



杭州大阳化工有限公司

Hangzhou Dayangchem Co., Ltd.

Safety Data Sheet

No :M-3944

Section 1 - Product and Company Identification

MSDS Name: 1-Methyl-2-pyrrolidinone

Synonyms: N-Methyl-2-pyrrolidone

Company Identification: Hangzhou Dayangchem Co., Ltd.

For information, call: 86-571-88938639

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Emergency Number: 86-571-88938639

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Section 2 – Hazards Identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin irritation (Category 2), H315

Eye irritation (Category 2), H319

Reproductive toxicity (Category 1B), H360D

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

R61

Xi Irritant R36/37/38

For the full text of the R-phrases mentioned in this Section, see Section 16.

Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word Danger

Hazard statement(s)

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H360D May damage the unborn child.

Precautionary statement(s)

P201 Obtain special instructions before use.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Section 3 – Composition/Information on Ingredients

CAS#	Chemical Name	%	EINECS#	Classification
872-50-4	1-Methyl-2-pyrrolidinone	99.8	212-828-1	Skin Irrit. 2; Eye Irrit. 2; Repr. 1B; STOT SE 3; H315, H319, H335, H360D T, Repr.Cat.2, R61 - R36/37/38

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section 4 - First Aid Measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Consult a physician.

In case of skin contact: Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5 - Fire Fighting Measures

Advice for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Spills/Leaks: Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

Section 7 - Handling and Storage

Handling: Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

Storage: Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section 8 - Exposure Controls, Personal Protection

Contains no substances with occupational exposure limit values.

Personal Protective Equipment

Eyes: Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Clothing: impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respirators: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Section 9 - Physical and Chemical Properties

Physical State: liquid

Color: colourless

Odor: Not available.

pH: 7.7 - 8

Vapor Pressure: 0.39 - 0.43 hPa at 20 °C

Viscosity: Not available.

Boiling Point: 81 - 82 °C at 13 hPa

Freezing/Melting Point: -24 °C

Autoignition Temperature: Not available.

Flash Point: 91 °C - closed cup

Explosion Limits:Lower: 1.3 %(V)

Explosion Limits Upper: 9.5 %(V)

Decomposition Temperature: Not available.

Solubility in water: Not available.

Specific Gravity/Density: 1.028 g/mL at 25 °C

Molecular Formula: C₅H₉NO

Molecular Weight: 99.13

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Heat, flames and sparks.

Incompatibilities with Other Materials: Strong acids, Strong oxidizing agents, Strong reducing agents

Hazardous Decomposition Products: Carbon monoxide, oxides of nitrogen, carbon dioxide.

Section 11 - Toxicological Information

RTECS#: CAS# 872-50-4: UY5790000

LD50/LC50: RTECS: LD50 Oral - Rat - 3,914 mg/kg

LDLO Inhalation - Rat - 4 h - > 5100 ppm

LD50 Dermal - Rabbit - 8,000 mg/kg

Carcinogenicity: 1-Methyl-2-pyrrolidinone- Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

Section 12 - Ecological Information

Toxicity

Toxicity to fish LC50 - other fish - 4,000 mg/l - 96 h

LC50 - Leuciscus idus (Golden orfe) - > 500 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - > 1,000 mg/l - 24 h

Toxicity to bacteria LC50 - Bacteria - > 9,000 mg/l

Section 13 - Disposal Considerations

Product: This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging: Dispose of as unused product

Section 14 - Transport Information

IATA : Not regulated as a dangerous material.

RID/ADR: Not regulated as a dangerous material.

IMO: Not regulated as a dangerous material.

Section 15 - Regulatory Information

This safety data sheet complies with the requirements of Regulation (EC) No 1907/2006

Section 16 - Other Information

Full text of H-Statements referred to under sections 2 and 3.

Eye Irrit. Eye irritation

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H360D May damage the unborn child.

Repr. Reproductive toxicity

Skin Irrit. Skin irritation

STOT SE Specific target organ toxicity - single exposure

Full text of R-phrases referred to under sections 2 and 3

T Toxic

R36/37/38 Irritating to eyes, respiratory system and skin.

R61 May cause harm to the unborn child.

Repr.Cat.2 Toxic to Reproduction Category 2

MSDS Creation Date: 23/09/2014

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