

Hydroxyurea SDS | MSDS

1.PRODUCT AND COMPANY IDENTIFICATION

Product identifier

- **Product Name:** Hydroxyurea
- **Catalog Number:** S1896
- **CAS Number:** 127-07-1
- **IUPAC Name:** 1-hydroxyurea

Relevant identified uses and uses advised against

- **Identified uses:** For research and development use only; laboratory chemicals; manufacture of substances.
- **Uses advised against:** Not for pharmaceutical, household, or other unapproved uses.

Details of the supplier

- **Company :** Selleck Chemicals
- **TollFree :** +1 877 796-6397
- **Tel :** +1 832 582-8158
- **Fax :** +1 832 582-8590

Emergency telephone number

- **Emergency phone #:** +1 832 582-8158

2. HAZARDS IDENTIFICATION

GHS Classification:

- Germ cell mutagenicity: Category 1B
- Reproductive toxicity: Category 2

Pictogram:



Signal Word: Danger

Hazard Statements:

- H340: May cause genetic defects.
- H361: Suspected of damaging fertility or the unborn child.

Precautionary Statements:

- **Prevention:** P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
- **Response:** P308 + P313 IF exposed or concerned: Get medical advice/ attention.
- **Storage:** P405 Store locked up.
- **Disposal:** P501 Dispose of contents/ container to an approved waste disposal plant.

Other Hazards: None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture: Substance

CAS-No.: 127-07-1

Components:

- **Chemical name:** 1-hydroxyurea
- **CAS No.:** 127-07-1
- **Concentration (% w/w):** ≥ 90 - $\leq 100\%$
- **Note:** Actual concentration is withheld as a trade secret.

4. FIRST AID MEASURES

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

If inhaled: After inhalation, move to fresh air. Call a physician.

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower. Consult a physician.

In case of eye contact: After eye contact, rinse out with plenty of water. Remove contact lenses. Call an ophthalmologist.

If swallowed: After swallowing, immediately make victim drink water (two glasses at most). Consult a physician.

Most important symptoms and effects: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Protection of first-aiders: For personal protection see section 8.

Notes to physician: N/A.

5. FIREFIGHTING MEASURES

Unsuitable extinguishing media: For this substance/mixture, no limitations of extinguishing agents are given.

Hazardous combustion products: Carbon oxides, Nitrogen oxides (NO_x).

Specific extinguishing methods: N/A.

Further information: Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Special protective equipment for fire-fighters: Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

- **For non-emergency personnel:** Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, and consult an expert.
- **For emergency responders:** For personal protection see section 8.

Environmental precautions: Do not let product enter drains.

Methods and materials for containment and cleaning up: Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

7. HANDLING AND STORAGE

Advice on safe handling: Work under a hood. Do not inhale substance/mixture. For precautions see section 2.

Conditions for safe storage: Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorised persons.

Storage class: 6.1C, Combustible, acute toxic Cat.3 / toxic compounds or compounds which causing chronic effects.

Recommended storage temperature: 36 - 46 °F / 2 - 8 °C.

Further information on storage stability: Moisture sensitive.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters: Contains no substances with occupational exposure limit values.

Engineering measures: N/A.

Personal protective equipment:

- **Respiratory protection:** Required when dusts are generated. Recommended Filter type P3 (based on DIN EN 143, DIN 14387).
- **Hand protection:** Nitrile rubber gloves (Full and splash contact). Break through time: 480 min; Glove thickness: 0.11 mm. Handle with gloves and inspect prior to use.
- **Eye protection:** Safety glasses tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).
- **Skin and body protection:** Protective clothing.
- **Hygiene measures:** Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: powder

Color: N/A

Odor: N/A

Odor Threshold: N/A

pH: N/A

Melting point/range: 275 °F / 135 °C

Boiling point/boiling range: N/A

Flash point: N/A

Evaporation rate: N/A

Flammability (solid, gas): N/A

Flammability (liquids): N/A

Burning rate: N/A

Upper/Lower flammability or explosive limits: N/A

Vapor pressure: N/A

Relative vapour density: N/A

Relative density: N/A

Density: N/A

Water solubility: N/A

Partition coefficient: n-octanol/water: N/A

Autoignition temperature: N/A

Decomposition temperature: N/A

Viscosity: N/A

Explosive properties: N/A

Oxidizing properties: N/A

Molecular weight: 76.05 g/mol

Particle size: N/A

10. STABILITY AND REACTIVITY

Reactivity: N/A.

Chemical stability: The product is chemically stable under standard ambient conditions (room temperature).

Possibility of hazardous reactions: N/A.

Conditions to avoid: Exposure to moisture. No information available.

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products: In the event of fire: see section 5.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:

- LD50 Oral - Rat - 5,760 mg/kg

• Inhalation/Dermal: N/A.

Skin corrosion/irritation: N/A.

Serious eye damage/eye irritation: N/A.

Respiratory or skin sensitization: N/A.

Germ cell mutagenicity: In vivo tests showed mutagenic effects. Test Type: Hamster; Test system: fibroblast; Remarks: Sister chromatid exchange.

Carcinogenicity:

• IARC, NTP, OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a probable, possible, or confirmed human carcinogen.

Reproductive toxicity: Suspected human reproductive toxicant. Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

STOT - single/repeated exposure: N/A.

Aspiration hazard: N/A.

Additional Information: RTECS: YT4900000. Liver - Irregularities - Based on Human Evidence.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

• **N-hydroxyurea:** Toxicity to fish: N/A.

Persistence and degradability: N/A.

Bioaccumulative potential: N/A.

Mobility in soil: N/A.

Other adverse effects: N/A.

13. DISPOSAL CONSIDERATIONS

Waste from residues: Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

14. TRANSPORT INFORMATION

IATA-DGR: Not regulated as a dangerous good.

IMDG-Code: Not regulated as a dangerous good.

Transport in bulk: Not applicable for product as supplied.

49 CFR Road: Not regulated as a dangerous good.

Poison Inhalation Hazard: No.

Special precautions for user: Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

Components CAS-No. Component TPQ (lbs)

SARA 311/312 Hazards

Chronic Health Hazard

SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations

Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

1-hydroxyurea 127-07-1

Maine Chemicals of High Concern

Product does not contain any listed chemicals

Vermont Chemicals of High Concern

Product does not contain any listed chemicals

Washington Chemicals of High Concern

Product does not contain any listed chemicals

New Jersey Right To Know

1-hydroxyurea 127-07-1

California Prop. 65

WARNING: This product can expose you to chemicals including 1-hydroxyurea, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

The components of this product are reported in the following inventories:

TSCA : Product contains substance(s) not listed on TSCA inventory.

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

16. OTHER INFORMATION

Revision Date: 2026/08/04

Further Information: The information provided is believed to be correct but is not exhaustive and should be used only as a guideline based on current knowledge. It does not represent a guarantee of the properties of the product. Selleck Chemicals Corporation and its Affiliates shall not be held liable for any damage resulting from handling or contact with the product.