### 1 - Identification of substance and manufacturer

<table>
<thead>
<tr>
<th>Axon catalogue ID</th>
<th>CAS number</th>
<th>Manufacturer's name</th>
<th>Emergency Telephone number</th>
</tr>
</thead>
<tbody>
<tr>
<td>RIPA-56</td>
<td>1956370-21-0</td>
<td>Axon Medchem BV</td>
<td>+31 (0)50 311 8007</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product name</th>
<th>Batch no.</th>
<th>Ripa-PtA-56</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-benzyl-N-hydroxy-2,2-dimethylbutanamide</td>
<td>1</td>
<td>Rip1 inhibitor</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IUPAC name</th>
<th>Street address</th>
<th>Postal Code</th>
<th>City</th>
<th>Manufacturer's email address</th>
</tr>
</thead>
<tbody>
<tr>
<td>RIPA-56</td>
<td>Biotech Center UMC, Hanzeplein 1</td>
<td>9713 GZ</td>
<td>Groningen</td>
<td><a href="mailto:info@axonmedchem.com">info@axonmedchem.com</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Province</th>
<th>Country of origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groningen</td>
<td>The Netherlands</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Street address</th>
<th>Manufacturer's fax number</th>
<th>Manufacturer's website</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>+31 (0)50 3600390</td>
<td><a href="http://www.axonmedchem.com">http://www.axonmedchem.com</a></td>
</tr>
</tbody>
</table>

### 2 - Hazards identification

#### Route of entry
- Eye contact, Inhalation, Digestion

#### Symptoms of Exposure
- No data available

#### GHS Pictogram
- May be harmful by inhalation, ingestion or eye and/or skin absorption. May cause irritation to eye, mucous membranes, upper respiratory system, and/or skin. The toxicological properties of this compound have not been fully tested. For research purposes only.

### 3 - Information on ingredients

<table>
<thead>
<tr>
<th>Hazardous ingredient</th>
<th>CAS number</th>
<th>Concentration</th>
<th>LD-50 of ingredient</th>
</tr>
</thead>
<tbody>
<tr>
<td>RIPA-56</td>
<td>1956370-21-0</td>
<td>98.6%</td>
<td>No data available</td>
</tr>
</tbody>
</table>

### 4 - First Aid Measures

#### Skin contact
- Wash with copious amounts of water for at least 15 minutes. Remove contaminated clothing.
- Eye contact: Rinse with copious amounts of water for at least 15 minutes as a precaution.

#### Inhalation
- Monitor breathing. If breathing becomes difficult administer oxygen. If breathing stops give artificial respiration.

#### Ingestion
- Rinse mouth out with copious amounts of water, contact a physician.

### 5 - Fire Fighting Measures

#### Fire fighting instructions
- Use extinguishing media appropriate to the surrounding fire conditions. Wear protective clothing to prevent contact with skin, eyes, and respiratory system.
- Flammable
- Flashpoint (°C): No data available

#### Hazardous combustion products
- May emit toxic gasses like carbon monoxide (CO), carbon dioxide (CO2), hydrochloric acid (HCl), nitrogen oxide upon thermal decomposition.

### 6 - Accidental Release Measures

#### Leak and spill procedures
- Wear appropriate protective clothing. Vacuum or sweep up dry material and dispose in an appropriate container as described under Disposal Conditions. Avoid raising dust. Absorb solutions with finely-powdered liquid-binding material. After removal, ventilate and decontaminate surfaces and equipment with alcohol. Dispose of contaminated materials according to section 13.

#### Handling and Storage

- Wear appropriate protective clothing. Vacuum or sweep up dry material and dispose in an appropriate container as described under Disposal Conditions. Avoid raising dust. Absorb solutions with finely-powdered liquid-binding material. After removal, ventilate and decontaminate surfaces and equipment with alcohol. Dispose of contaminated materials according to section 13.

#### Storage requirements
- Store in a properly sealed container under the storage conditions indicated on the label.

### 7 - Handling and Storage

#### Handing procedures and equipment
- Avoid inhalation, contact with eyes, skin and clothing. Wear appropriate protective clothing. Avoid repeated and/or prolonged exposure. Use in a chemical fume hood, with an independent air supply.

#### Storage requirements
- Store in a properly sealed container under the storage conditions indicated on the label.

### 8 - Exposure Control / Personal Protection

#### Protection of hands/skin
- Chemical resistant gloves and lab coat

#### Protection of eyes
- Appropriate safety glasses

#### Protection of respiratory system
- Handle in fume hood. Prevent inhalation

### 9 - Physical and chemical properties

#### Batch molecular formula
- C13H19NO2

#### Appearance
- White solid

#### Melting point
- 87 - 89 °C

#### Chemical purity
- 98.6%

#### Optical purity (ee)
- N.A.

#### Flashpoint (°C)
- No data available

### 10 - Stability and reactivity

#### Stability
- Stable under normal handling conditions.

#### Reactivity
- May emit toxic gasses like carbon monoxide (CO), carbon dioxide (CO2), hydrochloric acid (HCl), nitrogen oxide upon thermal decomposition.

#### Conditions and materials to avoid
- Protect from light and heat. Avoid strong oxidizing agents.

### 11 - Toxicological information

#### Toxicity
- No data available

#### Carcinogenicity
- No data available

#### Mutagenicity
- No data available

#### Teratogenicity
- No data available

### 12 - Ecological information

#### Treat as potentially toxic. Runoff from fire control or dilution with water may cause pollution.

### 13 - Disposal considerations

#### Treat as potentially toxic. Dispose in accordance with local, state, and federal regulations.

### 14 - Transport Information

#### (US) DOT shipping name
- No data available

#### IATA class
- No data available

#### Applicable HS class
- 2942.00.0000

#### Transportation (Land/Sea/Air)
- Non-hazardous

### 15 - Regulatory Information

#### Hazardous ingredient
- RIPA-56

#### CAS number
- 1956370-21-0

#### European risk and safety phrases
- R48: Danger of serious damage to health by prolonged exposure.
- S22 - Do not breathe dust.
- S24/S25 - Avoid any inhalation, contact with skin and eyes.
- S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

#### US EPA SARA Title III
- Sec.302 (EHS) - No

#### US EPA CAA, CWA, TSCA
- EPA CAA - No
- EPA CWA NPDES - No
- EPA TSCA - No
- CA PROP 65 - No

CAUTION: SUBSTANCE NOT FULLY TESTED