td>Lower</td>
<td>Not determined</td>
</tr>
</tbody>
</table>
Stop Solution (RA19019R Kit)

Date of issue: 25.1.2018
Supersedes date: 

Upper: Not determined.
Vapour pressure at 20°C: 23 hPa
Density: Not determined.
Relative density: Not determined.
Vapour density: Not determined.
Evaporation rate: Not determined.
Solubility in / Miscibility with water: Fully miscible.
Partition coefficient: n-octanol/water: Not determined.
Viscosity:
Dynamic: Not determined.
Kinematic: Not determined.
Solvent content:
Organic solvents: 0.0%
Water: 95.0%

9.2 Other information
No further relevant information available.

SECTION 10  STABILITY AND REACTIVITY

10.1 Reactivity
No further relevant information available.

10.2 Chemical stability
Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions
No dangerous reactions known.

10.4 Conditions to avoid
No further relevant information available.

10.5 Incompatible materials
No further relevant information available.

10.6 Hazardous decomposition products
No dangerous decomposition products known.

SECTION 11  TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
Acute toxicity: Based on available data, the classification criteria are not met.

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

Serious eye damage/irritation: Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction):
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

Stop Solution (RA19019R Kit)
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Supersedes date:

Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: Based on available data, the classification criteria are not met.
STOT-single exposure: Based on available data, the classification criteria are not met.
STOT-repeated exposure: Based on available data, the classification criteria are not met.
Aspiration hazard: Based on available data, the classification criteria are not met.

SECTION 12 ECOLOGICAL INFORMATION

12.1 Toxicity
Aquatic toxicity: No further relevant information available.

12.2 Persistence and degradability
No further relevant information available.

12.3 Bioaccumulative potential
No further relevant information available.

12.4 Mobility in soil
No further relevant information available.

Additional ecological information:
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

12.5 Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

12.6 Other adverse effects
No further relevant information available.

SECTION 13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Recommendation:
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue
HP 4 Irritant - skin irritation and eye damage

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14 TRANSPORT INFORMATION

14.1 UN-Number
ADR, IMDG, IATA UN2796
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

Stop Solution (RA19019R Kit)

Date of issue: 25.1.2018
Supersedes date:

14.2 UN proper shipping name
ADR UN2796 SULPHURIC ACID
IMDG, IATA SULPHURIC ACID

14.3 Transport hazard class(es)
ADR, IMDG, IATA Class 8 Corrosive substances
Label 8

14.4 Packing group
ADR, IMDG II
IATA III

14.5 Environmental hazards:
Not applicable.

14.6 Special precautions for user
Warning: Corrosive substances.
Danger code (Kemler): 80
EMS Number: F-A, S-B
Segregation groups: Acids
Stowage Category: B

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable.

Transport/Additional information:
ADR
Limited quantities (LQ): 1L
Excepted quantities (EQ): Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml
Transport category: 2
Tunnel restriction code: E
IMDG
Limited quantities (LQ): 1L
Excepted quantities (EQ): Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml
IATA
Excepted quantities (EQ): Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml
IATA Remarks: When sold in quantities of less than or equal to 1mL or 1g with an Excepted Quantity Code of E1, E2, E3, E4 or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10. Therefore, packaging does not have to be labeled as Dangerous Goods/Excepted Quantity

SECTION 15 REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
15.2 Chemical safety assessment
Chemical safety assessment has not been carried out.

SECTION 16 OTHER INFORMATION

Date of issue: 25.1.2018
Revision notes:

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.