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

Product code       ICPE-050, ICPE-200, TENI-050, TENI-200, TPCR-050, TPCR-200
Product name       IndelCheck™ CRISPR/TALEN insertion or deletion detection system

Contact manufacturer

GeneCopoeia Inc.
9620 Medical Center Drive, Suite 101       Phone: 301-762-0888
Rockville, MD 20850       Toll free: 1-866-360-9531
USA       Fax: 301-762-3888

For research use only. Not intended for human or animal diagnostic or therapeutic uses

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous/Non-hazardous Components

<table>
<thead>
<tr>
<th>CAS. No.</th>
<th>Ingredient</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-68-5</td>
<td>Dimethyl sulfoxide</td>
</tr>
<tr>
<td>7783-20-2</td>
<td>(NH₄)₂SO₄ (ammonium sulfate)</td>
</tr>
<tr>
<td>9002-93-1</td>
<td>Triton-X100</td>
</tr>
</tbody>
</table>
Emergency Overview
The toxicological properties of these chemicals at their given concentrations have not been investigated. The materials and mixtures may present unknown hazards and should be used by workers technically qualified to handle potentially hazardous chemicals.

Form
Liquid

Principle Routes of Exposure/

Potential Health effects

<table>
<thead>
<tr>
<th>Eyes</th>
<th>May cause eye irritation with susceptible persons.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin</td>
<td>May cause skin irritation in susceptible persons.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>May be harmful by inhalation.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>May be harmful if swallowed.</td>
</tr>
</tbody>
</table>

Specific effects

<table>
<thead>
<tr>
<th>Carcinogenic effects</th>
<th>No information available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mutagenic effects</td>
<td>No information available</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>No information available</td>
</tr>
<tr>
<td>Sensitization</td>
<td>No information available</td>
</tr>
</tbody>
</table>

Target Organ Effects
No known effects under normal use conditions

**HMIS**

<table>
<thead>
<tr>
<th></th>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Skin contact
Wash off immediately with plenty of water. If symptoms arise, call a physician.

Eye contact
Rinse thoroughly with plenty of water, also under the eyelids. Remove contact lenses, if present and easy to do. If symptoms arise, call a physician.

Ingestion
Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Do not induce vomiting without medical advice.

Inhalation
Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.

Notes to physician
Treat symptomatically.
5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Dry chemical.

Special protective equipment for firefighters
Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Use personal protective equipment

Methods for cleaning up
Soak up with inert absorbent material

7. HANDLING AND STORAGE

Handling
Always wear recommended Personal Protective Equipment. No special handling advice required

Storage
Keep in properly labeled containers in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls
We are not aware of any national exposure limit.

Exposure limits

Engineering measures
Ensure adequate ventilation, especially in confined areas

Personal protective equipment

Respiratory protection
In case of insufficient ventilation wear suitable respiratory equipment

Hand protection
Protective gloves

Eye protection
Safety glasses with side-shields.

Skin and body protection
Lightweight protective clothing

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice

Environmental exposure control
Prevent product from entering drains
9. PHYSICAL AND CHEMICAL PROPERTIES

General Information

Form

Liquid

Important Health Safety and Environmental Information

Boiling point/range

°C No data available
°F No data available

Melting point/range

°C No data available
°F No data available

Flash point

°C No data available
°F No data available

Autoignition temperature

°C No data available
°F No data available

Oxidizing properties

No information available

Water solubility

Soluble

10. STABILITY AND REACTIVITY

Stability

Stable under normal conditions.

Materials to avoid

No dangerous reaction known under conditions of normal use.

Hazardous decomposition products

None under normal use.

Polymerization Hazardous

Hazardous polymerisation does not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Principle Routes of Exposure/
Potential Health effects

Eyes

May cause eye irritation with susceptible persons.

Skin

May cause skin irritation in susceptible persons.

Inhalation

May be harmful by inhalation.

Ingestion

May be harmful if swallowed.

Specific effects

Carcinogenic effects

No information available

Mutagenic effects

No information available

Reproductive toxicity

No information available

Sensitization

No information available

Target Organ Effects

No known effects under normal use conditions.
### 12. ECOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecotoxicity effects</td>
<td>No information available</td>
</tr>
<tr>
<td>Mobility</td>
<td>No information available</td>
</tr>
<tr>
<td>Biodegradation</td>
<td>Inherently biodegradable</td>
</tr>
<tr>
<td>Bioaccumulation</td>
<td>Does not bioaccumulate</td>
</tr>
</tbody>
</table>

### 13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations

### 14. TRANSPORT INFORMATION

**IATA**

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper shipping name</td>
<td>Not classified as dangerous in the meaning of transport regulations</td>
</tr>
<tr>
<td>Hazard Class</td>
<td>No information available</td>
</tr>
<tr>
<td>Subsidiary Class</td>
<td>No information available</td>
</tr>
<tr>
<td>Packing group</td>
<td>No information available</td>
</tr>
<tr>
<td>UN-No</td>
<td>No information available</td>
</tr>
</tbody>
</table>

### 15. REGULATORY INFORMATION

**International Inventories**

**U.S. Federal Regulations**

**SARA 313**

Not regulated

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product contains the following HAPs:

**U.S. State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals:

**WHMIS hazard class:**

Non-controlled

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR
16. OTHER INFORMATION

This material is sold for research and development purposes only. It is not for any human or animal therapeutic or clinical diagnostic use. It is not intended for food, drug, household, agricultural, or cosmetic use. An individual technically qualified to handle potentially hazardous chemicals must supervise the use of this material.

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may be present unknown hazards and should be used with caution. Since Invitrogen Corporation cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS MSDS DOES NOT CONSTITUTE A WARRANTY, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

End of Safety Data Sheet