SAFETY DATA SHEET

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

Product name: Zika NS1 Capture ELISA
Components: Anti-Zika virus NS1 coated microtitre plate, NS1 standards, lyophilised zero standard (contains 0.1% Proclin 950), Wash Buffer, Antibody-biotin conjugate (contains 0.5% Proclin 950), Streptavidin-HRP conjugate (contains 0.1% Proclin 950), TMB-HK substrate, stop solution (contains 1M Hydrochloric Acid solution)
IUPAC name: -
Product number: ELS61231
Company: The Native Antigen Company Ltd. 
Building B 
Langford Locks 
Kidlington 
Oxfordshire 
OX5 1LH 
Tel+44 (0)1865 595230

E-mail address: contact@thenativeantigencompany.com

2. HAZARDS IDENTIFICATION

Name: 1M Hydrochloric Acid solution
Classification of the substance or mixture:
Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]
H290 Corrosive to metals (Category 1)

Label elements

Pictogram

Signal word: Warning
Hazard statement(s) H290 Corrosive to metals (Category 1)
Precautionary statement(s) P234 - Keep only in original container
P390 - Absorb spillage to prevent material damage
P406 - Store in corrosive resistant container with a resistant inner liner
3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures
Formula : HCl
Molecular weight : 36.46 g/mol

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

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric acid</td>
<td></td>
<td>= 5 - &lt; 10 %</td>
</tr>
<tr>
<td>CAS-No. 7647-01-0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC-No. 231-595-7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Index-No. 017-002-01-X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registration number 01-2119484862-27-XXXX</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Met. Corr. 1; Skin Corr. 1B;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>STOT SE 3; H290, H314,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>H335</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Concentration limits:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>= 25 %: Skin Corr. 1B,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>H314; 10 - &lt; 25 %: Skin Irrit.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2, H315; 10 - &lt; 25 %: Eye Irrit.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2, H319; = 10 %: STOT SE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3, H335; = 0.1 %: Met. Corr.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1, H290;</td>
<td></td>
</tr>
</tbody>
</table>

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

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

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

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

In case of eye contact
Flush eyes with water as a precaution.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

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

5. FIREFIGHTING MEASURES

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

5.2 Special hazards arising from the substance or mixture
No data available

5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information
No data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. Avoid breathing vapours, mist or gas.
For personal protection see section 8.

6.2 Environmental precautions
Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Avoid inhalation of vapour or mist.
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Corrodes metal. Metal containers must be lined.

7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters
Components with workplace control parameters

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Value of exposure</th>
<th>Control parameters</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric acid</td>
<td>7647-01-0</td>
<td>STEL</td>
<td>10 ppm 15 mg/m3</td>
<td>Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Remarks Indicative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>5 ppm 8 mg/m3</td>
<td>Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Indicative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>1 ppm 2 mg/m3</td>
<td>UK. EH40 WEL - Workplace Exposure Limits</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>5 ppm 8 mg/m3</td>
<td>UK. EH40 WEL - Workplace Exposure Limits</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Gas and aerosol)</td>
<td>1 ppm 2 mg/m3</td>
<td>UK. EH40 WEL - Workplace Exposure Limits</td>
</tr>
</tbody>
</table>

www.thenativeantigencompany.com contact@thenativeantigencompany.com VAT No: 102038475 Registration No. 7386339
<table>
<thead>
<tr>
<th></th>
<th>STEL (Gas and aerosol mists)</th>
<th>5 ppm 8 mg/m³</th>
<th>UK. EH40 WEL - Workplace Exposure Limits</th>
</tr>
</thead>
</table>

8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Body Protection**
Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a) Appearance</strong></td>
<td>Form: liquid</td>
</tr>
<tr>
<td><strong>b) Odour</strong></td>
<td>Colour: colourless</td>
</tr>
<tr>
<td><strong>c) Odour Threshold</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>d) pH</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>e) Melting point/freezing</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>f) Initial boiling point and</strong></td>
<td>boiling range</td>
</tr>
<tr>
<td><strong>g) Flash point</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>h) Evaporation rate</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>i) Flammability (solid, gas)</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>j) Upper/lower flammability or explosive limits</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>k) Vapour pressure</strong></td>
<td>23 hPa at 20 °C</td>
</tr>
</tbody>
</table>
l) Vapour density: No data available
m) Relative density: No data available
n) Water solubility: completely miscible
o) Partition coefficient: noctanol/water: No data available
p) Auto-ignition temperature: does not ignite
q) Decomposition temperature: No data available
r) Viscosity: No data available
s) Explosive properties: Not explosive
t) Oxidizing properties: No data available

9.2 Other safety information
No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity
No data available

10.2 Chemical stability
Stable under recommended storage conditions

10.3 Possibility of hazardous reactions
No data available

10.4 Conditions to avoid
No data available

10.5 Incompatible materials
Metals

10.6 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Hydrogen chloride gas
Other decomposition products - No data available

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
Acute toxicity
No data available
Inhalation: No data available

Skin corrosion/irritation
slight irritation

Serious eye damage/eye irritation
slight irritation

Respiratory or skin sensitisation
No data available

Germ cell mutagenicity
No data available

Carcinogenicity
IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Hydrochloric acid)
Reproductive toxicity
No data available

Specific target organ toxicity - single exposure
The substance or mixture is not classified as specific target organ toxicant, single exposure

Specific target organ toxicity - repeated exposure
The substance or mixture is not classified as specific target organ toxicant, repeated exposure

Aspiration hazard
No data available

Additional Information
RTECS: Not available
Ingestion of large amounts may cause:
Local irritation

12. ECOLOGICAL INFORMATION

12.1 Toxicity
No data available

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

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

12.6 Other adverse effects
May be harmful to aquatic organisms due to the shift of the pH.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN number
ADR/RID: 1789 IMDG: 1789 IATA: 1789

14.2 UN proper shipping name
ADR/RID: HYDROCHLORIC ACID
IMDG: HYDROCHLORIC ACID
IATA: Hydrochloric acid
14.3 Transport hazard class(es)
ADR/RID: 8  IMDG: 8  IATA: 8

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

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

14.6 Special precautions for user
No data available

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment
For this product a chemical safety assessment was not carried out

16. OTHER INFORMATION

Full text of H-Statements referred to under section 3.
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

2. HAZARDS IDENTIFICATION

Name: Reagents identified above as containing 0.1% ProClin 950

Classification of the substance or mixture:
Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]
H317: May cause an allergic skin reaction.

Label elements

Pictogram

Signal word: Warning

Hazard statement(s)  H317: May cause an allergic skin reaction

Precautionary statement(s)  P261 - Avoid breathing dust/fume/gas/mist/vapours/spray
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  
P363 - Wash contaminated clothing before reuse  
P501 - Dispose of contents/container to clinical waste  

3. COMPOSITION/INFORMATION ON INGREDIENTS  

Mixtures  
Hazardous ingredients according to Regulation (EC) No 1272/2008  

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proclin 950 (2-Methyl-4-isothiazolin-3-one)</td>
<td>Acute Tox. 4; Acute Tox. 3; Skin Corr. 1B; Skin Sens. 1; STOT SE 3; Aquatic Acute 1; H302, H314, H317, H331, H335, H400</td>
<td>0.1 %</td>
</tr>
<tr>
<td>2-Methyl-4-isothiazolin-3-one</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAS-No. 2682-20-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC-No. 220-239-6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES  

4.1 Description of first aid measures  

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

If inhaled  
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.  

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

In case of eye contact  
Flush eyes with water as a precaution.  

If swallowed  
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.  

4.2 Most important symptoms and effects, both acute and delayed  
The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11  

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

5. FIREFIGHTING MEASURES  

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

5.2 Special hazards arising from the substance or mixture  
Carbon oxides, nitrogen oxides (NOx), Sulphur oxides  

5.3 Advice for firefighters  
Wear self-contained breathing apparatus for firefighting if necessary.  

5.4 Further information  
No data available
6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. Avoid breathing vapours, mist or gas. For personal protection see section 8.

6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters
Components with workplace control parameters
Contains no substances with occupational exposure limit values

8.2 Exposure controls
Appropriate engineering controls
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment
Eye/face protection
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection
Lab coat to protect exposed skin
Respiratory protection
Not required

Control of environmental exposure
Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties
   a) Appearance    Form: liquid
                    Colour: colourless
   b) Odour        Mild
   c) Odour Threshold No data available
   d) pH           3.0 – 6.0
   e) Melting point/freezing point
                   -20°C -15°C
   f) Initial boiling point and boiling range
                   100°C
   g) Flash point
                   Not applicable
   h) Evaporation rate
                   No data available
   i) Flammability (solid, gas)
                   No data available
   j) Upper/lower flammability or explosive limits
                   No data available
   k) Vapour pressure 22.66 hPa at 20 °C
   l) Vapour density No data available
   m) Relative density 1.020 g/cm3 at 25 °C
   n) Water solubility completely soluble
   o) Partition coefficient: n-octanol/water
                   No data available
   p) Auto-ignition
                   does not ignite
   q) Decomposition temperature
                   No data available
   r) Viscosity
                   No data available
   s) Explosive properties
                   Not explosive
   t) Oxidizing properties
                   No data available

9.2 Other safety information
No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity
No data available

10.2 Chemical stability
Stable under recommended storage conditions

10.3 Possibility of hazardous reactions
No data available

10.4 Conditions to avoid
No data available

10.5 Incompatible materials
Strong oxidizing agents, Amines, Mercaptans, Reducing agents
10.6 Hazardous decomposition products
Other decomposition products - no data available
In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity
No data available

Inhalation: No data available

Skin corrosion/irritation
No data available

Serious eye damage/eye irritation
No data available

Respiratory or skin sensitisation
No data available

Germ cell mutagenicity
No data available

Carcinogenicity
No data available

Reproductive toxicity
No data available

Specific target organ toxicity - single exposure
The substance or mixture is not classified as specific target organ toxicant, single exposure

Specific target organ toxicity - repeated exposure
The substance or mixture is not classified as specific target organ toxicant, repeated exposure

Aspiration hazard
No data available

Additional Information
RTECS: Not available
Ingestion of large amounts may cause:, Local irritation

12. ECOLOGICAL INFORMATION

12.1 Toxicity
No data available

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available
12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects
May be harmful to aquatic organisms

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN number
No hazard

14.2 UN proper shipping name
None

14.3 Transport hazard class(es)
No transport restrictions

14.4 Packaging group
Not applicable

14.5 Environmental hazards
Not applicable

14.6 Special precautions for user
No data available

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment
For this product a chemical safety assessment was not carried out

16. OTHER INFORMATION

None

Further information

Last update: 18 January 2018
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.