SAFETY DATA SHEET

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

Product name: Rubella IgG ELISA
Rubella IgG Avidity ELISA
Rubella IgM µ-capture ELISA

IUPAC name: -

Product number: ELS61244
ELS61245
ELS61246

CAS number: -

Components:
(0) Microtiter Plate [MTP]
(1) TMB Substrate Solution [SUB TMB]
(2) Enzyme Conjugate [AB SOLN] [CONJ / STRE]
(3) Washing Buffer, concentrated [WASH BUF]
(4) Sample Diluent [DIL]
(6) Antigen lyophilized [AG LYO] / Avidity Reagent [REAG AVI]

(7) Stop Solution [SOLN STOP]

Company: The Native Antigen Company
Building B
Langford Locks
Kidlington
Oxfordshire
OX5 1LH
Tel+44 (0)1865 595230

E-mail address: contact@thenativeantigencompany.com

Concerning safety, the microtiter plate (0) is inoffensive and for this reason not part of this document. Components 1 – 6, due to coincident categorization, are combined as a group and treated and dealt with below. Component 7 (Stop Solution) is dealt with below in a separate safety data sheet.

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.
Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.

Label elements

Classification according to Regulation (EC) No 1272/2008 [CLP].
A. Components (2), (4) and (5) EUH Statements:

- EUH208: Contains 2-methyl-2H-isothiazol-3-one. May produce an allergic reaction.
- EUH210: Safety data sheet available on request.

A. Component (1) TMB Substrate Solution [SUB TMB]

Reproductive toxicity, Category 1B                  H360D
Full text of H statements: see section 16

Adverse physicochemical, human health and environmental effects
May damage the unborn child.

2.2. Label elements

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

<table>
<thead>
<tr>
<th>Hazard pictograms (CLP)</th>
<th>GHS08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signal word (CLP)</td>
<td>Danger</td>
</tr>
<tr>
<td>Hazard statements (CLP)</td>
<td>H360D - May damage the unborn child.</td>
</tr>
<tr>
<td>Precautionary statements (CLP)</td>
<td>P201 - Obtain special instructions before use. P280 - Wear protective clothing, protective gloves, eye protection, face protection. P308+P313 - IF exposed or concerned: Get medical advice.</td>
</tr>
<tr>
<td>Extra phrases</td>
<td>Restricted to professional users</td>
</tr>
</tbody>
</table>

3. COMPOSITION/INFORMATION ON INGREDIENTS

Enzyme immunoassays for the determination of human antibodies against infectious agents. Comprise solvent mixtures with additives.

TMB Substrate Solution

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
</table>

Specific concentration limits:

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>Specific concentration limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-methyl-2-pyrrolidone</td>
<td>(CAS-No.) 872-50-4 (EC-No.) 212-828-1 (REACH:no) 2118472430-46-xx</td>
<td>(C &gt;= 10) STOT SE 3, H335</td>
</tr>
</tbody>
</table>

Full text of H-statements: see section 16

4. FIRST AID MEASURES

General: Remove any clothing soiled by the product.

If inhaled: Remove person to fresh air, seek medical advice if breathing becomes difficult.
In case of skin contact: Wash off with soap and water.

In case of eye contact: Rinse at eyewash station.

If swallowed: If swallowed, wash out mouth with water provided person is conscious. Do not induce vomiting. Seek medical advice.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use fire extinguishing methods suitable to surrounding conditions. CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture
Ambient fire may liberate hazardous vapours. In the event of fire development of hazardous combustion gases or vapours possible. In case of fire, the following gases can be released: Dioxide, carbon monoxide, carbon dioxide, nitrogen oxides.

Special protective equipment for fire-fighters
Wear self-contained respiratory protective device. Wear fully protective suit.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Wear protective clothing.

Environmental precautions
Do not allow to enter sewers/ground water or penetrate the soil.

Methods and materials for containment and cleaning up
Absorb with liquid binding material (sand diatomite, acid binders, universal binders, sawdust). Dispose of the material according to regulations.

7. HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin and eyes.

Conditions for safe storage
Recommended storage temperature: 2-8°C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
The mixtures do not contain any relevant quantities of materials with critical values that have to be monitored at the working place.
Additional information: The lists valid during the making were used as basis.
Personal protective equipment

General protective and hygienic measures
Wash hands before breaks and at the end of work. Keep away from foodstuffs, beverages and feed. Avoid contact with the eyes and skin. Immediately remove all soiled and contaminated clothing. Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Respiratory protection
In case of inadequate ventilation wear respiratory protection (P2, EN 143).

Hand protection
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. Nitrile rubber, thickness: ≥ 0.11 mm (EN 374). 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. Penetration time of glove material: Value of the permeation: Level ≥ 6 (>480 min.). 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 chemical goggles (EN 166)

Skin and body protection
Protective work clothing.

Hygiene measures
Avoid contact with skin, eyes and clothing
### Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Calibrators</th>
<th>Substrate Solution</th>
<th>Enzyme Conjugate</th>
<th>Washing Solution</th>
<th>Sample Diluent</th>
<th>Controls</th>
<th>Avidity Reagent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other information:</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Appearance:</td>
<td></td>
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<tr>
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<td>3.6 - 3.8</td>
<td>7.0 – 7.4</td>
<td>7.0 – 7.4</td>
<td>6.3 – 7.5</td>
<td>7.3 - 7.7</td>
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<td>Fully miscible</td>
<td>Fully miscible</td>
<td>Fully miscible</td>
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<td>Fully miscible</td>
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<tr>
<td>Partition coefficient (n-Octanol/Water):</td>
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<td>No information available</td>
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<td>No information available</td>
<td>No information available</td>
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<td>No information available</td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Conditions to avoid
No information available.

Materials to avoid
No information available.

Hazardous decomposition products
No decomposition if used and stored according to specifications.

Hazardous polymerization
No dangerous decomposition products known

11. TOXICOLOGICAL INFORMATION

Acute toxicity
Quantitative data on the toxicity of the mixtures are not available.

Primary irritant effect
On the skin: Repeated or prolonged skin contact may cause irritation.
On the eyes: Slight eye irritant upon direct contact.
After inhalation: No irritating effect known.
Sensitization: No sensitizing effects known.

CMR effects
Germ cell mutagenicity: No information available.
Carcinogenicity: No information available.
Reproductive toxicity: May damage the unborn child.

Aspiration hazard
No aspiration toxicity classification.

Specific target organ toxicity – single exposure
The mixtures are not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity – repeated exposure
The mixtures are not classified as specific target organ toxicant, repeated exposure.

Additional toxicological information
We have no description of any toxicological symptoms.

Further information
The product should be handled with the care usual when dealing with chemicals.

Additional toxicological information
When used and handled according to specifications, the mixtures do not have any harmful effects to our experience and the information provided to us.
12. ECOLOGICAL INFORMATION

Toxicity
Quantitative data on the ecological effect of the mixtures are not available.

Persistence and degradability
No data available

Bioaccumulative potential
No data available

Mobility in soil
No data available. Do not allow to enter waters, sewers or soil

PBT and vPvB assessment
Not applicable

Other adverse effects
No data available

13. DISPOSAL CONSIDERATIONS

Product
This material and its container must be disposed of as hazardous waste. The disposal is regionally differently regulated; therefore, the kind of disposal is to be inquired at the responsible authorities.

Contaminated packaging
Disposal according to official regulations.

14. TRANSPORT INFORMATION
Not dangerous goods, no transport limitations.

15. REGULATORY INFORMATION
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

16. OTHER INFORMATION
None

17. REGULATORY INFORMATION
The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008:

<table>
<thead>
<tr>
<th>N-methyl-2-pyrrolidone</th>
<th>TMB Substrate Solution - N-methyl-2-pyrrolidone</th>
</tr>
</thead>
</table>

3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

30. Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 classified as Toxic to Reproduction category 1A or 1B (Table 3.1) or Toxic to Reproduction category 1 or 2 (Table 3.2) and listed as follows: Reproductive toxicant category 1A adverse effects on sexual function and fertility or on development (Table 3.1) or Reproductive toxicant category 1 with R60 (May impair fertility) or R61 (May cause harm to the unborn child) (Table 3.2) listed in Appendix 5 Reproductive toxicant category 1B adverse effects on sexual function and fertility or on development (Table 3.1) or Reproductive toxicant category 2 with R60 (May impair fertility) or R61 (May cause harm to the unborn child) (Table 3.2) listed in Appendix 6

Contains a substance on the REACH candidate list in concentration ≥ 0.1% or with a lower specific limit: N-methyl-2-pyrrolidone (EC 212-828-1, CAS 872-50-4)

Contains no REACH Annex XIV substances

Other information, restriction and prohibition regulations:

National regulations:
Take note of Directive 92/85/EC on the safety and health of pregnant workers at work.

**Last update:** 27 March 2019

**Prepared by:** The Native Antigen Company

Although the information, opinions and recommendations contained in this Safety Data Sheet are compiled from sources believed to be reliable, we accept no responsibility for the accuracy, sufficiency, or reliability or for any loss or injury resulting from the use of the information.
SAFETY DATA SHEET

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

Product name: Chikungunya virus IgG capture ELISA
Chikungunya Virus IgM μ-capture ELISA

IUPAC name: 

Product number: ELS61242
ELS61243

CAS number: 

Components: (7) Stop Solution [SOLN STOP]

Company: The Native Antigen Company
Building B
Langford Locks
Kidlington
Oxfordshire
OX5 1LH
Tel+44 (0)1865 595230

E-mail address: contact@thenativeantigencompany.com

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture
Classification according to Directive 67/548/EEC or Directive 1999/45/EC:
X, Irritant

Classification according to Regulation (EC) No 1272/2008
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.

Information concerning particular hazards for human and environment
The mixture has to be labelled due to the calculation procedure of the „General Classification guideline for preparations of the EU” in the latest valid version.

Classification system
The classification is according to the latest editions of the EU lists, and extended by company and literature data.

2.2. Label elements
Labeling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation

Hazard pictograms:
GHS05
Signal word Warning.
Hazard statements
H315 Causes skin irritation.
H319 Causes serious eye irritation.
Precautionary statements
P280 Wear protective gloves/protective clothing/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.
P362 Take off contaminated clothing and wash before reuse.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.

2.3. Other hazards
All chemicals are potentially dangerous. They should only be handled by specially trained personnel.

PBT Not applicable.
vPvB Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Mixtures
Description: Aqueous solution.

Dangerous components

<table>
<thead>
<tr>
<th>CAS No.:</th>
<th>Description:</th>
<th>EINECS:</th>
<th>Index number:</th>
<th>Elemental Formula:</th>
<th>Molar Mass:</th>
<th>Concentration in mixture:</th>
<th>Classification according to Directive 67/548/EEC or Directive 1999/45/EC:</th>
<th>Classification according to Regulation (EC) No 1272/2008:</th>
</tr>
</thead>
</table>
| 7664-93-9 | Sulfuric acid | 231-639-5 | 016-020-00-8   | H₂SO₄            | 98.08       | 0.5 M                      | C R35                                             | Met Corr. 1  
Skin Corr. 1A  
H290, H314 |

4. FIRST AID MEASURES

4.1. Description of first aid measures

General information
First aider: Pay attention for self-protection!! Remove any clothing soiled by the product.

After Inhalation
Remove to fresh air. If breathing is difficult, give oxygen. Seek medical advice immediately.

**After skin contact**
Immediately rinse with water. After massive or prolonged skin contact: Seek medical advice.

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

**After swallowing**
Rinse out mouth and drink a glass of water. Do not induce vomiting. If there is any trouble seek medical help.

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.

5. FIREFIGHTING MEASURES

5.1. Extinguishing media
**Suitable extinguishing agents**
Use fire extinguishing methods suitable to surrounding conditions. CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**for safety reasons unsuitable extinguishing agents**
For this mixture no limitations of extinguishing agents are given.

5.2. Special hazards arising from the substance or mixture
Ambient fire may liberate hazardous vapours. In the event of fire development of hazardous combustion gases or vapours possible. In case of fire, the following gases can be released: Sulphur dioxide, carbon monoxide and carbon dioxide.

5.3. Important Advice for firefighters
**Protective equipment**
Wear self-contained respiratory protective device. Wear fully protective suit.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures
Wear protective clothing. Keep away unprotected persons. Avoid eye or skin contact.

6.2. Environmental precautions
Do not allow to enter sewers/ground water or penetrate the soil.

6.3. Methods and material for containment and cleaning up
Absorb with liquid binding material (sand diatomite, acid binders, universal binders, sawdust).
Dispose of the material according to regulations. 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 requirement.
See section 13 for disposal information.

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

**Storage:**

Requirements to be met by storerooms and receptacles

Store at a cool place. Do not store in corrosionable metal. Provide acid-resistant floor.

**Information about storage in one common storage facility**

Store away from foodstuffs.

Further information about storage conditions

None.

Recommended storage temperature

2-8°C

7.3. Specific end use(s)

No further relevant information available.

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 workplace:**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Limit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>7664-93-9 Sulphuric acid</td>
<td></td>
</tr>
<tr>
<td>AGW (Germany):</td>
<td>0.1 E mg/m³</td>
</tr>
<tr>
<td>IOELV (EU):</td>
<td>0.05 mg/m³</td>
</tr>
</tbody>
</table>

**DNEL values (Sulphuric acid):**

<table>
<thead>
<tr>
<th>Workers</th>
<th>Long-term exposition – local effects:</th>
<th>Short-term exposition – local effects:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalative</td>
<td>DNEL</td>
<td>0.05 mg/m³ (worker)</td>
</tr>
</tbody>
</table>

**PNEC values (Sulphuric acid):**

<table>
<thead>
<tr>
<th>PNEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.8 mg/L (sewage treatment plant)</td>
</tr>
<tr>
<td>0.002 mg/kg (sea water sediment)</td>
</tr>
<tr>
<td>0.25 mg/L (sea water)</td>
</tr>
<tr>
<td>0.002 mg/kg (sea water sediment)</td>
</tr>
<tr>
<td>0.0025 mg/L (fresh water)</td>
</tr>
</tbody>
</table>

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. Keep away from foodstuffs, beverages and feed. Avoid contact with the eyes and skin. Immediately remove all soiled and contaminated clothing.

- Individual protection measures
  
  Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

- Respiratory protection
  
  Required when vapors/aerosols are generated.

**Protection of hands**
Protective gloves – The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

**Material of gloves**
Nitrile, thickness: ≥ 0.11 mm. 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.

**Penetration time of glove material**
Value of the permeation: Level ≥ 6. 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.

**Body protection**
Protective work clothing.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Stop Solution (0.5 M Sulphuric acid)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General information</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Appearance:</strong></td>
<td></td>
</tr>
<tr>
<td>Form:</td>
<td>fluid</td>
</tr>
<tr>
<td>Colour:</td>
<td>colourless</td>
</tr>
<tr>
<td>Odour:</td>
<td>odourless</td>
</tr>
<tr>
<td>Odour threshold:</td>
<td>No information available</td>
</tr>
<tr>
<td>pH-value:</td>
<td>1</td>
</tr>
<tr>
<td><strong>Change in condition:</strong></td>
<td></td>
</tr>
<tr>
<td>Melting point/ Melting range:</td>
<td>No information available</td>
</tr>
<tr>
<td>Boiling point/ Boiling range:</td>
<td>100°C</td>
</tr>
<tr>
<td>Flash point:</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability (solid, gaseous):</td>
<td>No information available</td>
</tr>
<tr>
<td>Ignition temperature:</td>
<td>No information available</td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>No information available</td>
</tr>
<tr>
<td>Self-igniting:</td>
<td>The mixture is not self-igniting</td>
</tr>
<tr>
<td>Danger of explosion:</td>
<td>The mixture does not present an explosion hazard</td>
</tr>
<tr>
<td><strong>Explosion limits:</strong></td>
<td></td>
</tr>
<tr>
<td>Lower:</td>
<td>No information available</td>
</tr>
<tr>
<td>Upper:</td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Oxidizing properties</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Vapour pressure at 20 °C:</strong></td>
<td>23 hPa</td>
</tr>
<tr>
<td><strong>Density:</strong></td>
<td>1.03 g/cm³</td>
</tr>
<tr>
<td><strong>Vapour density:</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Evaporation rate:</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Solubility in:</strong></td>
<td>Fully miscible</td>
</tr>
<tr>
<td><strong>Miscibility with water:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Partition coefficient</strong></td>
<td>No information available</td>
</tr>
<tr>
<td>Property</td>
<td>Stop Solution (0.5 M Sulphuric acid)</td>
</tr>
<tr>
<td>----------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>(n-Octanol/Water)</td>
<td></td>
</tr>
<tr>
<td>Viscosity:</td>
<td></td>
</tr>
<tr>
<td>Dynamic:</td>
<td>No information available</td>
</tr>
<tr>
<td>Kinematic:</td>
<td>No information available</td>
</tr>
</tbody>
</table>

9.2. Other information
No further relevant information available.

10. STABILITY AND REACTIVITY
10.1. Reactivity
See section 10.3.

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

10.3. Possibility of hazardous reactions
Reacts with alkali (lyes).

10.4. Conditions to avoid
No information available.

10.5. Incompatible materials
No information available.

10.6. Hazardous decomposition products
No dangerous decomposition products known. In case of fire see item 5.

11. TOXICOLOGICAL INFORMATION
11.1. Information on toxicological effects
Acute Toxicity
LD/LC50 values relevant for classification: Quantitative data on the toxicity of this product are not available.

Primary irritant effect
On the skin: Irritant to skin and mucous membranes.
On the eyes: Irritant.
After inhalation: Irritant to skin and mucous membranes.
Sensitization: No sensitizing effects known.

CMR effects
Germ cell mutagenicity: No information available.
Carcinogenicity: No information available.
Reproductive toxicity: No information available.

Aspiration hazard
No aspiration toxicity classification.

Specific target organ toxicity – single exposure:
The mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity – repeated exposure:
The mixture is not classified as specific target organ toxicant, repeated exposure.

Additional toxicological information:
We have no description of any toxicological symptoms.
11.2. Further information
The product should be handled with the care usual when dealing with chemicals.

12. ECOLOGICAL INFORMATION
12.1. Toxicity
Aquatic toxicity
Quantitative data on the ecological effect of this product are not available.

12.2. Persistence and degradability
No further relevant information available.

12.3. Bio accumulative potential
No further relevant information available.

12.4. Mobility in soil
No further relevant information available.

Ecotoxic effects
Do not allow to enter waters, sewers or soil.

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

12.6. Other adverse effects
No further relevant information available.

13. DISPOSAL CONSIDERATIONS
13.1. Waste treatment methods
Recommendation
This material and its container must be disposed of as hazardous waste. The disposal is regionally differently regulated, therefore the kind of disposal is to be inquired at the responsible authorities.

Uncleaned packaging:
Recommendation
Disposal according to official regulations.

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

14. TRANSPORT INFORMATION
14.1. UN-Number
ADR, IMDG, IATA: UN2796

14.2. UN proper shipping name
ADR: „2796 Battery fluid, acid or Sulphuric acid with not more than 51 percent acid, N.O.S.“
IMDG, IATA: „SULFURIC ACID, N.O.S.“
14.3. Transport hazard class(es)

**ADR:**

<table>
<thead>
<tr>
<th>Class:</th>
<th>8 Corrosive substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Label:</td>
<td>8</td>
</tr>
</tbody>
</table>

**IMDG, IATA:**

<table>
<thead>
<tr>
<th>Class:</th>
<th>8 Corrosive Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Label:</td>
<td>8</td>
</tr>
</tbody>
</table>

14.4. Packing group

ADR, IMDG, IATA: II

14.5. Environmental hazards

Marine pollutant: No.

14.6. Special precautions for user

Warning: Corrosive substances.
Danger code (Kemler): 80
EMS number: F-A, S-B

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

### Transport/Additional information (ADR)

<table>
<thead>
<tr>
<th>Limited quantities (LQ)</th>
<th>5 L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport category</td>
<td>3</td>
</tr>
<tr>
<td>Tunnel restriction code</td>
<td>E</td>
</tr>
</tbody>
</table>

UN „Model Regulation“: 2796 Battery fluid, acid or Sulphuric acid with not more than 51 percent acid, N.O.S., 8, II

15. REGULATORY INFORMATION

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

National regulations:

Information about limitation of use: Employment restrictions concerning juveniles must be observed.
Water hazard class: Slightly hazardous for water.

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.
16. OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

<table>
<thead>
<tr>
<th>Phrase</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>H315</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>R36/38</td>
<td>Irritating to eyes and skin.</td>
</tr>
</tbody>
</table>

17. REGULATORY INFORMATION

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2008:

<table>
<thead>
<tr>
<th>Description</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008</td>
<td>sulphuric acid</td>
</tr>
<tr>
<td>3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10</td>
<td>sulphuric acid</td>
</tr>
</tbody>
</table>

Last update: 10 May 2019

Prepared by: The Native Antigen Company

Although the information, opinions and recommendations contained in this Safety Data Sheet are compiled from sources believed to be reliable, we accept no responsibility for the accuracy, sufficiency, or reliability or for any loss or injury resulting from the use of the information.