



# Safety Data Sheet

## Urea, Prilled, Crystal, ACS

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Urea, Prilled, Crystal, ACS

**Synonyms/Generic Names:** Carbamide

**Product Number:** 5990

**Product Use:** Industrial, Manufacturing or Laboratory use

**Manufacturer:** Columbus Chemical Industries, Inc.  
N4335 Temkin Rd.  
Columbus, WI. 53925

**For More Information Call:** 920-623-2140 (Monday-Friday 8:00-4:30)

**In Case of Emergency Call:** CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

### 2. HAZARDS IDENTIFICATION

**OSHA Hazards:** No known OSHA hazards

**Target Organs:** None

**Signal Words:** None

**Pictograms:** None

**GHS Classification:**

None	
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**GHS Label Elements, including precautionary statements:**

**Hazard Statements:**

None	
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**Precautionary Statements:**

None	
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#### Potential Health Effects

<b>Eyes</b>	May cause eye irritation.
<b>Inhalation</b>	May be harmful if inhaled. May cause respiratory tract irritation.
<b>Skin</b>	May be harmful if absorbed through skin. May cause skin irritation.
<b>Ingestion</b>	May be harmful if swallowed.

**NFPA Ratings**

Health	1
Flammability	1
Reactivity	0
Specific hazard	Not Available

**HMIS Ratings**

Health	1
Fire	1
Reactivity	0
Personal	E

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Urea	>98	57-13-6	200-315-5	CH <sub>4</sub> N <sub>2</sub> O	60.06 g/mol

**4. FIRST-AID MEASURES**

<b>Eyes</b>	In case of eye contact, rinse with plenty of water and seek medical attention if necessary.
<b>Inhalation</b>	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention if necessary.
<b>Skin</b>	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention if necessary.
<b>Ingestion</b>	<b>Do Not Induce Vomiting!</b> Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention if necessary.

**5. FIREFIGHTING MEASURES**

<b>Suitable (and unsuitable) extinguishing media</b>	Product may be flammable at high temperatures. Use appropriate media for adjacent fire. Cool unopened containers with water.
<b>Special protective equipment and precautions for firefighters</b>	Wear self-contained breathing apparatus for firefighting if necessary.
<b>Specific hazards arising from the chemical</b>	Emits toxic fumes (carbon oxides, nitrogen oxides) under fire conditions. (See also Stability and Reactivity section).

**6. ACCIDENTAL RELEASE MEASURES**

<b>Personal precautions, protective equipment and emergency procedures</b>	See section 8 for recommendations on the use of personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, or gas.
<b>Environmental precautions</b>	Prevent spillage from entering drains. Any release to the environment may be subject to a federal/national or local reporting requirements.
<b>Methods and materials for containment and cleaning up</b>	Cleanup personnel need personal protection from inhalation and skin/eye contact. Evacuate and ventilate the area. Pick up and arrange disposal without creating dust. Sweep up and place in suitable, closed containers for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

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## 7. HANDLING AND STORAGE

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### Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Provide appropriate exhaust ventilation at places where dust is formed.

### Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well ventilated place.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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### Occupational exposure controls:

Component	Exposure Limits	Basis	Entity
Urea	10 mg/m <sup>3</sup>	WEEL	USA

TWA: Time Weighted Average over 8 hours of work.

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.

IDLH: Immediately Dangerous to Life or Health

WEEL: Workplace Environmental Exposure Levels

### Personal Protection

<b>Eyes</b>	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH.
<b>Inhalation</b>	Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH..
<b>Skin</b>	Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the workplace.
<b>Other</b>	Not Available

### Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling. Have supplies and equipment for neutralization and running water available.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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Appearance (physical state, color, etc.)	White crystals to white powder
Odor	Ammonia odor in presence of moisture.
Odor threshold	Not Available
pH	7.5-9.5 at 480 g/l at 25°C (77°F)
Melting point/freezing point	133°C (271°F)
Initial boiling point and boiling range	Not Available
Flash point	Flammable in presence of heat
Evaporation rate	Not Available
Flammability (solid, gas)	Not Available
Upper/lower flammability or explosive limit	Not Available

Vapor pressure	0.009 hPa (0.007 mmHg) @ 20°C (68°F)
Vapor density	2.07
Relative density	Not Available
Solubility (ies)	480 g/l at 20°C (68°F)
Partition coefficient: n-octanol/water	Log Pow: -2.59 - -1.59
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable
<b>Possibility of Hazardous Reactions</b>	Will not occur.
<b>Conditions to Avoid</b>	Heat, moisture.
<b>Incompatible Materials</b>	Sources of ignition, oxidizing agents.
<b>Hazardous Decomposition Products</b>	Carbon oxides, nitrogen oxides.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

<b>Skin</b>	Skin – rabbit – No skin irritation
<b>Eyes</b>	Eyes – rabbit – No eye irritation
<b>Respiratory</b>	Not Available
<b>Ingestion</b>	LD50 Oral – rat – 8471 mg/kg

### Carcinogenicity

<b>IARC</b>	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
<b>ACGIH</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
<b>NTP</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
<b>OSHA</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### Signs & Symptoms of Exposure

<b>Eyes</b>	May cause eye irritation.
<b>Inhalation</b>	May be harmful if inhaled. May cause respiratory tract irritation.
<b>Skin</b>	May be harmful if absorbed through skin. May cause skin irritation.
<b>Ingestion</b>	May be harmful if swallowed.

<b>Chronic Toxicity</b>	Not Available
<b>Teratogenicity</b>	Not Available
<b>Mutagenicity</b>	Genotoxicity in vitro – mouse – lymphocyte: DNA damage Genotoxicity in vivo – mouse – Oral: Cytogenetic analysis
<b>Embryotoxicity</b>	Not Available
<b>Specific Target Organ Toxicity</b>	Not Available

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## 12. ECOLOGICAL INFORMATION

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### Ecotoxicity

<b>Aquatic Vertebrate</b>	LC50 – Poecilia reticulata (guppy) – 17500 mg/l – 96 hours
<b>Aquatic Invertebrate</b>	EC50 – Daphnia magna (Water flea) – 3910 mg/l – 48 hours
<b>Terrestrial</b>	Not Available

<b>Persistence and Degradability</b>	Not Available
<b>Bioaccumulative Potential</b>	Not Available
<b>Mobility in Soil</b>	Not Available
<b>PBT and vPvB Assessment</b>	Not Available
<b>Other Adverse Effects</b>	Not Available

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## 13. DISPOSAL CONSIDERATIONS

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<b>Waste Residues</b>	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.
<b>Product Containers</b>	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

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## 14. TRANSPORTATION INFORMATION

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US DOT	Not Dangerous Goods
TDG	Not Dangerous Goods
IMDG	Not Dangerous Goods
Marine Pollutant	No
IATA/ICAO	Not Dangerous Goods

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## 15. REGULATORY INFORMATION

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TSCA Inventory Status	All ingredients are listed on the TSCA inventory.
DSCL (EEC)	All ingredients are listed on the DSCL inventory.
California Proposition 65	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Not Listed
SARA 312	Not Listed
SARA 313	Not Listed
WHMIS Canada	Class D-2B: Poisonous and infectious material- Other effects- Toxic

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## 16. OTHER INFORMATION

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Revision	Date
Revision 1	8-02-2011

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