

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Aquaporin-4 (AQP4) Antibody ELISA (ElisaRSR™ AQP4 Ab Version 2)  
 Catalogue no: EA111/96 (REF) AQP4/96/2)

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

Quantitative determination of autoantibodies to AQP4 in human serum

**1.3 Details of the supplier of the safety data sheet:**

DLD Diagnostika GmbH  
 Adlerhorst 15  
 22459 HAMBURG, GERMANY  
 Phone: +49405558710; Fax: +494055587111  
 Email: contact@dld-diagnostika.de

**1.4 Emergency telephone number:**

+49(0)40-5558710 (Mon – Fri, except public holidays, 8.00 – 15.30)


**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No. 1272/2008 [CLP]:

| Kit Component                    | Hazard Classification              | Hazard Statements |
|----------------------------------|------------------------------------|-------------------|
| Streptavidin Peroxidase (SA-POD) | Skin Sensitisation, Category 1     | H317              |
| Peroxidase Substrate (TMB)       | Reproductive Toxicity, Category 1B | H360D             |


**2.2 Label elements**

Labelling according to Regulation (EC) No. 1272/2008 [CLP]:

| STREPTAVIDIN PEROXIDASE (SA-POD)  |   |                             |
|-----------------------------------|---|-----------------------------|
| Hazard pictogram                  |  | <b>Signal word:</b> Warning |
| <b>Hazard statement(s)</b>        |   |                             |
| H317                              | May cause an allergic skin reaction   |                             |
| <b>Precautionary statement(s)</b> |   |                             |
| P261                              | Avoid breathing mist, vapors  |                             |
| P272                              | Contaminated work clothing should not be allowed out of the workplace               |                             |
| P280                              | Wear protective gloves/protective clothing/eye protection/face protection           |                             |
| P302 + P352                       | IF ON SKIN: Wash with plenty of soap and water                                      |                             |
| P333 + P313                       | If skin irritation or rash occurs: Get medical advice/attention                     |                             |
| P362 + P364                       | Take off contaminated clothing and wash it before reuse                             |                             |

|      |  |
|------|--|
| P501 | Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation |
|------|--|

**PEROXIDASE SUBSTRATE (TMB)**

|                                   |  |                            |
|-----------------------------------|--|----------------------------|
| Hazard pictogram                  |   | <b>Signal word:</b> Danger |
| <b>Hazard statement(s)</b>        |  |                            |
| H360D                             | May damage the unborn child  |                            |
| <b>Precautionary statement(s)</b> |  |                            |
| P202                              | Do not handle until all safety precautions have been read and understood   |                            |
| P280                              | Wear protective gloves/protective clothing/eye protection/face protection  |                            |
| P308 + P313                       | IF exposed or concerned: Get medical advice/attention  |                            |
| P501                              | Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation |                            |

**2.3 Other Hazards**

All other kit components not listed in section 2.1 and 2.2 do not contain hazardous ingredients in concentrations which meet the criteria for classification according to Regulation (EC) No. 1272/2008. However, ingestion or exposure to large amounts from improper handling can be potentially hazardous.

This kit contains both animal and human proteins and should be treated as a potential biohazard. All animal and human sera have been tested to ensure the absence of infectious agents but all materials should be handled as though capable of transmitting infectious disease and disposed of accordingly.

AQP4 Antibody ELISA kit components ingredients listed in 3.2 have not been identified as having endocrine disrupting properties according to Regulation (EU) 2017/2100 and does not meet the criteria for vPvB and PBT according to Regulation (EC) No. 1907/2006 Annex XIII.

The following precautionary statements should be taken into consideration:

P233, P270, P281, P301 + P330 + P331, P302 + P352, P304 + P340, P305 + P351 + P338 (see section 16 for full text).

**SECTION 3: Composition/information on ingredients****3.1 Substances**

Not applicable

**3.2 Mixtures**

## Hazardous ingredients according to Regulation (EC) No. 1272/2008:

## PEROXIDASE SUBSTRATE (TMB)

| Ingredient(s)      | CAS No. | EC No. | Classification (GHS) | Conc. (v/v) | Conc. Limits |
|--------------------|---------|--------|----------------------|-------------|--------------|
| SeramunBlau® fast2 | N/A     | N/A    | Repr. 1B; H360D      | ≤100%       | ≥0.3%        |

Contains 2-pyrrolidone:

CAS No. 616-45-5

EC No. 210-483-1

Concentration: 1-3%

Classification: Eye Irrit. 2, H319; Repr. 1B, H360D

## STREPTAVIDIN PEROXIDASE (SA-POD)

| Ingredient(s)                        | CAS No. | EC No. | Classification (GHS) | Conc. (v/v) | Conc. Limits |
|--------------------------------------|---------|--------|----------------------|-------------|--------------|
| StabilZyme® HRP Conjugate Stabilizer | N/A     | N/A    | Skin Sens. 1; H317   | >99%        | ≥0.1%        |

Contains 2-methyl-2H-isothiazol-3-one:

CAS No. 2682-20-4

EC No. 613-167-00-5

Concentration: 0.0126%

Classification: Skin Corr. 1C, H314; Skin Sens. 1A, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410

Specific Concentration Limits:

C≥0.6%

Skin Corr. 1C, H314

Contains CMIT/MIT: Mixture, 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1):

CAS No. 55965-84-9

EC No. 613-167-00-5

Concentration: 0.0024%

Classification: Acute Tox. 3 (Oral), H301, Acute Tox. 2 (Dermal), H310; Acute Tox. 3 (Inhalation), H330; Eye Dam. 1, H318; Skin Corr. 1C, H314; Skin Sens. 1A, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410

Specific Concentration Limits:

C ≥ 0.0015%

Skin Sens. 1, H317

C≥0.06%

Eye Dam. 1, H318

AQP4-Biotin, reconstitution buffer for AQP4-Biotin, calibrators and positive and negative controls contain animal and human proteins and should be treated as potential biohazards.

The following kit components contain ingredients which are considered hazardous but are not present in high enough concentrations to be classified under Regulation (EC) No. 1272/2008.

| Component(s)   | Ingredient  | Number                                 | Classification (GHS)   | Conc. (v/v) | Conc. Limits (v/v)   |
|--|---|--|--|-------------|--|
| Stop Solution  | Sulphuric Acid                                    | CAS No. 7664-93-9<br>EC No. 231-639-5  | Met. Corr. 1, Skin Corr. 1A; H290, H314  | <5%         | Skin Corr. 1A C≥15%<br>Skin Irrit. 2 5%≤C<15%<br>Eye Irrit. 2 5%≤C<15%<br>Met. Corr. 1* C≥0.3%   |
| Diluent for SA-POD   | 2-Chloroacetamide                                 | CAS No.<br>EC No.                      | Acute Tox. 3 (Oral), Skin Sens. 1. Repr. 2; H301, H317, H361f  | <0.1%       | Acute Tox. 3 (Oral) C≥0.1%<br>Skin Sens. 1 C≥0.1%<br>Repr. 2 C≥3%  |
| Diluent for SA-POD   | 2-Methyl-4-isothiazolin-3-one hydrochloride (MIT) | CAS No. 26172-54-3<br>EC No. 247-499-3 | Acute Tox. 3 (Oral & Dermal), Acute Tox. 2 (inhalation), Skin Corr. 1A, Skin Sens. 1A, Aquatic Chronic 1; H301, H311, H314, H317, H330, H410       | <0.1%       | Acute Tox. 3 (Oral & Dermal) C≥0.1%<br>Acute Tox. 2 (Inhalation) C≥0.1%<br>Skin Corr. 1A C≥5%<br>Skin Irrit. 2 1%≤C<5%<br>Skin Sens. 1A C≥0.1%<br>Aquatic Chronic 1 C≥0.1% |
| Reconstitution Buffer for AQP4-Biotin<br>Controls<br>Calibrators | Sodium Azide                                      | CAS No. 26628-22-8<br>EC No. 247-852-1 | Acute Tox. 2 (Oral & Inhalation), Acute Tox. 1 (Dermal), STOT RE 2, Aquatic Acute 1, Aquatic Chronic 1; H300, H310, H330, H373, H400, H410, EUH032 | <0.1%       | Acute Tox. 2 (Oral & Inhalation) C≥0.1%<br>Acute Tox. 1 (Dermal) C≥0.1%<br>STOT RE 2 C≥10%<br>Aquatic Acute 1 C≥0.1%<br>Aquatic Chronic 1 C≥0.1%                           |

\*Please note that corrosive to metals does not need to be on the label of Stop Solution as it is exempt under 1.5.2.1.3. of Regulation (EC) No. 1272/2008.

The full text for the hazard statements can be found in section 16.

## SECTION 4: First aid measures

## 4.1 Description of first aid measures

## After skin contact

Wash off skin thoroughly with water for at least 15 minutes. Remove contaminated clothing. In severe cases or if skin is broken, OBTAIN MEDICAL ATTENTION.

## After eye contact

Separate eyelids with fingers and flush eye with copious amounts of water for at least 15 minutes. OBTAIN MEDICAL ATTENTION.

#### After Inhalation

Remove from exposure, rest and keep warm. If breathing becomes difficult, OBTAIN MEDICAL ATTENTION.

#### After Ingestion

If patient is conscious, wash out mouth with water and give plenty of water to drink. OBTAIN MEDICAL ATTENTION.

#### 4.2 Most important symptoms and effects, both acute and delayed

Not available.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Not available.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Use water, dry powder or foam as appropriate to supporting fire.

#### 5.2 Special hazards arising from the substance or mixture

May evolve toxic fumes in fire. Hazardous combustion products are not known for kit components but combustion products for the ingredients listed in subsection 3.2 can be found in the following table:

| Ingredient                           | Hazardous combustion product(s)   |
|--------------------------------------|---|
| 2-Chloroacetamide                    | Carbon oxides, nitrogen oxides (NO <sub>x</sub> ) and hydrogen chloride gas                 |
| MIT                                  | Carbon oxides, nitrogen oxides (NO <sub>x</sub> ), sulphur oxides and hydrogen chloride gas |
| SeramunBlau® Fast2                   | Carbon oxides and nitrogen oxides (NO <sub>x</sub> )  |
| Sodium Azide                         | Nitrogen oxides (NO <sub>x</sub> )  |
| Stabilzyme® HRP Conjugate Stabilizer | Carbon oxides and nitrogen oxides (NO <sub>x</sub> )  |
| Sulphuric Acid                       | Sulphur oxides  |

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Wear appropriate protective clothing as described in subsection 8.2. Ventilate area and avoid breathing vapours, mist or gas.

#### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent any reagents from entering drains.

#### 6.3 Methods and material for containment and cleaning up

Wipe up liquid spills with absorbent paper. For solid spills, sweep up without raising dust. Once pick up is complete. Wash site with detergent and water. Decontaminate with a suitable disinfectant solution.

#### 6.4 Reference to other sections

See sections 8 and 13.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Material of human origin has been tested and found non-reactive for HIV 1 and 2 and HCV antibodies and HBsAg. All animal sourced material has been obtained from animals certified as healthy and free from disease. However all potentially biohazardous components should be considered as potentially infectious. Level 2 containment should be applied.

Do not eat, drink or smoke in the laboratory. Do not pipette by mouth. Avoid skin and eye contact. Wear appropriate protective clothing as described in subsection 8.2. Avoid the use of needles or other sharp implements. Avoid prolonged or repeated exposure. Wash hands thoroughly after handling. Avoid release into drains; in case of accidental spillage, refer to section 6.

#### 7.2 Conditions for safe storage, including any incompatibilities

Keep containers tightly closed. Store in a dry place in the box supplied at a temperature between +2 and +8°C.

#### 7.3 Specific end use(s)

The AQP4 Antibody ELISA Kit is intended for professional use only and to be used solely for the purpose as specified in subsection 1.2. Refer to kit instructions for details.

### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

No occupational exposure limits exist for any kit components. However, exposure limits apply to the following ingredients (see subsection 3.2 for components containing these substances):

| Value*                | Control Parameters     | Basis                                    |
|-----------------------|------------------------|--|
| <b>Sodium Azide</b>   |                        |  |
| TWA                   | 0.1 mg/m <sup>3</sup>  | UK: EH40 Workplace Exposure Limits (WEL) |
| STEL                  | 0.3 mg/m <sup>3</sup>  | Europe: Commission Directive 2000/39/EC  |
| <b>Sulphuric Acid</b> |                        |  |
| TWA                   | 0.05 mg/m <sup>3</sup> | UK: EH40 Workplace Exposure Limits (WEL) |
|                       |                        | Europe: Commission Directive 2009/161/EU |

#### Stabilzyme® HRP Conjugate Stabilizer

|  |  |
|--|--|
| TRGS 900 Occupational exposure limit value | 0.2 mg/m <sup>3</sup> inhalable fraction |
|--|--|

|                                       |  |
|---------------------------------------|--|
| TRGS 900 Limitation of exposure peaks | 0.4 mg/m <sup>3</sup> inhalable fraction |
|---------------------------------------|--|

*\*Definitions can be found in section 16*

## 8.2 Exposure controls

### Appropriate engineering controls

Good laboratory practice should be followed (see Section 7). Avoid contact with skin or eyes. Wash hands after use.

### Individual protection measures (personal protective equipment)

#### Eye/face protection

Chemical safety glasses or goggles conforming to appropriate government standards such as EN166 (EU) or NIOSH (US).

#### Skin and body protection

Chemical resistant gloves to be used in accordance with standard EN374 derived from Regulation (EU) 2016/425. Inspect gloves for damage prior to use and change if any sign of degradation. Proper glove removal technique must be used. Wash hands after use.

The following are suitable as protective gloves:

Glove materials: Nitrile rubber

Glove Thickness:  $\geq 0.4$  mm thickness

Permeation Time:  $\geq 480$  min

This recommendation is advisory only and should be evaluated by the customer for suitability in their specific situation.

#### Respiratory protection

Local exhaust.

### Environmental exposure controls

Prevent further leakage or spillage if safe to do so. Prevent any reagents from entering drains.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| Kit component                         | Appearance                        | Odour | pH   | Solubility |
|---------------------------------------|-----------------------------------|-------|------|------------|
| AQP4 Coated Wells                     | Colourless polystyrene microplate | None  | N/A  | N/A        |
| Calibrators and Controls              | Pale yellow liquid                | None  | N/A  | N/A        |
| AQP4-Biotin                           | White solid                       | None  | N/A  | In water   |
| Reconstitution Buffer for AQP4-Biotin | Pink liquid                       | None  | ~8.0 | N/A        |

| Kit component | Appearance | Odour | pH | Solubility |
|---------------|------------|-------|----|------------|
|---------------|------------|-------|----|------------|

|                                      |                                  |                            |      |     |
|--------------------------------------|----------------------------------|----------------------------|------|-----|
| Streptavidin Peroxidase (SA-POD)     | Pale brown/yellow liquid         | None                       | N/A  | N/A |
| Diluent for SA-POD                   | Colourless liquid                | None                       | ~7.5 | N/A |
| Peroxidase Substrate (TMB)           | Colourless to slight blue liquid | None                       | N/A  | N/A |
| Stop Solution (0.25M sulphuric acid) | Colourless liquid                | May be slightly sulphurous | <1.0 | N/A |
| Concentrated Wash Solution           | Colourless liquid                | None                       | ~7.7 | N/A |

There is no information available for the following categories: odour threshold, melting/freezing point, initial boiling point/boiling range, flash point, evaporation rate, flammability (solid, gas), upper/lower flammability or explosive limits, vapour pressure, relative vapour density, relative density, particle characteristics, partition coefficient, autoignition temperature, decomposition temperature, kinematic viscosity, explosive properties or oxidising properties.

### 9.2 Other information

All liquid components are miscible with water in all proportions.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Data is not available on the reactivity of individual kit components but is given, where available, on ingredients listed in subsection 3.2.

Sulphuric acid is a strong oxidising agent and has a corrosive effect. There is no data available on the other ingredients.

### 10.2 Chemical stability

All components of the AQP4 Antibody ELISA Kit have been found stable for stated shelf life when stored under the recommended conditions.

### 10.3 Possibility of hazardous reactions

No hazardous reactions known for kit components although, hazardous reactions occur for the following ingredients listed in subsection 3.2:

| Ingredient   | Hazardous Reaction   |
|--------------|--|
| Sodium Azide | Risk of explosion and/or toxic gas formation exists with heavy metals, bromine, lead, chromyl chloride, dichloromethane, dimethylsulfate, halogenated hydrocarbon, acid, carbon disulphide, sulphuric acid, copper and nitric acid. Generates dangerous gases or fumes with acids and water, leading to the release of hydrazoic acid. Violent reactions possible with nitrates, benzoyl chloride and potassium nitrate. |

|                |  |
|----------------|--|
| Sulphuric Acid | Violent reactions possible with: Water, alkali metals, alkali compounds, ammonia, aldehydes, acetonitrile, alkaline earth metals, alkalines, acids, alkaline earth compounds, metals, metal alloys, oxides of phosphorus, phosphorus, hydrides, halogen-halogen compounds, oxyhalogenic compounds, permanganates, nitrates, carbides, combustible substances, organic solvent, acetylidene, nitriles, organic nitro compounds, anilines, peroxides, picrates, nitrides, lithium silicide, iron (III) compounds, bromates, chlorates, amines, perchlorates and hydrogen peroxide. |
|----------------|--|

**10.4 Conditions to avoid**

Peroxidase substrate (TMB) is light, heat and moisture sensitive, exposure to these conditions will reduce the quality of the product. Therefore the bottle should be kept tightly closed when not in use and stored in a dark place.

Proteins, sodium azide and sulphuric acid are heat sensitive and storage or use at the improper temperature may compromise the integrity of the kit.

**10.5 Incompatible materials**

No data is known for kit components but the following data is known for ingredients listed in subsection 3.2:

| Ingredient                           | Incompatible materials   |
|--------------------------------------|--|
| 2-Chloroacetamide                    | Strong oxidising agents, strong acids, strong bases and strong reducing agents   |
| MIT                                  | Strong oxidising agents  |
| SeramunBlau® Fast2                   | Strong oxidising agents and metals   |
| Sodium Azide                         | Aluminium and heavy metals   |
| StabilZyme® HRP Conjugate Stabilizer | None known   |
| Sulphuric Acid                       | Animal and vegetable tissues. Metals. Contact with metals liberates hydrogen gas |

**10.6 Hazardous decomposition products**

No decomposition products are formed if kit is stored and used under the specified storage and handling conditions.

May evolve toxic fumes in fire. Thermal decomposition products are not known for the kit components but hazardous combustion products of the ingredients listed in subsection 3.2 can be found in subsection 5.2

**SECTION 11: Toxicological information****11.1 Information on toxicological effects**

The kit components have not been directly tested for their toxicological effects, therefore no information is known for these mixtures. The following toxicological data is known for ingredients listed in subsection 3.2:

**(a) Acute toxicity**

\*Definitions can be found in section 16

| Ingredient        | Measurement*                  | Value                  | Species |
|-------------------|-------------------------------|------------------------|---------|
| 2-Chloroacetamide | LD <sub>50</sub> (Oral)       | 138 mg/kg              | Rat     |
| MIT               | LD <sub>50</sub> (Oral)       | 175 mg/kg              | Rat     |
|                   | LC <sub>50</sub> (Inhalation) | 0.11 mg/L (4h)         | Rat     |
|                   | LD <sub>50</sub> (Dermal)     | 242 mg/kg              | Rat     |
| Sodium Azide      | LD <sub>50</sub> (Oral)       | 27 mg/kg               | Rat     |
|                   | LC <sub>50</sub> (Inhalation) | 0.054 – 0.52 mg/L (4h) | Rat     |
|                   | LD <sub>50</sub> (Dermal)     | 20 mg/kg               | Rabbit  |
| Sulphuric Acid    | LD <sub>50</sub> (Oral)       | >2140 mg/kg            | Rat     |
|                   | LC <sub>50</sub> (Inhalation) | >0.51 mg/L             | Rat     |

**(b) Skin corrosion/irritation**

| Ingredient         | Test/Result  |
|--------------------|--|
| MIT                | Skin (reconstructed human epidermis (RhE) – Corrosive        |
| SeramunBlau® Fast2 | Based on available data, classification criteria are not met |
| Sodium Azide       | In vitro study, human skin model test – No skin irritation   |
| Sulphuric Acid     | Skin – Rabbit – Result: Extremely destructive to tissue      |

No data available for other ingredients listed in subsection 3.2.

**(c) Serious eye damage/irritation**

| Ingredient         | Test/Result  |
|--------------------|--|
| MIT                | Causes serious eye damage                                    |
| SeramunBlau® Fast2 | Based on available data, classification criteria are not met |
| Sodium Azide       | Bovine cornea, exposure time 4 hours – No eye irritation     |
| Sulphuric Acid     | Causes serious eye damage – risk of blindness                |

No data available for other ingredients listed in subsection 3.2.

**(d) Respiratory or skin sensitisation**

| Ingredient                           | Test/Result  |
|--------------------------------------|--|
| 2-Chloroacetamide                    | Maximisation test, Guinea pig – May cause sensitisation by skin contact  |
| MIT                                  | Maximisation test, Guinea pig – Result: Positive<br>Local lymph node assay (LLNA) – Result: Positive – Sub-category 1A |
| SeramunBlau® Fast2                   | Based on available data, classification criteria are not met   |
| Sodium Azide                         | Sensitisation test (dermal), Local lymph node assay (LLNA) – Mouse – Result: Negative                                  |
| Stabilzyme® HRP Conjugate Stabilizer | May cause an allergic skin reaction  |

No data available for other ingredients listed in subsection 3.2.

**(e) Germ cell mutagenicity**

| Ingredient        | Test/Result  |
|-------------------|--|
| 2-Chloroacetamide | Hamster, lungs – Negative<br>Mouse, male and female – Negative |

| Ingredient | Test/Result |
|------------|-------------|
|------------|-------------|

|                |   |
|----------------|---|
| MIT            | Ames test: Salmonella typhimurium – Negative,<br>Chinese hamster ovary cells – Negative,<br>Mouse – Negative,<br>Rat – Negative   |
| Sodium Azide   | Chromosome aberration:<br>Chinese hamster ovary cells – Negative<br>Unscheduled DNA Synthesis assay:<br>Chinese hamster lung cells – Negative<br>Sister Chromatid exchange assay:<br>Chinese hamster ovary cells – Negative |
| Sulphuric Acid | Ames test: Salmonella typhimurium – Negative  |

No data available for other ingredients listed in subsection 3.2.

#### (f) Carcinogenicity

| Ingredient         | Test/Result   |
|--------------------|---|
| 2-Chloroacetamide  | IARC: No component of this product present at levels $\geq 0.1\%$ is identified as probable, possible or confirmed human carcinogen by IARC |
| MIT                |   |
| SeramunBlau® Fast2 | Based on available data, classification criteria are not met  |

No data available for other ingredients listed in subsection 3.2.

#### (g) Reproductive toxicity

| Ingredient         | Test/Result   |
|--------------------|---|
| 2-Chloroacetamide  | Suspected human reproductive toxicant   |
| MIT                | Effects on foetal development – Rat – Oral 40 mg/kg bw/day – Result: Negative |
| SeramunBlau® Fast2 | Toxic for reproduction category 1 - May damage fertility or the unborn child. |

No data available for other ingredients listed in subsection 3.2.

#### (h) STOT-single exposure

| Ingredient         | Test/Result  |
|--------------------|--|
| SeramunBlau® Fast2 | Based on available data, classification criteria are not met |

No data available for other ingredients listed in subsection 3.2.

#### (i) STOT-repeated exposure

| Ingredient         | Test/Result  |
|--------------------|--|
| SeramunBlau® Fast2 | Based on available data, classification criteria are not met                     |
| Sodium Azide       | Oral – may cause damage to organs through prolonged or repeated exposure - Brain |

No data available for other ingredients listed in subsection 3.2.

#### (j) Aspiration hazard

| Ingredient         | Test/Result  |
|--------------------|--|
| SeramunBlau® Fast2 | Based on available data, classification criteria are not met |

No data available for other ingredients listed in subsection 3.2.

### 11.2 Information on other hazards

#### (a) Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to Commission Regulations (EU) 2017/2100 and (EU) 2018/605.

#### (b) Other information

As the kit components have not been tested for their toxicological effects, other hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

### SECTION 12: Ecological information

The kit components have not been tested for their ecological effects, therefore no information is known for these mixtures. The following ecological data is known for ingredients listed in subsection 3.2:

#### 12.1 Toxicity

\*Definitions can be found in section 16

| Ingredient                           | Toxicity to  | Measurement*      | Value                           |
|--------------------------------------|--|-------------------|---------------------------------|
| 2-Chloroacetamide                    | Fish<br>( <i>Carassius auratus</i> (goldfish))   | LC <sub>50</sub>  | 19.8 mg/L (96h)                 |
|                                      | Daphnia<br>( <i>Daphnia magna</i> (water flea))  | EC <sub>50</sub>  | 14 mg/L (48h)                   |
| MIT                                  | Fish<br>( <i>Oncorhynchus mykiss</i> (rainbow trout))                                  | LC <sub>50</sub>  | 4.77 mg/L (96h)                 |
|                                      | Daphnia<br>( <i>Daphnia magna</i> (water flea))  | EC <sub>50</sub>  | 2.33 mg/L (48h) (Static)        |
|                                      | Daphnia<br>( <i>Daphnia magna</i> (water flea))  | EC <sub>50</sub>  | 0.998 mg/L (48h) (Flow through) |
|                                      | Algae<br>( <i>Pseudokirchneriella subcapitata</i> (green algae))                       | ErC <sub>50</sub> | 0.289 mg/L (72h)                |
|                                      |  |                   |                                 |
| Sodium Azide                         | Fish<br>( <i>Oncorhynchus mykiss</i> (rainbow trout))                                  | LC <sub>50</sub>  | 2.75 mg/L (96h)                 |
|                                      | Algae<br>( <i>Pseudokirchneriella subcapitata</i> )                                    | ErC <sub>50</sub> | 0.35 mg/L (96h)                 |
| StabilZyme® HRP Conjugate Stabilizer | Fish<br>( <i>Oncorhynchus mykiss</i> (rainbow trout))                                  | LC <sub>50</sub>  | 0.19 mg/L                       |
|                                      | Daphnia & other aquatic invertebrates ( <i>Crassostrea virginica</i> (eastern oyster)) | EC <sub>50</sub>  | 0.028 mg/L                      |
|                                      | Algae<br>( <i>Raphidocelis subcapitata</i> (green algae))                              | EC <sub>50</sub>  | 0.018 mg/L (72h)                |
| Sulphuric Acid                       | Daphnia & other aquatic invertebrates ( <i>Daphnia magna</i> (water flea))             | EC <sub>50</sub>  | >100 mg/L (48h)                 |
|                                      | Algae  | ErC <sub>50</sub> | >100 mg/L (72h)                 |

(*Desmodesmus subspicatus*  
(green algae))

No data available for other ingredients listed in subsection 3.2.

## 12.2 Persistence and degradability

| Ingredient                              | Test/Result  |
|---|--|
| 2-Chloroacetamide                       | Biodegradability: aerobic, exposure time 28 days<br>Results: 94% - Readily degradable    |
| MIT                                     | Biodegradability: aerobic, exposure time 28 days<br>Results: 0% - Not readily degradable |
| StabilZyme® HRP<br>Conjugate Stabilizer | Not rapidly degradable   |

No data available for other ingredients listed in subsection 3.2.

## 12.3 Bioaccumulative potential

| Ingredient                              | Test/Result  |
|---|--|
| MIT                                     | Partition coefficient: n-octanol/water - log Pow: -0.44<br>(Bioaccumulation is not expected) |
| StabilZyme® HRP<br>Conjugate Stabilizer | Log Kow: >5 (significant bioaccumulation)  |

No data available for other ingredients listed in subsection 3.2.

## 12.4 Mobility in soil

No data available.

## 12.5 Results of PBT and vPvB assessment

| Ingredient        | Test/Result   |
|-------------------|---|
| 2-Chloroacetamide | This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of $\geq 0.1\%$ |
| MIT               |   |
| Sodium Azide      |   |
| Sulphuric Acid    |   |

No data available for other ingredients listed in subsection 3.2.

## 12.6 Endocrine disrupting properties

The ingredients listed in subsection 3.2 do not have endocrine disrupting properties with respect to non-target organisms as it does not meet the criteria set out in section B of Regulation (EU) No 2017/2100.

## 12.7 Other adverse effects

The concentrations of ingredients listed in subsection 3.2 are below the acceptable limit for hazardous substances; the ecological risk is minimal. However, it is recommended that reagents do not enter drains in large quantities.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Chemical and biological residues are classified as special waste and as such, are covered by regulations which may vary according to location. Contact your local waste disposal authority for advice or pass to a licensed disposal company. Observe all national and local environmental regulations. Contaminated packaging should be disposed of using the same routes.

## SECTION 14: Transport information

This product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

Transport of this product can be carried out at ambient temperature but in the event of delays store at 2 – 8°C with all reagents contained within the packaging provided.

### 14.1 UN number or ID number

Not applicable.

### 14.2 UN proper shipping name

Not applicable.

### 14.3 Transport hazard class(es)

Not applicable.

### 14.4 Packing group

Not applicable.

### 14.5 Environmental hazards

Not applicable.

### 14.6 Special precautions for user

See sections 6 to 8.

### 14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

## SECTION 15: Regulatory information

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

None known.

### 15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for the AQP4 Antibody ELISA kit by the manufacturer.

## SECTION 16: Other information

This SDS has been compiled in accordance with Commission Regulation (EC) No. 1907/2006 as amended by Commission Regulation (EU) 2020/878.

All information provided on ingredients listed in subsection 3.2 has been obtained from the appropriate chemical safety data sheets.

Full text of precautionary statements (listed in subsection 2.3) and hazard statements (listed in subsection 3.2) according to Regulation (EC) No. 1272/2008:

P202: Do not handle until all safety precautions have been read and understood.

P233: Keep container tightly closed.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P270: Do not eat, drink or smoke when using this product.

P272: Contaminated work clothing should not be allowed out of the workplace.  
P280: Wear protective gloves/protected clothing/eye protection/face protection.  
P281: Use personal protective equipment as required.  
P301 + P330 + P331: IF SWALLOWED rinse mouth. Do NOT induce vomiting.  
P302 + P352: IF ON SKIN: Wash with plenty of soap and water.  
P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.  
P308 + P313: IF exposed or concerned: Get medical advice/attention.  
P333 + P313: If skin irritation or rash occurs: Get medical advice/attention.  
P362 + P364: Take off contaminated clothing and wash it before reuse.  
P501: Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

H290: May be corrosive to metals.

H300: Fatal if swallowed.

H301: Toxic if swallowed.

H310: Fatal in contact with skin.

H311: Toxic in contact with skin.

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H318: Causes serious eye damage.

H319: Causes serious eye irritation.

H330: Fatal if inhaled.

H360D: May damage the unborn child.

H361f: Suspected of damaging fertility.

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.

EUH032: Contact with acids liberates very toxic gas.

#### Definitions:

**LC50:** The lethal concentration of a substance that kills 50% of the test population within a designated period.

**LD50:** Lethal dose for 50% of the test population.

**EC50:** The effective concentration of a substance that causes adverse effects in 50% of the test population within a designated period.

**ErC50** = The effective concentration of a substance that causes 50% reduction in growth rate of the test population within a designated period.

**IC50:** The inhibition concentration of a substance that causes a 50% inhibition of growth of the test population relative to the control within a designated period.

**STEL:** Short term exposure limit (15 minute reference period).

**TWA:** Time weighted average, long term exposure limit (8 hour reference period).

The above information is believed to be correct but does not purport to be all-inclusive and is provided for guidance only. DLD Diagnostika GmbH shall not be held liable for

any damage or injury resulting from handling or from contact with the above product and assumes no responsibility to the accuracy or completeness of the data contained herein. It is the responsibility of the purchaser to ensure that laboratory workers who use this product are aware of its hazards and take all necessary precautions to prevent contact, ingestion, inhalation or any other mode of exposure.

#### REVISION INFORMATION

| Revision Number | Effective Date            | Description of Changes                                      |
|-----------------|---------------------------|---|
| 10              | 22 <sup>nd</sup> May 2023 | Revision of SDS to meet (EU) 2020/878 – changes throughout. |