1 IDENTIFICATION OF THE SUBSTANCE

- **Trade Name**: INFLATABLE LIFE JACKET
- **MSDS No**: CS 001
- **Chemical Formula**: Contains a small CO₂ cylinder to inflate the life jacket
- **Company Identification**: Survitec Service & Distribution Ltd
  Survitec House, Lederle Lane
  Gosport
  Hampshire
  PO13 0FZ
  England
- **Emergency Phone Numbers**: +44 (0) 1329 820000
  +44 (0) 7436 547852
  +43 664 384 1889 (for CO₂ cylinder emergency information)

2 HAZARDS IDENTIFICATION

- **Hazards Identification**: The inflatable life jacket contains a small cylinder of compressed Carbon Dioxide CO₂ gas that may vent from the cylinder or inflate the life jacket. The cylinder may explode if heated, or under fire conditions. CO₂ is non-toxic, non-flammable and heavier than air. In high concentrations may cause asphyxiation.
  Cylinders contain 33g, 38g or a maximum of 60g of CO₂ gas; Equivalent fill volumes of 34ml, 39ml or 64ml respectively

3 COMPOSITION / INFORMATION ON INGREDIENTS

Small CO₂ cylinder used for the inflation of the lifejacket. Contains no other components or impurities which will influence the classification of the product

<table>
<thead>
<tr>
<th>Substance / Preparation</th>
<th>Contents</th>
<th>CAS No</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Dioxide</td>
<td>&gt;99%</td>
<td>124-38-9</td>
<td>Non Toxic</td>
</tr>
</tbody>
</table>

4 FIRST AID MEASURES

The life saving appliance presents no hazards in general that require first aid measures. First Aid Measures for contact with the contents of the CO₂ cylinder detailed below:

- **Eyes**: Irrigate with water for several minutes and seek medical advice if symptoms persist
- **Skin**: May cause cold burns or frostbite in high concentrations. Irrigate the affected area with tepid water for 5 minutes. Apply a sterile dressing and treat as a thermal burn.
- **Inhalation**: Remove victim to uncontaminated area. In high concentrations may cause asphyxiation. Keep victim warm and rested. Seek medical advice. Apply artificial respiration if breathing stopped
- **Ingestion**: Do not induce vomiting, seek medical advice.
5 FIRE-FIGHTING MEASURES
Specific hazards: Exposure to fire may cause CO₂ container to rupture/explode.
Hazardous combustion products: May form harmful fumes under fire conditions; use air ventilated mask and protective clothing when fire fighting.
Extinguishing media: Carbon dioxide, water mist, dry chemical powder – or AFF
Personal protection: Move away from the cylinder and cool with water from a protected position. Use air ventilated breathing apparatus and protective clothing.

6 ACCIDENTAL RELEASE MEASURES
Lifejackets present no hazards in general that require safety measures. Safety Measures for the accidental release of the contents of the CO₂ cylinder used to inflate the jacket are detailed below. (For further information refer to the ISI MSDS for the CO₂ cylinder)

Personal precautions: In the event of CO₂ cylinder rupture, evacuate area. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe. Ensure adequate air ventilation.

Environmental precautions: Try to stop release.
Clean up methods: Ventilate area.

7 HANDLING AND STORAGE
The life jacket presents no hazards in general requiring safety measures during handling and storage.

Storage: Keep CO₂ container below 40°C in a well ventilated place.
Handling: Use only properly specified equipment which is suitable for this product, its supply pressure and temperature.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION
The life jacket presents no hazards in general requiring exposure control or PPE.

Personal protection: In the event of rupture of the CO₂ cylinder, ensure adequate ventilation; refer to sections 4 & 6 or the MSDS for the CO₂ cylinder

9 PHYSICAL AND CHEMICAL PROPERTIES
The physical and chemical properties detailed below refer to the CO₂ cylinder used to inflate the jacket.

Colour: The cylinder contains carbon dioxide, a colourless gas
Odour: No odour warning properties.
Molecular weight [g/mol]: 44.01
Density of gas 15°C, 1 bar: 1.8474 g/l
Critical temperature [°C]: 31.1°C

10 STABILITY AND REACTIVITY
Stability and reactivity: Stable under normal conditions but avoid intense heat and fire.

11 TOXICOLOGICAL INFORMATION
Toxicity information: No known toxicological effects from this product.
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**ECOLOGICAL INFORMATION**

<table>
<thead>
<tr>
<th>CO(_2) Cylinder (empty)</th>
<th>Lifejacket</th>
</tr>
</thead>
<tbody>
<tr>
<td>No known ecological damage caused by the product. On the CO(_2) cylinder there is a chromate layer which protects the zinc plating – never dump at sea.</td>
<td>Remove as domestic waste</td>
</tr>
</tbody>
</table>

**DISPOSAL CONSIDERATIONS**

<table>
<thead>
<tr>
<th>General</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not discharge the CO(_2) from the cylinder into any place where its accumulation could be dangerous. Do not dump at sea. Contact supplier if guidance is required.</td>
</tr>
</tbody>
</table>

**TRANSPORT INFORMATION**

The classification for **ADR, IATA, IMDG & RID** is the same:

<table>
<thead>
<tr>
<th>Class</th>
<th>UN/ID Number</th>
<th>Proper Shipping Name</th>
<th>Label</th>
<th>Further information</th>
</tr>
</thead>
</table>
| Class 9     | UN 2990      | LIFE-SAVING APPLIANCES, SELF- INFLATING | None | Refer to PI955 IATA 59th edition 2018  
Special Provision 296 of ADR 2017  
Special provision 956 of IMDG Code 36-12 |

Avoid transport on vehicles where the load space is not separated from the driver's compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident.

**REGULATORY INFORMATION**

<table>
<thead>
<tr>
<th>EC Classification</th>
<th>EC Labelling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not included in Annex I.</td>
<td>No EC labelling required.</td>
</tr>
</tbody>
</table>

**OTHER INFORMATION**

User must be familiar with this safety data sheet (SDS). The purpose of the SDS is to describe the product in terms of its health, safety and environmental requirements only. It should not be construed as guaranteeing any specific property of the product.

The data given here is based on current knowledge and experience. Whilst proper care has been taken in the preparation of this document, no liability for injury or damage resulting from its use can be accepted.

**Recommended uses and restrictions:** This SDS is for information purposes only and is subject to change without notice.