Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name: Multiplex PCR 5 X Master Mix

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

Relevant identified use(s): This product is for research and development only

1.3 Details of the supplier of the safety data sheet

Manufacturer: NanoString Technologies
530 Fairview Avenue North
Seattle, WA 98109
United States
www.nanostring.com
safetycommittee@nanostring.com
Telephone (General): 206.378.NANO (6266)

1.4 Emergency telephone number

Manufacturer: 206.378.NANO (6266)

Section 2: Hazards Identification

EU/EEC

2.1 Classification of the substance or mixture

CLP: Not classified

2.2 Label Elements

Hazard statements: No label element(s) required

2.3 Other Hazards

CLP: According to Regulation (EC) No. 1272/2008 (CLP) this material is not considered hazardous.

UN GHS Revision 4
According to: UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS): Fourth Revised Edition

2.1 Classification of the substance or mixture
UN GHS

2.2 Label elements

UN GHS

Hazard statements • No label element(s) required

Precautionary statements

2.3 Other hazards

UN GHS • According to the Globally Harmonized System for Classification and Labeling (GHS) this product is not considered hazardous

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS 2012 • Not classified

2.2 Label elements

OSHA HCS 2012

Hazard statements • No label element(s) required

2.3 Other hazards

OSHA HCS 2012 • This product is not considered hazardous under the U.S. OSHA 29 CFR 1910.1200 Hazard Communication Standard.

Canada

According to: WHMIS 2015

2.1 Classification of the substance or mixture

WHMIS 2015 • Not classified

2.2 Label elements

WHMIS 2015

Hazard statements • No label element(s) required

Precautionary statements

2.3 Other hazards

WHMIS 2015 • In Canada, the product mentioned above is not considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

Section 3 - Composition/Information on Ingredients

3.1 Substances

• Material does not meet the criteria of a substance.

3.2 Mixtures

• The product contains no substances which at their given concentration, are considered to be hazardous to health.
Section 4 - First Aid Measures

4.1 Description of first aid measures
Inhalation
• Remove to fresh air.

Skin
• Wash skin with soap and water.

Eye
• Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Ingestion
• Clean mouth with water and drink afterwards plenty of water.

4.2 Most important symptoms and effects, both acute and delayed
• Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed
Notes to Physician
• All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5 - Firefighting Measures

5.1 Extinguishing media
Suitable Extinguishing Media
• In case of fire use media as appropriate for surrounding fire.

Unsuitable Extinguishing Media
• CAUTION: Use of water spray when fighting fire may be inefficient.

5.2 Special hazards arising from the substance or mixture
Unusual Fire and Explosion Hazards
• Some may burn but none ignite readily.

Hazardous Combustion Products
• No data available.

5.3 Advice for firefighters
• Move containers from fire area if you can do it without risk. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters’ protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible. Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures
Personal Precautions
• Ensure adequate ventilation, especially in confined areas. Do not walk through spilled material. Wear appropriate protective clothing.

Emergency Procedures
• Keep unauthorized personnel away. Stay upwind.

6.2 Environmental precautions
• Avoid run off to waterways and sewers.

6.3 Methods and material for containment and cleaning up
Containment/Clean-up Measures
• Stop leak if you can do it without risk. SMALL LIQUID SPILLS: Take up with sand, earth or other non-combustible absorbent material. LARGE SPILLS: Dike far ahead of liquid spill for later disposal.
Pick up and transfer to properly labeled containers. This material and its container must be disposed of as hazardous waste.

### 6.4 Reference to other sections
- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

### Section 7 - Handling and Storage

#### 7.1 Precautions for safe handling
**Handling**
- Use good safety and industrial hygiene practices.

#### 7.2 Conditions for safe storage, including any incompatibilities
**Storage**
- Keep only in the original container.

#### 7.3 Specific end use(s)
- Refer to Section 1.2 - Relevant identified uses.

### Section 8 - Exposure Controls/Personal Protection

#### 8.1 Control parameters

<table>
<thead>
<tr>
<th>Result</th>
<th>Ammonium chloride (12125-02-9)</th>
<th>Glycerine (56-81-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>STELs</td>
<td>20 mg/m^3 STEL (fume)</td>
<td>Not established</td>
</tr>
<tr>
<td>TWAs</td>
<td>10 mg/m^3 TWA (fume)</td>
<td>10 mg/m^3 TWA [VME] (fume)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 8.2 Exposure controls

#### Engineering Measures/Controls
- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

#### Personal Protective Equipment

- **Respiratory**
  - In case of insufficient ventilation, wear suitable respiratory equipment.
- **Eye/face**
  - Wear face shield and eye protection.
- **Skin/Body**
  - Wear long sleeves and/or protective coveralls. Wear appropriate gloves.

#### Environmental Exposure Controls
- Follow best practice for site management and disposal of waste. Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

### Section 9 - Physical and Chemical Properties

#### 9.1 Information on Basic Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Material Description</th>
<th>Physical Form</th>
<th>Appearance/Description</th>
<th>Color</th>
<th>Odor</th>
<th>MILD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Form</td>
<td>Liquid</td>
<td>Colorless liquid with mild odor.</td>
<td>Colorless</td>
<td>Odor</td>
<td>Mild</td>
</tr>
</tbody>
</table>
### General Properties

<table>
<thead>
<tr>
<th>Property</th>
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<th>Data lacking</th>
<th>Data lacking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>Data lacking</td>
<td>Melting Point/Freezing Point</td>
<td>Data lacking</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Data lacking</td>
<td>pH</td>
<td>8.3</td>
</tr>
<tr>
<td>Specific Gravity/Relative Density</td>
<td>Data lacking</td>
<td>Water Solubility</td>
<td>Data lacking</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Data lacking</td>
<td>Explosive Properties</td>
<td>Data lacking</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Data lacking</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Volatility

<table>
<thead>
<tr>
<th>Property</th>
<th>Data lacking</th>
<th>Data lacking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapor Pressure</td>
<td>Data lacking</td>
<td>Vapor Density</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Data lacking</td>
<td></td>
</tr>
</tbody>
</table>

### Flammability

<table>
<thead>
<tr>
<th>Property</th>
<th>Data lacking</th>
<th>Data lacking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>Data lacking</td>
<td>UEL</td>
</tr>
<tr>
<td>LEL</td>
<td>Data lacking</td>
<td>Autoignition</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Data lacking</td>
<td></td>
</tr>
</tbody>
</table>

### Environmental

<table>
<thead>
<tr>
<th>Property</th>
<th>Data lacking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octanol/Water Partition coefficient</td>
<td>Data lacking</td>
</tr>
</tbody>
</table>

### 9.2 Other Information

- No additional physical and chemical parameters noted.

### Section 10: Stability and Reactivity

#### 10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

#### 10.2 Chemical stability

- Stable under normal temperatures and pressures.

#### 10.3 Possibility of hazardous reactions

- Can react briskly with oxidizers - danger of explosion.

#### 10.4 Conditions to avoid


#### 10.5 Incompatible materials

- Strong oxidizing agents.

#### 10.6 Hazardous decomposition products

- Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon monoxide. Carbon dioxide (CO2)

### Section 11 - Toxicological Information

#### 11.1 Information on toxicological effects

<table>
<thead>
<tr>
<th>GHS Properties</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>EU/CLP • Data lacking</td>
</tr>
<tr>
<td></td>
<td>UN GHS 4 • Data lacking</td>
</tr>
<tr>
<td></td>
<td>OSHA HCS 2012 • Data lacking</td>
</tr>
<tr>
<td></td>
<td>WHMIS 2015 • Data lacking</td>
</tr>
<tr>
<td></td>
<td>EU/CLP • Data lacking</td>
</tr>
</tbody>
</table>
## Potential Health Effects

### Inhalation

**Acute (Immediate)**
- Avoid breathing vapors or mists. May cause irritation of respiratory tract.

**Chronic (Delayed)**
- No data available

### Skin

**Acute (Immediate)**
- No data available

**Chronic (Delayed)**
- Prolonged contact may cause redness and irritation. Repeated exposure may cause skin dryness or cracking.

### Eye
Acute (Immediate)  • Redness. May cause slight irritation.
Chronic (Delayed)  • No data available

Ingestion
Acute (Immediate)  • May cause drowsiness or dizziness. Ingestion causes burns of the upper digestive and respiratory tracts. Symptoms include burning sensation, coughing, wheezing, shortness of breath, headache, nausea, and vomiting.
Chronic (Delayed)  • No data available

Section 12 - Ecological Information

12.1 Toxicity
   • 0.46518% of the mixture consists of component(s) of unknown hazards to the aquatic environment.

12.2 Persistence and degradability
   • Material data lacking.

12.3 Bioaccumulative potential
   • Material data lacking.

12.4 Mobility in Soil
   • Material data lacking.

12.5 Results of PBT and vPvB assessment
   • No PBT and vPvB assessment has been conducted.

12.6 Other adverse effects
   • No studies have been found.

Section 13 - Disposal Considerations

13.1 Waste treatment methods
Product waste  • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
Packaging waste  • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

<table>
<thead>
<tr>
<th></th>
<th>14.1 UN number</th>
<th>14.2 UN proper shipping name</th>
<th>14.3 Transport hazard class(es)</th>
<th>14.4 Packing group</th>
<th>14.5 Environmental hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td>Not Applicable</td>
<td>Not Regulated</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>NDA</td>
</tr>
<tr>
<td>TDG</td>
<td>Not Applicable</td>
<td>Not Regulated</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>NDA</td>
</tr>
<tr>
<td>IMO/IMDG</td>
<td>Not Applicable</td>
<td>Not Regulated</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>NDA</td>
</tr>
<tr>
<td>IATA/ICAO</td>
<td>Not Applicable</td>
<td>Not Regulated</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>NDA</td>
</tr>
</tbody>
</table>

14.6 Special precautions for user
   • None specified.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
   • Data lacking.
Section 15 - Regulatory Information

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

SARA Hazard Classifications • None

15.2 Chemical Safety Assessment

• No Chemical Safety Assessment has been carried out.

Section 16 - Other Information

Revision Date • 20/June/2017
Preparation Date • 20/June/2017
Disclaimer/Statement of Liability • The information herein is given in good faith but no warranty, expressed or implied, is made.