

## SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

Product name : Urea  
 CAS number : 57-13-6  
 Synonyms : Urea Granular, Urea Prills, Urea Pastille

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Fertilizer. Manufacture of chemical products  
 Uses identified against : None

#### 1.3 Details of the supplier of the safety data sheet

Company : Lab Alley, LLC  
 22111 Highway 71 West, Suite 601  
 Spicewood, Texas 78669  
 U.S.A.  
 Telephone : 512-668-9918  
 Fax : 512-886-4008

#### 1.4 Emergency telephone

Emergency Phone # : US & Canada: 1-800-535-5053 INFOTRAC  
 International 1-352-323-3500 INFOTRAC

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)  
 For the full text of the H-Statements mentioned in this Section, see Section 16

#### 2.2 GHS Label elements, including precautionary statements

Pictogram : Non required  
 Signal Word : None identified  
 Hazard statement(s) : No known significant effects or critical hazards  
 Precautionary statement  
 General : Read label before use, keep out of reach of children, if medical advice is needed, have product container or label at hand.  
 Prevention : Not applicable  
 Response : Not applicable  
 Storage : Not applicable  
 Disposal : Not applicable  
 Supplemental label elements : None known  
 Other hazards : None known

#### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS : None identified

### SECTION 3: Composition/information on ingredients

#### 3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Urea		57-13-6	97.5 - 99.7 w/w%
Urea reaction products with formaldehyde		68611-64-3	0 - <1.5 w/w%
Imidodicarbonic diamide		108-19-0	<1.5 w/w%

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

#### General advice

<b>If inhaled</b>	Remove to fresh air. Get medical attention immediately if symptoms occur. If not breathing, give artificial respiration
<b>In case of skin contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur
<b>In case of eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician
<b>If swallowed</b>	Do NOT induce vomiting. Get medical attention if symptoms occur.

### 4.2 Most important symptoms and effects, both acute and delayed

Eye contact No significant effects or critical hazards  
Inhalation No significant effects or critical hazards  
Ingestion No significant effects or critical hazards  
Skin contact No significant effects or critical hazards

### 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	Substance is nonflammable; use agent most appropriate to extinguish surrounding
<b>Unsuitable extinguishing media</b>	No information available

### 5.2 Specific hazards arising from the substance or mixture

Incompatible with halogens. If mixed with chlorine or hypochlorites, it may form nitrogen trichloride which may explode spontaneously in air

### 5.3 Special protective equipment and precautions for firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.  
Fire fighters should wear appropriate protective equipment and self contained breathing apparatus SCBA with a full face piece operated in positive pressure mode.

### 5.4 Further information

Contain and collect the water used to fight the fire for later treatment and disposal.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

### 6.2 Environmental precautions

Should not be released into the environment. See Section 12 for additional Ecological Information.

### 6.3 Methods and materials for containment and cleaning up

Up Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

### 6.4 Reference to other sections

No data available

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Precautions on safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation.  
Avoid ingestion and inhalation. Avoid contact with skin, eyes or clothing. Avoid dust formation. Protect from moisture.

#### Hygiene measures

Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from incompatible materials. Do not store in unlabeled containers.

#### Incompatibilities

Strong oxidizing agents

## 8. Exposure controls/personal protection

## 8.1 Occupational exposure limits

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Component	Type	Value
Urea	PNOR	15mg/m3

**US. ACGIH Threshold Limit Values**

Component	Type	Value

**US. NIOSH: Pocket Guide to Chemical Hazards**

Component	Type	Value

**Biological occupational exposure limits**

Component	Type	Value

## 8.2 Exposure controls

### Appropriate engineering controls

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

### Personal protective equipment

#### Eye/face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

#### Skin protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

#### Body Protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling product. Cotton or cotton/synthetic overalls or coveralls are normally suitable.

#### Respiratory protection

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training and other important aspects of use.

#### Control of environmental exposure

Emission from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical State	Solid prills
Appearance	white
Odor	Slight ammoniacal
Odor Thresh	No data available
pH	7 to 8 (Conc %w/w at 10%)
Melting Point/Range	134°C (273.2°F)
Boiling Point/Range	No data available
Evaporation Rate	No data available
Flammability (solid)	Non-flammable substance. Non-combustible
Flammability or explosive limit	
	Upper No data available
	Lower No data available
Vapor Pressure	0 kPa ( ) mm Hg at room temperature)
Vapor Density	No data available
Density	2.31
Solubility	Easily soluble in water : 1193g/L @ 25°C
Partition coefficient; n-octanol/water	
Autoignition Temp	No data available
Decomposition Temp	135°C
Viscosity	No data available
Molecular Formula	C2H2Cl2O2
Molecular Weight	128.94

VOC Content(%) No data available  
Oxidizing properties No data available

## 9.2 Other safety information

No data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Incompatible with halogen, hydrogen peroxide, chlorinated hydrocarbons, fluorine, nitric acid, oxidizing agents and sulfuric acid.

### 10.2 Chemical stability

Stable under proper conditions.

### 10.3 Possibility of hazardous reactions

Under normal conditions of storage and use hazardous reactions will not occur.

### 10.4 Conditions to avoid

Absorbs moisture on long-term storage under high humid conditions Decomposes on heating.

Store in a dry, cool and well ventilated area, away from incompatible materials.

### 10.5 Incompatible materials

See 10.1

### 10.6 Hazardous decomposition products

Under normal conditions of storage and use hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Product Information, Component Information

#### Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Rat	8471 mg/kg	No data available	No data available

Conclusion: Very low toxicity to humans and animals. Effects are not sufficient for classification as hazardous.

#### Skin corrosion/irritation

May cause slight transient irritation. Inorganic salt. Prolonged or repeated exposure may dry the skin, causing irritation. Effects are not sufficient for classification as hazardous.

#### Serious eye damage/eye irritation

No known significant effects or critical hazards. May cause irritation due to mechanical action.

#### Respiratory or skin sensitization

No sensitizer to skin or lungs

#### Germ cell mutagenicity

No mutagenic effect

#### Carcinogenicity

No significant effects or critical hazards.

#### Reproductive toxicity

Not available

#### Specific target organ toxicity - single exposure

Not available

#### Specific target organ toxicity - repeated exposure

Not available

#### Chronic effects

No data available

#### Teratogenicity

Not available

#### Aspiration hazard

Not available

### 11.2 Additional Information

No data available

## 12. Ecological information

### 12.1 Toxicity

Excessive nutrient runoff to a body of water may results in eutrophication.

### 12.2 Persistence and degradability

Readily biodegradable

### 12.3 Bio accumulative potential

Low

LogP<sub>ow</sub> < - 1.73

### 12.4 Mobility in soil

Soil/wate partition coeffiecient 0.037

### 12.5 Results of PBT and vPvB assessment

No data available

### 12.6 Endocrine disrupting properties

No data available

### 12.7 Other adverse effects

No know significant effects or critical hazards

Product	Exposure	Species	Test Results

#### Persistence and Degradability

No data available

#### Bioaccumulation/ Accumulation

No data available

#### Mobility

No data available

#### Other adverse effects

No data available

## 13. Disposal considerations

### 13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste.

Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Disposal of container: Dispose of as unused product. Do not re-use empty containers.

Other considerations: Observe all federal, state and local regulations when disposing of the substance.

## SECTION 14: Transport information

### DOT (US)

UN number: Not regulated

Proper shipping name: -

Hazard Class -

Subsidiary risk -

Packaging Group -

Environmental hazards No

### IMDG

UN number: Not regulated

Proper shipping name: -

Hazard Class -

Subsidiary risk -

Packaging Group -

Environmental hazards No

**IATA**

UN number: Not regulated  
Proper shipping name: -  
Hazard Class: -  
Subsidiary risk: -  
Packaging Group: -  
Environmental hazards: No

**SECTION 15: Regulatory information**

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

**TSCA Section 8(a) CDR Exempt/partial exemption.**

Not determined

**TSCA Section 8(b) Active Inventory**

This material is listed or exempted.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not available

**SARA 304 Emergency release notification**

Not applicable

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not available

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**

Not applicable

**SARA 311/312 Hazardous**

Not applicable

**SARA 313 (TRI reporting)**

Not available

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not listed

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not listed

**Safe Drinking Water Act**

Not available

**FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**

Not available

**Food and Drug Administration (FDA)**

Total food additive

Direct food additive

GRAS food additive

**US state regulations**

**US. Massachusetts RTK - Substance List**

None of the components are listed

**US. New Jersey Worker and Community Right-to-Know Act**

None of the components are listed

**US. Pennsylvania Worker and Community Right-to-Know Law**

None of the components are listed

**US. Rhode Island RTK**

Not available

**California Proposition 65**

This product as manufactured does not contain any substance in concentrations known to the state of California to cause cancer, birth defects or other reproductive harm. Lab Alley cannot guarantee the downstream compliance of any product once out of the Lab Alley custody.

**International Inventories**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL)

#### **SECTION 16: Other information**

Revision date: 12/11/2023  
Revision number: 1

#### **SECTION 17: Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.