

# SAFETY DATA SHEET

## 1. Identification

**Product Name:** Urea

**Synonyms:** Carbamide, Carbonyldiamide

**CAS No.:** 57-13-6

**EC No.:** 200-315-5

**Recommended Use:** Laboratory chemical, industrial use.

**Uses Advised Against:** Not for food, drug, or household use.

### Supplier Details:

**Company Name:** Qingdao Sigma Chemical Co., Ltd.

**Address:** Room 2-1-2301, Jiahe Xinxing, No. 130, Shandong Road, Shibei

District, Qingdao City, Shandong Province

**Email:** [786099005@qq.com](mailto:786099005@qq.com)

### Emergency Telephone Number:

Local emergency services or poison control center.

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## 2. Hazard(s) Identification

**Classification:**

Not classified as hazardous under OSHA Hazard Communication Standard (29 CFR 1910.1200).

May cause mild skin irritation (H316).

**Label Elements:**

**Warning:** Causes mild skin irritation.

**Precautionary Statements:**

Avoid contact with skin and eyes.

Wash hands thoroughly after handling.

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**3. Composition/Information on Ingredients**

Ingredient	CAS No.	Weight %	GHS Classification
Urea	57-13-6	≥99.5%	Not classified

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**4. First-Aid Measures**

**Inhalation:** Move to fresh air. Seek medical attention if symptoms persist.

**Skin Contact:** Wash with soap and water. If irritation occurs, seek medical advice.

**Eye Contact:** Rinse immediately with plenty of water for at least 15 minutes.

Seek medical attention if irritation persists.

**Ingestion:** Rinse mouth. Do NOT induce vomiting. Seek medical attention if symptoms occur.

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## 5. Fire-Fighting Measures

**Suitable Extinguishing Media:** Water spray, dry chemical, CO<sub>2</sub>, foam.

**Unsuitable Extinguishing Media:** Water jet (may spread product).

**Hazardous Combustion Products:** Nitrogen oxides (NO<sub>x</sub>), ammonia, carbon monoxide (CO).

**Special Protective Equipment for Firefighters:** Wear self-contained breathing apparatus and full protective gear.

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## 6. Accidental Release Measures

**Personal Precautions:** Avoid dust formation. Wear protective gloves and goggles.

**Environmental Precautions:** Prevent entry into drains or waterways.

**Clean-Up Methods:** Sweep or shovel into containers for disposal. Flush residual amounts with water.

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## 7. Handling and Storage

**Handling:** Avoid inhalation of dust. Use local exhaust ventilation.

**Storage:** Store in a cool, dry, well-ventilated place. Keep container tightly closed.

**Incompatible Materials:** Strong oxidizers, acids, bases, hypochlorites.

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## 8. Exposure Controls/Personal Protection

**Engineering Controls:** Use local exhaust ventilation.

**Personal Protective Equipment (PPE):**

**Eye Protection:** Safety goggles.

**Skin Protection:** Gloves (nitrile rubber).

**Respiratory Protection:** Dust mask if handling in poorly ventilated areas.

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## 9. Physical and Chemical Properties

Property	Value
Appearance	White crystalline solid
Odor	Slight ammonia-like
Melting Point	132 - 135° C
Solubility in Water	Highly soluble

Property	Value
pH (10% solution)	7.2 – 9.5
Density	1.33 g/cm <sup>3</sup>

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## 10. Stability and Reactivity

**Stability:** Stable under normal conditions.

**Conditions to Avoid:** Heat, strong oxidizers.

**Hazardous Decomposition Products:** Ammonia, nitrogen oxides.

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## 11. Toxicological Information

**Acute Toxicity:**

Oral LD50 (rat): 8,471 mg/kg.

Skin irritation: Mild.

**Carcinogenicity:** Not classified as carcinogenic by IARC, NTP, or OSHA.

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## 12. Ecological Information

**Ecotoxicity:** Low toxicity to aquatic organisms.

**Persistence:** Readily biodegradable.

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### 13. Disposal Considerations

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

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### 14. Transport Information

Not regulated for transport.

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### 15. Regulatory Information

**WHMIS Classification:** Not controlled.

**REACH:** Registered.

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### 16. Other Information

**Revision Date:** [July 1, 2025]