SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Product form: Mixture
Substance name: SOLUS ONE LISTERIA (LIS1-0096 & LIS1-0480)
Product group: Blend

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

1.2.1. Relevant identified uses
Main use category: Laboratory use, Industrial use, Professional use
Industrial/Professional use spec: For professional use only
Use of the substance/mixture: For analytical purposes
Scientific research and development
Not for human consumption or veterinary purposes.

1.2.2. Uses advised against
No additional information available

1.3. Details of the supplier of the safety data sheet
Supplier
Solus Scientific Solutions
Unit 9, Mansfield Network Centre
Millenium Business Park, Concorde Way
NG19 7JJ Mansfield
T +44 (0) 1623 429701
solus.info@perkinelmer.com

1.4. Emergency telephone number
Emergency number: +44 (0) 1623 429701

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP]
Not classified

Adverse physicochemical, human health and environmental effects
No additional information available

2.2. Label elements
Not classified.

2.3. Other hazards
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
SOLUS ONE LISTERIA (LIS1-0096 & LIS1-0480)
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SECTION 3: Composition/information on ingredients

3.1. Substances

Comments

<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>
<tbody>
<tr>
<td>SOLUS ONE LISTERIA (LIS1-0096 &amp; LIS1-0480)</td>
<td>100</td>
<td>Not classified</td>
<td></td>
</tr>
</tbody>
</table>

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general

If possible show this sheet, if not available show packaging or label. Never give anything by mouth to an unconscious person. Do not leave affected person unattended.

First-aid measures after inhalation

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration if necessary. If breathing difficulties persist: Get medical advice/attention.

First-aid measures after skin contact

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Do not remove clothing if it sticks to the skin. If irritation persists, consult a doctor.

First-aid measures after eye contact

Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion

Rinse mouth out with water. Do not induce vomiting. Get medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects

Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/effects after inhalation

Vapour/ mist from product, if present, may cause irritation after an excessive inhalation exposure.

Symptoms/effects after skin contact

Vapour may cause irritation to skin after excessive exposure.

Symptoms/effects after eye contact

May cause eye irritation. Redness, itching, tears.

Symptoms/effects after ingestion

May cause irritation to the digestive tract. Abdominal pain, nausea.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.
SECTION 5: Firefighting measures

5.1. Extinguishing media
Unsuitable extinguishing media: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture
Hazardous decomposition products in case of fire: Toxic fumes.

5.3. Advice for firefighters
Precautionary measures fire: Keep container tightly closed and away from heat, sparks and flame. Keep away from combustible materials.
Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.
Other information: Warn all persons of toxic hazard.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
General measures: Isolate from fire, if possible, without unnecessary risk. Do not breathe gas, fumes, vapour or spray. No flames, no sparks. Eliminate all sources of ignition.

6.1.1. For non-emergency personnel
Protective equipment: Wear recommended personal protective equipment.
Emergency procedures: Evacuate unnecessary personnel. Mark out the contaminated area with signs and prevent access to unauthorized personnel. Do not touch or walk on the spilled product. Avoid contact with skin, eyes and clothing.
Measures in case of dust release: Shelter from vapours by keeping upwind. Ventilate the area thoroughly, especially low lying areas (basements, workpits etc).

6.1.2. For emergency responders
Protective equipment: Equip cleanup crew with proper protection. Use self-contained breathing apparatus and chemically protective clothing.
Emergency procedures: Ventilate area.

6.2. Environmental precautions
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up
For containment: Collect spillage. Contain the spilled material by bunding.
Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Try to stop release if without risk.

6.4. Reference to other sections
See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Avoid formation of vapours. Provide local exhaust or general room ventilation.
Hygiene measures: Take off immediately all contaminated clothing and wash it before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities
Technical conditions: Ensure adequate ventilation, especially in confined areas.
Storage conditions: Keep only in the original container in a cool, well ventilated place away from: Heat sources, Direct sunlight. Keep container closed when not in use.
Incompatible products: Strong oxidizing agents.
Incompatible materials: Sources of ignition. Direct sunlight. Heat sources.
Heat and ignition sources: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

7.3. Specific end use(s)
For analytical purposes. Scientific research and development. Not for human consumption or veterinary purposes.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
No additional information available

8.2. Exposure controls
Appropriate engineering controls:
Handle in accordance with good industrial hygiene and safety procedures. Floors should be impervious, resistant to liquids and easy to clean.
SOLUS ONE LISTERIA (LIS1-0096 & LIS1-0480)
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Personal protective equipment:
Avoid all unnecessary exposure.

Materials for protective clothing:
Wear suitable protective clothing, gloves and eye/face protection.

Hand protection:
The protective gloves to be used must comply with the specifications of the regulation 2016/425 and the resultant standard EN 374

<table>
<thead>
<tr>
<th>Type</th>
<th>Material</th>
<th>Permeation</th>
<th>Thickness (mm)</th>
<th>Penetration</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disposable gloves</td>
<td>Nitrile rubber (NBR)</td>
<td>6 (&gt; 480 minutes)</td>
<td>0.11</td>
<td></td>
<td>EN 374</td>
</tr>
</tbody>
</table>

Eye protection:
Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Use eye protection according to EN 166, designed to protect against liquid splashes.

<table>
<thead>
<tr>
<th>Type</th>
<th>Use</th>
<th>Characteristics</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety glasses</td>
<td>Droplet, vapours</td>
<td>With side shields</td>
<td>EN 166</td>
</tr>
</tbody>
</table>

Skin and body protection:
Emergency safety showers should be available in the immediate vicinity of any potential exposure. Keep suitable chemically resistant protective clothing readily available for emergency use.

<table>
<thead>
<tr>
<th>Type</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long sleeved protective clothing</td>
<td>EN 14605</td>
</tr>
</tbody>
</table>

Respiratory protection:
No respiratory protection needed under normal use conditions. [In case of inadequate ventilation] wear respiratory protection.

<table>
<thead>
<tr>
<th>Device</th>
<th>Filter type</th>
<th>Condition</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air-Purifying Respirator (APR),</td>
<td>ABEK</td>
<td>Moist condition, Mist formation, Protection</td>
<td>EN 14387</td>
</tr>
<tr>
<td>reusable</td>
<td></td>
<td>for Liquid particles, Vapour protection</td>
<td></td>
</tr>
</tbody>
</table>

Other information:
Do not eat, drink or smoke during use.

SECTION 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>Physical state</td>
<td>No data available</td>
</tr>
<tr>
<td>Colour</td>
<td>No data available</td>
</tr>
<tr>
<td>Odour</td>
<td>No data available.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available.</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available.</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available.</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available.</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available.</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available.</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Non flammable.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available.</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available.</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available.</td>
</tr>
<tr>
<td>Solubility</td>
<td>No data available.</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available.</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available.</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available.</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available.</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No data available.</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available.</td>
</tr>
</tbody>
</table>
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9.2. Other information
No additional information available

SECTION 10: Stability and reactivity
10.1. Reactivity
The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability
Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid
Protect from sunlight. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials
Strong oxidizers.

10.6. Hazardous decomposition products
No hazardous decomposition products known at room temperature. Thermal decomposition generates: Toxic fumes.

SECTION 11: Toxicological information
11.1. Information on toxicological effects
Acute toxicity (oral): Not classified
Acute toxicity (dermal): Not classified
Acute toxicity (inhalation): Not classified
Skin corrosion/irritation: Not classified
Additional information: Based on available data, the classification criteria are not met
Serious eye damage/irritation: Not classified
Additional information: Based on available data, the classification criteria are not met
Respiratory or skin sensitisation: Not classified
Additional information: Based on available data, the classification criteria are not met
Germ cell mutagenicity: Not classified
Additional information: Based on available data, the classification criteria are not met
Carcinogenicity: Not classified
Additional information: Based on available data, the classification criteria are not met
Reproductive toxicity: Not classified
Additional information: Based on available data, the classification criteria are not met
STOT-single exposure: Not classified
Additional information: Based on available data, the classification criteria are not met
STOT-repeated exposure: Not classified
Additional information: Based on available data, the classification criteria are not met
Aspiration hazard: Not classified
Additional information: Based on available data, the classification criteria are not met
Potential adverse human health effects and symptoms: Based on available data, the classification criteria are not met.

SECTION 12: Ecological information
12.1. Toxicity
Hazardous to the aquatic environment, short-term (acute): Not classified
Hazardous to the aquatic environment, long-term (chronic): Not classified

12.2. Persistence and degradability
SOLUS ONE LISTERIA (LIS1-0480 & LIS1-0096)
Persistence and degradability: No data available.

12.3. Bioaccumulative potential
SOLUS ONE LISTERIA (LIS1-0480 & LIS1-0096)
Bioaccumulative potential: No data available.

12.4. Mobility in soil
No additional information available
SOLUS ONE LISTERIA (LIS1-0096 & LIS1-0480)

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12.5. Results of PBT and vPvB assessment

SOLUS ONE LISTERIA (LIS1-0480 & LIS1-0096)
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects
Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

<table>
<thead>
<tr>
<th>ADR</th>
<th>IMDG</th>
<th>IATA</th>
<th>ADN</th>
<th>RID</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1. UN number</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.2. UN proper shipping name</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.3. Transport hazard classes</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.4. Packing group</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.5. Environmental hazards</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

No supplementary information available

14.6. Special precautions for user
Overland transport
Not applicable
Transport by sea
Not applicable
Air transport
Not applicable
Inland waterway transport
Not applicable
Rail transport
Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations
No REACH Annex XVII restrictions
SOLUS ONE LISTERIA (LIS1-0480 & LIS1-0096) is not on the REACH Candidate List Directive 2012/18/EU (SEVESO III)

15.1.2. National regulations
No additional information available

15.2. Chemical safety assessment
No chemical safety assessment has been carried out for the substance or the mixture by the supplier
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SECTION 16: Other information


Other information: This SDS has been produced by Molekula Ltd.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

SDS EU (REACH Annex II)
This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.