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

**Identification of the substance/preparation**

**Product Id:** 72379I  
**Product Name:** SURFADONE® LP-100  
**CAS Registry Number:** 2687-94-7  
**CAS Name:** 2-Pyrrolidinone, 1-octyl  
**EEC Name:** 1-Octyl-2-pyrrolidone  
**Formula:** C₁₂H₂₃NO  
**Molecular Weight:** 197.00  
**Responsible Party:** International Specialty Products  
1361 Alps Rd.  
Wayne, NJ 07470, U.S.A.  
Telephone: (973) 628-4000  
Distributed By: ISP (Great Britain) Co. Ltd.  
Waterfield, Tadworth  
Surrey KT20 5HQ, United Kingdom  
Tel: +44 161 998 1122  

**Synonyms:** Caprylyl pyrrolidone (INCI NAME)  
**Emergency Telephone Number:** +32.3.575.55.55 (SGS)  
**Prepared By:** Product Stewardship

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**2. COMPOSITION/INFORMATION ON INGREDIENTS**

<table>
<thead>
<tr>
<th>Components:</th>
<th>Weight %</th>
<th>EU Classification:</th>
<th>German MAK:</th>
<th>UK OES/MEL:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-OCTYL-2-PYRROLIDONE</td>
<td>99</td>
<td>N; R51/53</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
<tr>
<td>2687-94-7</td>
<td></td>
<td>C; R34</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**3. HAZARDS IDENTIFICATION**

**Indication of Danger:**  
C Corrosive.  
N Dangerous for the environment
Risk Phrases:  
R34 - Causes burns.  
R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Hazard Overview
Target Organs:  Skin / Eyes / Respiratory System / Gastrointestinal Tract
Primary Entry Routes:  Dermal - skin. Eyes. Inhalation.
Acute Health Hazards:  Corrosive. Causes eye burns. Causes permanent skin damage.
Chronic Health Hazards:  None known

Signs and Symptoms of Overexposure
Eye Contact:  Causes eye burns.
Skin Contact:  Causes permanent skin damage.
Ingestion:  Causes burns of the mouth, throat and stomach.
Inhalation:  Corrosive to respiratory passages.

4. FIRST AID MEASURES
Eye Contact:  In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.
Skin Contact:  In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention. Remove contaminated clothing and launder before reuse.
Ingestion:  Seek immediate medical attention. Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation:  If inhaled, remove to fresh air. If not breathing or if breathing is difficult, give artificial respiration or oxygen by trained personnel. Seek medical attention.

5. FIRE-FIGHTING MEASURES
Flash Point (°F):  235
Extinguishing Media:  All standard firefighting media
Unusual Fire/Explosion Hazards:  Unknown
Special Protective Equipment:  Fire fighters should wear full protective clothing, including self-contained breathing equipment.

6. ACCIDENTAL RELEASE MEASURES
Personal Precautionary Measures:  Use appropriate protective equipment.
Procedure for Cleaning/Absorption:  Contain spill with sand or other inert materials.

7. HANDLING AND STORAGE
Handling:  Do not get on skin or in eyes. Do not breathe material. Do not swallow material. Where splashing is possible, full chemically resistant protective clothing is required. Acid suit and boots are required. Wash thoroughly with soap and water after handling.
Storage: Keep containers tightly closed when not in use. Store in a cool, dry place, out of direct sunlight.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Use in a well ventilated area.

Respiratory Protection: Use in a well ventilated area. Wear a NIOSH approved respirator appropriate for airborne exposure at the point of use.

Hand Protection: All cleanable impervious glove types are acceptable.

Eye Protection: Chemical goggles; also wear a face shield if splashing hazard exists.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Color: Clear to hazy

pH: 7.0-10.0

Specific Gravity: 0.92 @25°C

Boiling Point (°F): 212 @ 0.3 mm Hg

Melting Point/Freezing Point(°F): -13

Vapor Pressure: <0.001 @20°C (est.)

Solubility: Slightly soluble in water

10. STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions of handling, use and transportation.

Hazardous Polymerization: Will not occur

Conditions to Avoid: Not determined.

Hazardous Decomposition Products: Oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION

Toxicity Test:

Acute Oral LD50 (mg/kg): 2,050 (rat)

Acute Dermal LD50 (mg/kg): >2,000 (rabbit)

Sensitization: Evidence of delayed contact hypersensitivity in 2/20 animals (Guinea pig Maximization Study)

Human RIPT: Non-sensitizing

Mutagenicity: Non-mutagenic (Ames assay).

Non-mutagenic (Mouse micronucleus)

Non-mutagenic (Mouse lymphoma)

Skin Irritation: Minimally irritating to rabbit skin (2% solution in water).

Extremely irritating to rabbit skin (as sold)

DOT Corrosive (as sold)

Eye Irritation: Non-irritating to rabbit eye with and without washout (2% aqueous suspension)

Extremely irritating to rabbit eye (as sold)
Other Information: 28 Day Subacute Oral Toxicity: (rat) NOEL= 55mg/kg/day.
90 Day Subchronic Oral Toxicity: 30, 90, 240 mg/kg/day no adverse effect level = 30 mg/kg/day
90 Day Rat Feeding Study: 60, 600 & 10,000 ppm. NOEL= 600 ppm
Comedogenicity: Expected to be non-Comedogenic (humans). Rabbit comedogenicity assay score = 0.67 on a scale of 0-5.
Photoallergy: Non-photoallergenic
Phototoxicity: Non-phototoxic.

12. ECOLOGICAL INFORMATION

Biodegradability: Modified Semi-Continuous Activated Sludge Test: Ultimately Biodegradable (99.4%)
Modified Sturm Test: Readily biodegradable Readily biodegradable (>80%)

Aquatic Toxicity: 96 hr. Static LC50 (Bluegill sunfish): 22.5 mg/L
48 hr. Static EC50 (Daphnia Magna): 19.1 mg/L
96 hr. Static EC50 (Selenatrum Capricornutum): 6.20 mg/L; 96 hr. NOEC: 3.26 mg/L
96 hr. Flow-through LC50= 17.8 mg/L (Rainbow Trout)
Bobwhite LD50:1,838 mg/kg (acute oral)
Bobwhite LC50: >5,620 ppm (dietary)

13. DISPOSAL CONSIDERATIONS

Disposal of Waste Method: Follow all applicable community, national or regional regulations regarding waste management methods.

14. TRANSPORT INFORMATION

Land Transportation:

DOT (Non-Bulk):
DOT Shipping Name: CORROSIVE LIQUID, N.O.S. (N-(n-octyl)-2-pyrrolidone)
UN/NA Number: 1760
Hazard Class: 8
Packing Group: III

DOT (Bulk):
DOT Shipping Name: CORROSIVE LIQUID, N.O.S. (N-(n-octyl)-2-pyrrolidone)
UN/NA Number: 1760
Hazard Class: 8
Packing Group: III

Air Transportation (IATA):
Proper Shipping Name: CORROSIVE LIQUID, N.O.S. (N-(n-octyl)-2-pyrrolidone)
UN Number: 1760
Hazard Classification: 8
Packing Group: III
Packaging Instructions IATA Cargo: (820) 60 litres
Packaging Instructions IATA Passenger: (Y-818) 1 litre (818) 5 litres
Sea Transportation (IMO):
Proper Shipping Name: CORROSIVE LIQUID, N.O.S. (N-(n-octyl)-2-pyrrolidone)
UN/ID Number: 1760
Hazard Classification: 8
Packing Group: III

ADR:
Proper Shipping Name: CORROSIVE LIQUID, N.O.S. (N-(n-octyl)-2-pyrrolidone)
UN: 1760
CLASS: 8
Packing group: III
HI No: 80
TREM Card Classification: 80GC9-II+III

15. REGULATORY INFORMATION

Classification:

Risk Phrases:
R34 - Causes burns.
R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:
S23 - Do not breathe fumes.
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
S61 - Avoid release to the environment.
Refer to special instructions/Safety data sheets.
S 36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

TSCA Inventory List: This product and/or its components is listed on TSCA.

California Proposition 65 Carcinogens & Reproductive Toxicity (CRT) List: None of the components of this product is listed on CALPROP.

Canada DSL Inventory List: This product and/or its components is listed on DSL.

Canada NDSL Inventory List: This product and/or its components is not listed on NDSL.

EU EINECS List: This product and/or its components is not listed on or is exempt from EINECS.

ELINCS: This product and/or its components is listed on ELINCS.

Germany VCI Assigned Classification into Water Endangering Classes (WGK) List: This product and/or its components is listed on or has been reviewed by WGK.
This product and/or its components is not listed on ENCS.

This product and/or its components is listed on AICS.

16. OTHER INFORMATION

Prepared By: Product Stewardship


Important Note: For purposes of this MSDS, International Specialty Products, as responsible party, provides the information herein which is intended for use by persons who have or should obtain professional knowledge and experience in the subjects discussed. ISP’s industrial products are used as materials in the production of products by industrial customers. ISP usually has only limited information about the products of its customers and their composition, methods of manufacture and use. Accordingly, ISP makes no warranty, express or implied, as to the accuracy, completeness or reliability of information herein except that such information is, to the best of ISP’s knowledge and belief, accurate as of the date indicated. ISP recommends that customers independently test and evaluate its products and their products and processes in which ISP products are used in order to decide their safety and effectiveness.

***END OF MSDS***