

# SAFETY DATA SHEET



Revision date: 26-Nov-2024

Revision Number 2.1

## Section 1: Identification

### Product identifier

**Product Name** Swell  
**Product Code(s)** 000000067000

### Other means of identification

### Recommended use of the chemical and restrictions on use

**Recommended use** Cleaning agent.  
**Uses advised against** No information available.

### Details of manufacturer or importer

#### Supplier

Liquimix Pty Ltd  
ABN: 32 062 887 585  
Street Address: 24 Rosa Place  
Richlands QLD 4077  
Australia

Telephone Number: +61 7 3277 6655

### Emergency telephone number

Emergency telephone number **1 800 033 111 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

## Section 2: Hazard identification

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).  
Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

### GHS Classification

Flammable liquids	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Reproductive toxicity	Category 1B
Specific target organ toxicity (single exposure)	Category 3

### Label elements

Exclamation mark  
Health hazard



**Signal word**  
DANGER

**Hazard statements**

H227 - Combustible liquid  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H335 - May cause respiratory irritation  
H360D - May damage the unborn child

**Precautionary Statements - Prevention**

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Avoid breathing dust/fume/gas/mist/vapors/spray.  
Use only outdoors or in a well-ventilated area.  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Wear protective gloves/clothing and eye/face protection.  
Wash face, hands and any exposed skin thoroughly after handling.

**Precautionary Statements - Response**

IF exposed or concerned:  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.  
IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.  
Take off contaminated clothing and wash before reuse.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.  
In case of fire: Use extinguishing media as outlined in Section 5 of this Safety Data Sheet to extinguish..

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed.  
Store locked up.

**Precautionary Statements - Disposal**

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable.

**Other hazards which do not result in classification**

### Section 3: Composition and information on ingredients

Chemical name	CAS No.	Weight-%
N-methyl-2-pyrrolidone	872-50-4	> 90%
Surfactant	-	< 5%

### Section 4: First aid measures

**Description of first aid measures**

**General advice**

For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

**Inhalation**

Move to fresh air in case of accidental inhalation of vapors. If breathing is difficult,

administer oxygen. Medical aid is necessary if symptoms appear to be an obvious consequence of inhalation. Unconscious persons should be moved to an uncontaminated area and, as necessary, given artificial resuscitation and supplemental oxygen. Seek immediate medical attention/advice.

<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately if symptoms occur.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Drink 1 or 2 glasses of water. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Get medical attention.

#### **Most important symptoms and effects, both acute and delayed**

<b>Symptoms</b>	No information available.
<b>Effects of Exposure</b>	No information available.

#### **Indication of any immediate medical attention and special treatment needed**

<b>Note to physicians</b>	Treat symptomatically.
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### **Section 5: Firefighting measures**

#### **Suitable Extinguishing Media**

<b>Suitable extinguishing media</b>	Dry chemical, CO2 or water spray.
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#### **Specific hazards arising from the chemical**

<b>Specific hazards arising from the chemical</b>	Combustible material. Vapors may travel to source of ignition and flash back.
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<b>Hazardous combustion products</b>	Carbon oxides. Nitrogen oxides.
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#### **Special protective actions for fire-fighters**

<b>Special protective equipment and precautions for fire-fighters</b>	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
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### **Section 6: Accidental release measures**

#### **Personal precautions, protective equipment and emergency procedures**

<b>Personal precautions</b>	Ensure adequate ventilation. Avoid contact with skin, eyes and inhalation of vapors. Avoid contact during pregnancy and while nursing.
<b>For emergency responders</b>	Remove all sources of ignition. Refer to protective measures listed in Sections 7 and 8. Work up wind or increase ventilation.

#### **Environmental precautions**

**Environmental precautions** See Section 12 for additional Ecological Information.

#### **Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

**Methods for cleaning up** Collect in properly labelled drums or other suitable containers, with loose fitting lids. After cleaning, flush away traces with water.

### **Section 7: Handling and storage**

#### **Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

#### **Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from sunlight.

Classified as a C1 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to State Regulations for storage and transport requirements.

**Incompatible materials** Strong oxidizing agents. Strong reducing agents. Moisture.

### **Section 8: Exposure controls and personal protection**

#### **Control parameters**

#### **Exposure Limits**

Chemical name	Australia	New Zealand	ACGIH TLV
N-methyl-2-pyrrolidone 872-50-4	TWA: 25 ppm TWA: 103 mg/m <sup>3</sup> STEL: 75 ppm STEL: 309 mg/m <sup>3</sup>	TWA: 25 ppm TWA: 103 mg/m <sup>3</sup> STEL: 75 ppm STEL: 309 mg/m <sup>3</sup> Sk*	-

Chemical name	European Union	United Kingdom	Germany DFG
N-methyl-2-pyrrolidone 872-50-4	TWA: 40 mg/m <sup>3</sup> TWA: 10 ppm * STEL: 20 ppm STEL: 80 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 40 mg/m <sup>3</sup> STEL: 20 ppm STEL: 80 mg/m <sup>3</sup> Sk*	TWA: 20 ppm TWA: 82 mg/m <sup>3</sup> Peak: 40 ppm Peak: 164 mg/m <sup>3</sup> Sk*

Chemical name	Australia	ACGIH	European Union
N-methyl-2-pyrrolidone 872-50-4	-	100 mg/L	-

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

STEL (Short Term Exposure Limit) - the airborne concentration of a particular substance calculated as a time-weighted average over 15 minutes, which should not be exceeded at any time during a normal eight hour work day. According to current knowledge this concentration should neither

impair the health of, nor cause undue discomfort to, nearly all workers.

`Sk' (skin) Notice - absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.

Peak Limitation - a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

### Appropriate engineering controls

<b>Engineering controls</b>	Showers Eyewash stations Ventilation systems.
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### Individual protection measures, such as personal protective equipment

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, RESPIRATOR.



<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin and body protection</b>	Lightweight protective clothing. Long sleeved clothing.
<b>Hand protection</b>	Impervious gloves.
<b>Respiratory protection</b>	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. If determined by a risk assessment an inhalation risk exists, wear an organic vapour respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.
<b>Environmental exposure controls</b>	No information available.
<b>Thermal hazards</b>	No information available.

## **Section 9: Physical and chemical properties**

### Information on basic physical and chemical properties

<b>Physical state</b>	Liquid
<b>Appearance</b>	Clear
<b>Color</b>	No information available
<b>Odor</b>	Amine -like
<b>Odor threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	7 - 8	None known
<b>pH (as aqueous solution)</b>	No data available	None known
<b>Melting point / freezing point</b>	No data available	None known
<b>Boiling point / boiling range</b>	204°C	None known

Flash point	91°C	CC (closed cup)
Evaporation rate	0.03 (n-butyl acetate = 1)	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	9.5%	
Lower flammability or explosive limits	1.3%	
Vapor pressure	0.32 hPa	None known
Vapor density	3.4 @ 25°C	None known
Relative density	1.03	None known
Water solubility	No data available	None known
Solubility(ies)	Miscible in water	None known
Partition coefficient	No data available	None known
Autoignition temperature	245°C	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	1.7 mPa.s @ 25°C	None known

**Other information****Section 10: Stability and reactivity****Reactivity**

**Reactivity** Hygroscopic: absorbs moisture or water from surrounding air.

**Chemical stability**

**Stability** Stable under recommended storage conditions. Decomposes in air.

**Explosion data**

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

**Possibility of hazardous reactions**

**Possibility of hazardous reactions** None under normal processing.

**Hazardous polymerization** Hazardous polymerization does not occur.

**Conditions to avoid**

**Conditions to avoid** Direct sunlight. Avoid exposure to moisture.

**Incompatible materials**

**Incompatible materials** Strong oxidizing agents. Strong reducing agents. Moisture.

**Hazardous decomposition products**

**Hazardous decomposition products** Carbon oxides. Nitrogen oxides.

**Section 11: Toxicological information****Information on likely routes of exposure**

**Product Information** No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is

mishandled and overexposure occurs are:

<b>Inhalation</b>	Inhalation of vapors in high concentration may cause irritation of respiratory system. May cause drowsiness or dizziness.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Skin contact</b>	Causes skin irritation. Prolonged or repeated contact may dry skin and cause irritation.
<b>Ingestion</b>	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
<b>Symptoms</b>	No information available.

#### Acute toxicity

#### Numerical measures of toxicity - Product Information

No information available

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
N-methyl-2-pyrrolidone	= 3914 mg/kg ( Rat )	= 8 g/kg ( Rabbit )	> 5.1 mg/L ( Rat ) 4 h

See section 16 for terms and abbreviations

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Skin corrosion/irritation</b>	Causes skin irritation.
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.
<b>Respiratory or skin sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.
<b>Reproductive toxicity</b>	May cause harm to the unborn child.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.

## Section 12: Ecological information

#### Ecotoxicity

**Aquatic ecotoxicity** The environmental impact of this product has not been fully investigated.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
N-methyl-2-pyrrolidone	EC50: >500mg/L (72h, <i>Desmodesmus subspicatus</i> )	LC50: =832mg/L (96h, <i>Lepomis macrochirus</i> ) LC50: =1072mg/L (96h, <i>Pimephales promelas</i> ) LC50: =1400mg/L (96h, <i>Poecilia reticulata</i> )	-	EC50: =4897mg/L (48h, <i>Daphnia magna</i> )

**Terrestrial ecotoxicity** There is no data for this product.

Chemical name	Earthworm	Avian	Honeybees
N-methyl-2-pyrrolidone	-	Acute Oral Toxicity: LD50 = 2212 mg/kg ( <i>Colinus virginianus</i> ) Source: IUCLID	-

#### Persistence and degradability

**Persistence and degradability** Readily biodegradable.

#### Bioaccumulative potential

**Bioaccumulation** There is no data for this product.

Chemical name	Partition coefficient
N-methyl-2-pyrrolidone	-0.46

#### Mobility

**Mobility** No information available.

#### Other adverse effects

**Other adverse effects** No information available.

### Section 13: Disposal considerations

#### Waste treatment methods

**Waste from residues/unused products** Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Dispose of in accordance with federal, state and local regulations.

See section 8 for more information

### Section 14: Transport information

**ADG** Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.



**IATA** Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

**IMDG** Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

No information available

## Section 15: Regulatory information

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

#### National regulations

##### Australia

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).  
Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

See section 8 for national exposure control parameters

#### **Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)**

Classified as a scheduled poison according to the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

**Poison Schedule Number** 6

#### **Australian Industrial Chemicals Introduction Scheme (AICIS)**

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Chemical name	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
N-methyl-2-pyrrolidone - 872-50-4	Present	-

#### **Illicit Drug Precursors/Reagents**

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

Chemical name	National pollutant inventory
N-methyl-2-pyrrolidone - 872-50-4	20 MW Threshold category 2b total 60000 MWH Threshold category 2b total 1 tonne/h Threshold category 2a total 25 tonne/yr Threshold category 1a total 400 tonne/yr Threshold category 2a total 2000 tonne/yr Threshold category 2b total

#### **International Inventories**

**AIIIC**

**NZIoC**

**TSCA**

**DSL/NDSL**

This material is listed on the Australian Inventory of Industrial Chemicals.

Contact supplier for inventory compliance status.

Contact supplier for inventory compliance status.

Contact supplier for inventory compliance status.

<b>EINECS/ELINCS</b>	Contact supplier for inventory compliance status.
<b>ENCS</b>	Contact supplier for inventory compliance status.
<b>IECSC</b>	Contact supplier for inventory compliance status.
<b>KECL</b>	Contact supplier for inventory compliance status.
<b>PICCS</b>	Contact supplier for inventory compliance status.

**Legend:****AIIC**- Australian Inventory of Industrial Chemicals**NZIoC** - New Zealand Inventory of Chemicals**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances**ENCS** - Japan Existing and New Chemical Substances**IECSC** - China Inventory of Existing Chemical Substances**KECL** - Korean Existing and Evaluated Chemical Substances**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**International Regulations****The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable**The Stockholm Convention on Persistent Organic Pollutants** Not applicable**The Rotterdam Convention** Not applicable**Section 16: Other information****Reason(s) For Issue:** 5 Yearly Revised Primary SDS  
Updated Formulation**Prepared By** This Safety Data Sheet has been prepared by IXOM Operations Pty Ltd (Toxicology and SDS Services).**Revision date:** 26-Nov-2024**Revision Note:**

The symbol (\*) in the margin of this SDS indicates that this line has been revised.

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend**

SVHC: Substances of Very High Concern for Authorization:

PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances

vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances

STOT: Specific Target Organ Toxicity

ATE: Acute Toxicity Estimate

LC50: 50% Lethal Concentration

LD50: 50% Lethal Dose

**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

<b>TWA</b>	<b>TWA</b> (time-weighted average)	<b>STEL</b>	<b>STEL</b> (Short Term Exposure Limit)
<b>Ceiling</b>	<b>Maximum</b> limit value	<b>*</b>	<b>Skin</b> designation
<b>C</b>	<b>Carcinogen</b>		

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

Environmental Protection Agency  
Acute Exposure Guideline Level(s) (AEGl(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
National Institute of Technology and Evaluation (NITE)  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
Australian Industrial Chemicals Introduction Scheme (AICIS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
U.S. National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Disclaimer**

**This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Liquimix Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.**

**If clarification or further information is needed, the user should contact their Liquimix representative or Liquimix Pty Ltd at the contact details on page 1.**

**Liquimix Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.**

**End of Safety Data Sheet**