

Safety Data Sheet

Urea Crystalline Powder, USP

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Urea Crystalline Powder, USP

Synonyms/Generic Names: Carbamide, Carbonyldiamide

Product Number: 9946

Product Use: Industrial, Manufacturing or Laboratory use

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

For More Information: 920-623-2140 (Monday-Friday 8:00-4:30) www.columbuschemical.com

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

2. HAZARDS IDENTIFICATION

Hazard Not Otherwise Classified (HNOC): None

Signal Words: None

Pictograms: None

GHS Classification:

None

GHS Label Elements, including precautionary statements:

Hazard Statements:

None

Precautionary Statements:

None

Potential Health Effects

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

Ν	NFPA Ratings			
	Health	1		
	Flammability	1		
	Reactivity	0		
Specific hazard Not		Not Available		

HMIS Ratings		
Health 1		
Fire	1	
Reactivity	0	

3. COMPOSITION/INFORMATION ON INGREDIENTS

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

4. FIRST-AID MEASURES

Eyes	In case of eye contact, rinse with plenty of water and seek medical attention if necessary.		
Inhalation	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.		
Skin	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention if necessary.		
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention if necessary.		

5. FIREFIGHTING MEASURES

Suitable (and unsuitable) extinguishing media	Product may be flammable at high temperatures. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Cool unopened container with water.
Special protective equipment and precautions for firefighters	Wear self-contained breathing apparatus for firefighting if necessary.
Specific hazards arising from the chemical	Emits toxic fumes (carbon oxides, nitrogen oxides) under fire conditions. (See also Stability and Reactivity section).

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	See section 8 for recommendations on the use of personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, or gas.
Environmental precautions	Prevent spillage from entering drains. Any release to the environment may be subject to a federal/national or local reporting requirements.
Methods and materials for containment and cleaning up	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.

7. HANDLING AND STORAGE

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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls:

Component	Exposure Limits	Basis	Entity
Urea	10 mg/m ³	WEEL	AIHA

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

Eyes	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH.
Inhalation	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.
Skin	Wear Nitrile rubber gloves. 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.
Other	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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	White crystals to white powder
Odor	Not Available
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	Not Available

Relative density	1.335 g/mL at 25 °C (68°F)
Solubility (ies)	480 g/l at 20°C (68°F) – completely soluble
Partition coefficient: n-octanol/water	Log Pow: -2.591.59
Bulk Density	700 – 800 kg/m3 at 20 °C (68 °F)
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	No data available.
Conditions to Avoid	Heat, moisture.
Incompatible Materials	Strong oxidizing agents.
Hazardous Decomposition Products	Carbon oxides, nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

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

Carcinogenicity

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IARC	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.		
ACGIH	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.		
NTP	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.		
OSHA	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

	ation.	
Inhalation May be harmful if in	haled. May cause respiratory tract irritation.	
Skin May be harmful if a	May be harmful if absorbed through skin. May cause skin irritation.	
Ingestion May be harmful if s	May be harmful if swallowed.	

Chronic Toxicity	Not Available
Teratogenicity	Not Available
Mutagenicity	Not Available
Embryotoxicity	Not Available
Target Organ(s)	Not Available

12. ECOLOGICAL INFORMATION

Ecotoxicity

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

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

13. DISPOSAL CONSIDERATIONS

Waste Residues	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.
Product Containers	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.

14. TRANSPORTATION INFORMATION

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

15. REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA Active inventory.
DSL / NDSL	All ingredients are listed on the DSL inventory.
California Proposition 65	Not Listed
Rhode Island: Hazardous Substance List	Not Listed
Massachusetts: Toxic or Hazardous Substance List, Right to Know	Not Listed
Pennsylvania: Hazardous Substance List	Not Listed
New Jersey: Right to Know Hazardous Substance List	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	No SARA Hazards.
SARA 312	No SARA Hazards.
SARA 313	Not Listed
WHMIS Canada	Listed: Not Classified.

16. OTHER INFORMATION

Revision	Date
Original	07/16/2020
Revision 1	05/02/2022

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