

Safety Information

Human/Rat Angiotensin II ELISA

Revision Date: 6.2.2018

The RA05880R Human/Rat Angiotensin II ELISA kit may be used to measure human/rat angiotensin II in culture media samples (tissue culture supernatants) and/or in plasma samples after extraction.

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) Conjugate Solution
- C) Angiotensin II Standard
- D) Quality Control
- E) Tween 20
- F) Dilution Buffer
- G) Wash Solution Concentrate
- H) Substrate Solution (Ellman's reagent)
- I) Glutaraldehyde
- J) Borane Trimethylamine

Components B) – D), F), and H) – J) are hazardous mixtures according to CLP Regulation (EC) as amended. Safety Data Sheets according to actual Regulations (EC/EU) are attached.

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

Conjugate Solution (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

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

1.1 Product identifier

Trade name: Conjugate Solution (RA05880R Kit)

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

Assay component – Angiotensin II 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:

Aquatic Chronic 3, H412

2.2 Label elements

Hazard pictogram:

Void

Signal word:

Void

Hazard statements:

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P273 Avoid release to the environment.

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

3.2 Mixtures

Ingredient	Conc. in w/w%	EINECS	CAS-Nr.
sodium azide	0.25– <2.5	247-852-1	26628-22-8

Classification according to regulation 1272/2008/EC:

Acute Tox. 2, H300; STOT RE 2, H373; Aquatic Acute 1, H400; Aquatic Chronic 1, H410

For full text of H-phrases see section 16.

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

Conjugate Solution (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

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:

Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Pick up mechanically.

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: -20°C

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

Conjugate Solution (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

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: 26628-22-8, sodium azide

WEL Short-term value: 0.3 mg/m³

Long-term value: 0.1 mg/m³

(as NaN₃), Sk

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

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

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: Not required.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form:	Solid
Colour:	Whitish
Odour:	Uncharacteristic.
Odour threshold:	Not determined.
pH-value:	Not applicable.
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	100°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.

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

Conjugate Solution (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

Density:	Not determined.
Relative density:	Not determined.
Vapour density:	Not applicable.
Evaporation rate:	Not applicable.
Solubility in / Miscibility with water:	Soluble.
Partition coefficient: n-octanol/water:	Not determined.
Viscosity: Dynamic:	Not applicable.
Kinematic:	Not applicable.
Solvent content: Organic solvents:	0.0%
Solids content:	97.5%

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: 26628-22-8, sodium azide

Oral LD50 27 mg/kg (rat)
Dermal LD50 20 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.

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

Conjugate Solution (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

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.
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:

CAS: 26628-22-8 sodium azide

EC50 96h (static)

0.35 mg/l (Pseudokirchneriella subcapitata)

LC50 96h

5.46 mg/l (Pimephales promelas)

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.

Ecotoxic effects:

Remark: Harmful to fish

Additional ecological information:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Harmful to aquatic organisms.

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 6 Acute Toxicity

HP 14 Ecotoxic

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

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

Conjugate Solution (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

Recommended cleansing agents: Water, if necessary together with cleansing agents.

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 of the European Parliament and the Council (EC) No. 1907/2006 (REACH).
Regulation of the European Parliament and the Council (EC) No. 1272/2008 (CLP).
Commission Regulation (EU) No. 830/2015.

15.2 Chemical safety assessment

Chemical safety assessment has not been carried out.

SECTION 16 OTHER INFORMATION

Date of issue: 6.2.2018

Revision notes:

Full text of H-phrases:

H300 Fatal if swallowed.

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.

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

Conjugate Solution (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

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.

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

Standard (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

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

1.1 Product identifier

Trade name: Standard (RA05880R Kit)

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

Assay component – Angiotensin II 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 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:

Aquatic Chronic 3, H412

2.2 Label elements

Hazard pictogram:

Void

Signal word:

Void

Hazard statements:

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P273 Avoid release to the environment.

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

Ingredient	Conc. in w/w%	EINECS	CAS-Nr.
sodium azide	0.25– <2.5	247-852-1	26628-22-8

Classification according to regulation 1272/2008/EC:

Acute Tox. 2, H300; STOT RE 2, H373; Aquatic Acute 1, H400; Aquatic Chronic 1, H410

For full text of H-phrases see section 16.

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

Standard (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

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:

Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Pick up mechanically.

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: -20°C

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

Standard (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

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: 26628-22-8, sodium azide

WEL Short-term value: 0.3 mg/m³

Long-term value: 0.1 mg/m³

(as NaN₃), Sk

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

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

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: Not required.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form:	Solid
Colour:	White
Odour:	Uncharacteristic.
Odour threshold:	Not determined.
pH-value:	Not applicable.
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	100°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.

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

Standard (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

Density:	Not determined.
Relative density:	Not determined.
Vapour density:	Not applicable.
Evaporation rate:	Not applicable.
Solubility in / Miscibility with water:	Soluble.
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: 26628-22-8, sodium azide

Oral LD50 27 mg/kg (rat)
Dermal LD50 20 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.

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

Standard (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

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.
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
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12.1 Toxicity

Aquatic toxicity:

CAS: 26628-22-8 sodium azide

EC50 96h (static)

0.35 mg/l (Pseudokirchneriella subcapitata)

LC50 96h

5.46 mg/l (Pimephales promelas)

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.

Ecotoxic effects:

Remark: Harmful to fish

Additional ecological information:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Harmful to aquatic organisms.

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 6 Acute Toxicity

HP 14 Ecotoxic

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

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

Standard (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

Recommended cleansing agents: Water, if necessary together with cleansing agents.

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 of the European Parliament and the Council (EC) No. 1907/2006 (REACH).
Regulation of the European Parliament and the Council (EC) No. 1272/2008 (CLP).
Commission Regulation (EU) No. 830/2015.

15.2 Chemical safety assessment

Chemical safety assessment has not been carried out.

SECTION 16 OTHER INFORMATION

Date of issue: 6.2.2018

Revision notes:

Full text of H-phrases:

H300 Fatal if swallowed.

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.

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

Standard (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

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.

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

Quality Control (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

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

1.1 Product identifier

Trade name: Quality Control (RA05880R Kit)

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

Assay component – Quality control sample.

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:

Aquatic Chronic 3, H412

2.2 Label elements

Hazard pictogram:

Void

Signal word:

Void

Hazard statements:

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P273 Avoid release to the environment.

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

Ingredient	Conc. in w/w%	EINECS	CAS-Nr.
sodium azide	0.25– <2.5	247-852-1	26628-22-8

Classification according to regulation 1272/2008/EC:

Acute Tox. 2, H300; STOT RE 2, H373; Aquatic Acute 1, H400; Aquatic Chronic 1, H410

For full text of H-phrases see section 16.

Quality Control (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

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:

Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Pick up mechanically.

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: -20°C

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

Quality Control (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

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: 26628-22-8, sodium azide

WEL Short-term value: 0.3 mg/m³

Long-term value: 0.1 mg/m³

(as NaN₃), Sk

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

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

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: Not required.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form:	Solid
Colour:	White
Odour:	Uncharacteristic.
Odour threshold:	Not determined.
pH-value:	Not applicable.
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	100°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.

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

Quality Control (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

Density:	Not determined.
Relative density:	Not determined.
Vapour density:	Not applicable.
Evaporation rate:	Not applicable.
Solubility in / Miscibility with water:	Soluble.
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: 26628-22-8, sodium azide

Oral LD50 27 mg/kg (rat)
 Dermal LD50 20 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.

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

Quality Control (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

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.
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:

CAS: 26628-22-8 sodium azide

EC50 96h (static)

0.35 mg/l (Pseudokirchneriella subcapitata)

LC50 96h

5.46 mg/l (Pimephales promelas)

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.

Ecotoxic effects:

Remark: Harmful to fish

Additional ecological information:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Harmful to aquatic organisms.

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 6 Acute Toxicity

HP 14 Ecotoxic

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

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

Quality Control (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

Recommended cleansing agents: Water, if necessary together with cleansing agents.

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 of the European Parliament and the Council (EC) No. 1907/2006 (REACH).
Regulation of the European Parliament and the Council (EC) No. 1272/2008 (CLP).
Commission Regulation (EU) No. 830/2015.

15.2 Chemical safety assessment

Chemical safety assessment has not been carried out.

SECTION 16 OTHER INFORMATION

Date of issue: 6.2.2018

Revision notes:

Full text of H-phrases:

H300 Fatal if swallowed.

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.

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

Quality Control (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

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.

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 (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

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

1.1 Product identifier

Trade name: Dilution Buffer (RA05880R Kit)

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

Assay component – 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:

Aquatic Chronic 3, H412

2.2 Label elements

Hazard pictogram:

Void

Signal word:

Void

Hazard statements:

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P273 Avoid release to the environment.

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

Ingredient	Conc. in w/w%	EINECS	CAS-Nr.
sodium azide	0.25– <2.5	247-852-1	26628-22-8

Classification according to regulation 1272/2008/EC:

Acute Tox. 2, H300; STOT RE 2, H373; Aquatic Acute 1, H400; Aquatic Chronic 1, H410

For full text of H-phrases see section 16.

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 (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

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:

Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Pick up mechanically.

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: -20°C

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 (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

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: 26628-22-8, sodium azide

WEL Short-term value: 0.3 mg/m³

Long-term value: 0.1 mg/m³

(as NaN₃), Sk

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

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

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: Not required.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form:	Solid
Colour:	Whitish
Odour:	Uncharacteristic.
Odour threshold:	Not determined.
pH-value:	Not applicable.
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	1461°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.

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 (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

Density:	Not determined.
Relative density:	Not determined.
Vapour density:	Not applicable.
Evaporation rate:	Not applicable.
Solubility in / Miscibility with water:	Soluble.
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: 26628-22-8, sodium azide

Oral LD50 27 mg/kg (rat)
 Dermal LD50 20 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.

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 (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

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.
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:

CAS: 26628-22-8 sodium azide

EC50 96h (static)

0.35 mg/l (Pseudokirchneriella subcapitata)

LC50 96h

5.46 mg/l (Pimephales promelas)

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.

Ecotoxic effects:

Remark: Harmful to fish

Additional ecological information:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Harmful to aquatic organisms.

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 6 Acute Toxicity

HP 14 Ecotoxic

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

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 (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

Recommended cleansing agents: Water, if necessary together with cleansing agents.

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 of the European Parliament and the Council (EC) No. 1907/2006 (REACH).
Regulation of the European Parliament and the Council (EC) No. 1272/2008 (CLP).
Commission Regulation (EU) No. 830/2015.

15.2 Chemical safety assessment

Chemical safety assessment has not been carried out.

SECTION 16 OTHER INFORMATION

Date of issue: 6.2.2018

Revision notes:

Full text of H-phrases:

H300 Fatal if swallowed.

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.

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 (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

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.

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

Substrate Solution (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

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

1.1 Product identifier

Trade name: Substrate Solution (RA05880R Kit)

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

Assay component – Ellman's reagent.

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:

Acute Tox. 4, H302

Skin Irrit. 2, H315

Eye Irrit. 2, H319

2.2 Label elements

Hazard pictogram:



Signal word:

Warning

Hazard-determining components of labelling:

2-acetylthioethyltrimethylammonium iodide

Hazard statements:

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statements:

P280 Wear protective gloves / eye protection / face 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.

P321 Specific treatment (see on this label).

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P332+P313 If skin irritation occurs: Get medical advice/attention.

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

Substrate Solution (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

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

Ingredient	Conc. in w/w%	EINECS	CAS-Nr.
2-acetylthioethyltrimethylammonium iodide	2.5 – <10	217-472-0	1866-15-5

Classification according to regulation 1272/2008/EC:

Acute Tox. 3, H301; Acute Tox. 3, H311; Skin Irrit. 2, H315; Eye Irrit 2, H319; STOT SE 3, H335

Ingredient	Conc. in w/w%	EINECS	CAS-Nr.
3,3'-dithiobis[6-nitrobenzoic] acid	2.5 – <10	200-714-4	69-78-3

Classification according to regulation 1272/2008/EC:

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

General information:

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

After inhalation: In case of unconsciousness place patient stably in side position for transportation.

After skin contact: Immediately wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing: Call for a doctor immediately.

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.

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

Substrate Solution (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

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:

Pick up mechanically.

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: -20°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.

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:

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

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

Substrate Solution (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

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:	Light yellow
Odour:	Odourless
Odour threshold:	Not determined.
pH-value:	Not applicable.
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	1461°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:	Soluble.
Partition coefficient: n-octanol/water:	Not determined.
Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
Solvent content:	
Organic solvents:	0.0%
Solids content:	100%

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.

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

Substrate Solution (RA05880R Kit)

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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: Harmful if swallowed

LD/LC50 values relevant for classification:

CAS: 1866-15-5, 2-acetylthioethyltrimethylammonium iodide

Oral LD50 100 mg/kg (rat)

Dermal LD50 500 mg/kg (guinea pig)

CAS: 69-78-3, 3,3'-dithiobis[6-nitrobenzoic] acid

LD50 Intraperitoneal 2080 mg/kg (mouse)

Primary irritant effect:

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/irritation: Causes serious eye damage.

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.

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.

Substrate Solution (RA05880R Kit)

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12.4 Mobility in soil

No further relevant information available.

Additional ecological information:

Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground.

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 6 Acute Toxicity

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, 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

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

Substrate Solution (RA05880R Kit)

Date of issue: 6.2.2018

Supersedes date:

SECTION 15 REGULATORY INFORMATION

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

Regulation of the European Parliament and the Council (EC) No. 1907/2006 (REACH).
Regulation of the European Parliament and the Council (EC) No. 1272/2008 (CLP).
Commission Regulation (EU) No. 830/2015.

15.2 Chemical safety assessment

Chemical safety assessment has not been carried out.

SECTION 16 OTHER INFORMATION

Date of issue: 6.2.2018

Revision notes:

Full text of H-phrases:

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

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

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

Glutaraldehyde (RA05880R Kit)

Date of issue: 7.2.2018

Supersedes date:

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

1.1 Product identifier

Trade name: Glutaraldehyde (RA05880R Kit)

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

Assay component – Linking reagent.

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:

Resp. Sens. 1, H334

Skin Corr. 1B, H314

Aquatic Acute 1, H400

Aquatic Chronic 2, H411

Acute Tox. 4, H302

Acute Tox. 4, H332

Skin Sens. 1, H317

STOT SE 3, H335

2.2 Label elements

Hazard pictogram:



Signal word:

Danger

Hazard-determining components of labelling:

Glutaral (Glutaraldehyde)

Hazard statements:

H302+H332 Harmful if swallowed or if inhaled.

H314 Causes severe skin burns and eye damage.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

H410 Very toxic to aquatic life with long lasting effects.

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

Glutaraldehyde (RA05880R Kit)

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Precautionary statements:

P260 Do not breathe dusts or mists.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P405 Store locked up.

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

Ingredient	Conc. in w/w%	EINECS	CAS-Nr.	Index-Nr.
Glutaral	≥ 10	203-856-5	111-30-8	605-022-00-X

Classification according to regulation 1272/2008/EC:

Skin Corr.1B, H314; Acute Tox.2, H330; Acute Tox.3, H301; STOT SE 3, H335; Skin Sens.1A, H317; Resp.Sens.1, H334; Aquatic Acute 1, H400; Aquatic Chronic 2, H411; EUH071

Conc. limits: >= 10 %: Skin Corr. 1B, H314; 0,5 - < 10 %: Skin Irrit. 2, H315; 2 - < 10 %: Eye Dam. 1, H318; 0,5 - < 2 %: Eye Irrit. 2, H319; >= 0,5 %: Skin Sens. 1, H317; >= 0,5 %: STOT SE 3, H335; M-Factor - Aquatic Acute: 1

For full text of H-phrases see section 16.

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures

General information:

Immediately remove any clothing soiled by the product.

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 and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.

After skin contact: Immediately wash with water and soap and rinse thoroughly.

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

After swallowing: Drink plenty of water and provide fresh air. Call for a doctor immediately.

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.

Glutaraldehyde (RA05880R Kit)

Date of issue: 7.2.2018

Supersedes date:

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

During heating or in case of fire poisonous gases are produced.

5.3 Advice for firefighters

Protective equipment: Mouth respiratory protective device.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device. Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:

Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system. 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. Ensure adequate ventilation.

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

Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.

Information about fire and explosion protection: Keep respiratory protective device available.

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: -20°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: 111-30-8, glutaral

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

Glutaraldehyde (RA05880R Kit)

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WEL Short-term value: 0.2 mg/m³, 0.05 ppm

WEL Long-term value: 0.2 mg/m³, 0.05 ppm.

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: 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:	Fluid
Colour:	Colourless
Odour:	Unpleasant
Odour threshold:	Not determined.
pH-value:	Not determined.
Melting point/freezing point:	6°C
Initial boiling point and boiling range:	101°C
Flash point:	71 - ca°C.
Flammability (solid, gas):	Not applicable.
Decomposition temperature:	Not determined.
Auto-ignition temperature:	Not determined.
Explosive properties:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure at 20°C:	0.0203 hPa.
Density at 20°C:	1.05 g/cm ³
Relative density:	Not determined.
Vapour density:	Not determined.
Evaporation rate:	Not determined.
Solubility in / Miscibility with water:	Fully miscible.

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

Glutaraldehyde (RA05880R Kit)

Date of issue: 7.2.2018

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Partition coefficient:	
n-octanol/water:	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Organic solvents:	0.0%

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: Harmful if swallowed or if inhaled.

LD/LC50 values relevant for classification:

CAS: 111-30-8, glutaral

Oral LD50	134 mg/kg (rat)
Dermal LD50	2560 mg/kg (rabbit)

Primary irritant effect:

Skin corrosion/irritation:	Causes severe skin burns and eye damage.
Serious eye damage/irritation:	Causes severe skin burns and eye damage.
Respiratory or skin sensitisation:	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
	May cause an allergic skin reaction.

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: May cause respiratory irritation.

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

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

Glutaraldehyde (RA05880R Kit)

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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

Ecotoxic effects:

Very toxic for fish

Additional ecological information:

Do not allow product to reach ground water, water course or sewage system, even in small quantities. Must not reach sewage water or drainage ditch undiluted or unneutralised. Danger to drinking water if even extremely small quantities leak into the ground. Poisonous also for fish and plankton in water bodies. Very toxic for aquatic organisms.

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 5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

HP 6 Acute Toxicity

HP 8 Corrosive

HP 13 Sensitising

HP 14 Ecotoxic

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 UN3082

14.2 UN proper shipping name

ADR UN3082 ENVIRONMENTALLY HAZARDOUS
SUBSTANCE, LIQUID, N.O.S. (glutaral)

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

Glutaraldehyde (RA05880R Kit)

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IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (glutaral), MARINE POLLUTANT
IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (glutaral)

14.3 Transport hazard class(es)

ADR, IMDG, IATA	Class 9 Miscellaneous dangerous substances and articles. Label: 8+6.1, 8/6.1, 8 (6.1)
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14.4 Packing group

ADR, IMDG, IATA	III
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14.5 Environmental hazards:

Product contains environmentally hazardous substances: glutaral (glutaraldehyde)

Marine pollutant:	Symbol (fish and tree)
Special marking (ADR):	Symbol (fish and tree)
Special marking (IATA):	Symbol (fish and tree)

14.6 Special precautions for user

Warning:	Miscellaneous dangerous substances and articles.
Danger code (Kemler):	86
EMS Number:	F-A, S-F
Stowage Category:	A

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

Transport/Additional information:

ADR

Limited quantities (LQ):	5L
Excepted quantities (EQ):	Code: E1
Maximum net quantity per inner packaging:	30 ml
Maximum net quantity per outer packaging:	1000 ml
Transport category:	3
Tunnel restriction code:	E

IMDG

Limited quantities (LQ):	5L
Excepted quantities (EQ):	Code: E1
Maximum net quantity per inner packaging:	30 ml
Maximum net quantity per outer packaging:	1000 ml

IATA

Excepted quantities (EQ):	Code: E1
Maximum net quantity per inner packaging:	30 ml
Maximum net quantity per outer packaging:	1000 ml

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.

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

Glutaraldehyde (RA05880R Kit)

Date of issue: 7.2.2018

Supersedes date:

SECTION 15 REGULATORY INFORMATION

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

Regulation of the European Parliament and the Council (EC) No. 1907/2006 (REACH).
Regulation of the European Parliament and the Council (EC) No. 1272/2008 (CLP).
Commission Regulation (EU) No. 830/2015.

Seveso category E1 Hazardous to the Aquatic Environment

Qualifying quantity (tonnes) for the application of lower-tier requirements: 100 t

Qualifying quantity (tonnes) for the application of upper-tier requirements: 200 t

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: 7.2.2018

Revision notes:

Full text of H-phrases:

H301 Toxic if swallowed.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H330 Fatal if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

EUH071 Corrosive to the respiratory tract.

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.

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

Borane Trimethylamine (RA05880R Kit)

Date of issue: 8.2.2018

Supersedes date:

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

1.1 Product identifier

Trade name: Borane Trimethylamine (RA05880R Kit)

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

Assay component – Linking reagent.

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:

Flam. Sol. 1, H228

Skin Irrit. 2, H315

Eye Irrit. 2, H319

STOT SE 3, H335

2.2 Label elements

Hazard pictogram:



Signal word:

Danger

Hazard-determining components of labelling:

Trimethylamine-borane (1:1)

Hazard statements:

H228 Flammable solid.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary statements:

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

P241 Use explosion-proof electrical/ventilating/lighting equipment.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

Borane Trimethylamine (RA05880R Kit)

Date of issue: 8.2.2018

Supersedes date:

P321 Specific treatment (see on this label).

P405 Store locked up.

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

Ingredient	EINECS	CAS-Nr.
Trimethylamine-borane (1:1)	200-850-4	75-22-9

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures

General information:

Immediately remove any clothing soiled by the product.

After inhalation: In case of unconsciousness place patient stably in side position for transportation.

After skin contact: Immediately wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing: If symptoms persist, consult a 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

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:

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. Ensure adequate ventilation.

Borane Trimethylamine (RA05880R Kit)

Date of issue: 8.2.2018

Supersedes date:

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

Ensure good ventilation/exhaustion at the workplace.

Information about fire and explosion protection: Keep ignition sources away - Do not smoke. Protect against electrostatic charges.

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: -20°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: Not required.

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: 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

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SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form:	Crystalline
Colour:	White
Odour:	Uncharacteristic
Odour threshold:	Not determined.
pH-value:	Not applicable.
Melting point/freezing point:	92-94°C
Initial boiling point and boiling range:	172°C
Flash point:	64°C.
Flammability (solid, gas):	Flammable solid (category 1)
Decomposition temperature:	Not determined.
Auto-ignition temperature:	Not determined.
Explosive properties:	Not determined.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure at 97°C:	103 hPa
Density at 20°C:	0.81 g/cm ³
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.
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.

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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10.6 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: 75-22-9, trimethylamine-borane (1:1)

LD50 Intraperitoneal 175 mg/kg (rat)

Primary irritant effect:

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/irritation: Causes serious eye irritation.

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: May cause respiratory irritation.

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.

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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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 3 Flammable

HP 4 Irritant - skin irritation and eye damage

HP 5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

SECTION 14 TRANSPORT INFORMATION

14.1 UN-Number

ADR, IMDG, IATA UN1325

14.2 UN proper shipping name

ADR UN1325 FLAMMABLE SOLID, ORGANIC, N.O.S.
(trimethylamine-borane (1:1))
IMDG, IATA FLAMMABLE SOLID, ORGANIC, N.O.S.
(trimethylamine-borane (1:1))

14.3 Transport hazard class(es)

ADR, IMDG, IATA Class 4.1 Flammable solids, self-reactive substances and solid desensitised explosives.

14.4 Packing group

ADR, IMDG, IATA II

14.5 Environmental hazards:

Not applicable.

14.6 Special precautions for user

Warning: Flammable solids, self-reactive substances and solid desensitised explosives.

EMS Number: F-A, S-G

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): 1kg

Excepted quantities (EQ): Code: E2

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 500 g

IMDG

Limited quantities (LQ): 1kg

Excepted quantities (EQ): Code: E2

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 500 g

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IATA

Excepted quantities (EQ):

Maximum net quantity per inner packaging:

Maximum net quantity per outer packaging:

Remarks:

Code: E2

30 g

500 g

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 of the European Parliament and the Council (EC) No. 1907/2006 (REACH).
Regulation of the European Parliament and the Council (EC) No. 1272/2008 (CLP).
Commission Regulation (EU) No. 830/2015.

15.2 Chemical safety assessment

Chemical safety assessment has not been carried out.

SECTION 16 OTHER INFORMATION

Date of issue: 8.2.2018

Revision notes:

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.