

### SECTION 1: Identification of the substance/mixture

#### 1.1. Product identifier

Product form : Substance  
 Substance name : Urea  
 Formula :  $\text{CO}(\text{NH}_2)_2$   
 Molecular weight : 60.06 g/mol  
 CAS No. : 57-13-6  
 Product code : LW-UREA  
 Synonyms : Carbamide

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

Use of the substance/mixture : Laboratory chemicals,

#### 1.3. Emergency telephone number

Emergency number : 1.800.424.9300 (USA)  
 +1.703.527.3887 (INT)

### SECTION 2: Hazards Identification

#### 2.1. Classification of the substance or mixture

Not a hazardous substance or mixture.

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

Not a hazardous substance or mixture.

#### 2.3. Hazards not otherwise classified (HNOC) or not covered by GHS

none

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Formula :  $\text{CO}(\text{NH}_2)_2$   
 Synonyms : Carbamide  
 Molecular Weight : 60.06 g/mol  
 CAS-No. : 57-13-6

#### Hazardous components

| Component | Classification | Concentration |
|-----------|----------------|---------------|
| Urea      |                | <= 100 %      |

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### SECTION 4: Description of first aid measures

#### 4.1. Description of first aid measures

- First-aid measures after inhalation : If breathed in, move person into fresh air. If not breathing, give artificial respiration.
- First-aid measures after skin contact : Wash off with soap and plenty of water.
- First-aid measures after eye contact : Flush eyes with water as a precaution.
- First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Rinse mouth with water.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### 5.2. Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides (NO<sub>x</sub>)

#### 5.3. Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4. More Information

No data available

### SECTION 6: Accidental release measures

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

Avoid dust formation. Avoid breathing vapors, mist or gas.

For personal protection see section 8.

#### 6.2. Environmental precautions

Do not let product enter drains.

#### 6.3. Methods and material for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 6.4. Reference to other sections

For disposal see section 13.

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection. For precautions see section 2.2.

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

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

Keep in a dry place.

#### 7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### Components with workplace control parameters

| Component | CAS-No. | Value | Control parameters             | Basis   |
|-----------|---------|-------|--------------------------------|---|
| Urea      | 57-13-6 | TWA   | 10.000000<br>mg/m <sup>3</sup> | USA. Workplace Environmental Exposure Levels (WEEL) |

#### 8.2. Exposure controls

Appropriate engineering controls : General industrial hygiene practice.

#### 8.3. Personal protective equipment

Eye protection : Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin Protection : Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

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Material: Nitrile rubber  
Minimum layer thickness: 0.11 mm  
Break through time: 480 min  
Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)  
data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

- Body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- Respiratory protection : Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
- Environmental exposure controls : Do not let product enter drains.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

- Appearance : Form: powder  
Color: white
- Odor : No data available
- Odor Threshold : No data available
- pH : 7.5 - 9.5 at 480 g/l at 25 °C (77 °F)
- Melting point/freezing point : Melting point/range: 132 - 135 °C (270 - 275 °F)
- Initial boiling point and boiling range : No data available
- Flash point : Not applicable
- Evaporation rate : No data available

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|  |   |
|--|---|
| Flammability (solid, gas)                    | : No data available                             |
| Upper/lower flammability or explosive limits | : No data available                             |
| Vapor pressure                               | : 0.009 hPa (0.007 mmHg) at 20 °C (68 °F)       |
| Vapor density                                | : No data available                             |
| Relative density                             | : 1.335 g/mL at 25 °C (77 °F)                   |
| Water solubility                             | : 480 g/l at 20 °C (68 °F) - completely soluble |
| Partition coefficient: n-octanol/water       | : log Pow: -2.59 - -1.59                        |
| Auto-ignition temperature                    | : No data available                             |
| Decomposition temperature                    | : No data available                             |
| Viscosity                                    | : No data available                             |
| Explosive properties                         | : No data available                             |
| Oxidizing properties                         | : No data available                             |

### 9.2. Other safety information

Bulk density : 700 - 800 kg/m<sup>3</sup> at 20 °C (68 °F)

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No data available

### 10.2. Chemical stability

Stable under recommended storage conditions.

### 10.3. Possibility of hazardous reactions

No data available

### 10.4. Conditions to avoid

No data available

### 10.5. Incompatible materials

Strong oxidizing agents

### 10.6. Hazardous decomposition products

Other decomposition products - No data available

In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : LD50 Oral - Rat - 8,471 mg/kg

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|  |   |
|--|---|
|  | Inhalation: No data available   |
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|  | Dermal: No data available   |
|  | No data available   |
| Skin corrosion/irritation                          | : Skin - Rabbit   |
|  | Result: No skin irritation  |
| Serious eye damage/irritation                      | : Eyes - Rabbit   |
|  | Result: No eye irritation   |
| Respiratory or skin sensitization                  | : No data available   |
| Germ cell mutagenicity                             | : No data available   |
| <b>Carcinogenicity</b>                             |   |
| 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.             |
| Reproductive toxicity                              | : No data available   |
| Specific target organ toxicity (single exposure)   | : No data available   |
| Specific target organ toxicity (repeated exposure) | : No data available   |
| Aspiration hazard                                  | : No data available   |
| Additional Information                             | : RTECS: YR6250000  |
|  | To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.                                 |

## SECTION 12: Ecological information

### 12.1. Toxicity

Toxicity to fish : LC50 - Poecilia reticulata (guppy) - 17,500 mg/l - 96 h

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|   |   |  |
|---|---|--|
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 - Daphnia magna (Water flea) - 3,910 mg/l - 48 h                                      |
| <b>12.2. Persistence and degradability</b>          | : | No data available  |
| <b>12.3. Bioaccumulative potential</b>              | : | No data available  |
| <b>12.4. Mobility in soil</b>                       | : | No data available  |
| <b>12.5. Results of PBT and vPvB assessment</b>     | : | PBT/vPvB assessment not available as chemical safety assessment not required/not conducted |
| <b>12.6. Other adverse effects</b>                  | : | No data available  |

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

|                        |   |  |
|------------------------|---|--|
| Product                | : | Offer surplus and non-recyclable solutions to a licensed disposal company. |
| Contaminated Packaging | : | Dispose of as unused product.  |

### SECTION 14: Transport information

#### DOT (US)

Not dangerous goods

#### IMDG

Not dangerous goods

#### IATA

Not dangerous goods

### SECTION 15: Regulatory information

#### SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### SARA 313 Components

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.

#### SARA 311/312 Hazards

No SARA Hazards

#### Massachusetts Right To Know Components

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

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### Pennsylvania Right To Know Components

| Urea | CAS-No. | Revision Date |
|------|---------|---------------|
|      | 57-13-6 |               |

### New Jersey Right To Know Components

| Urea | CAS-No. | Revision Date |
|------|---------|---------------|
|      | 57-13-6 |               |

### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## SECTION 16: Other information

### HMIS Rating

|                       |   |   |
|-----------------------|---|---|
| Health Hazard         | : | 0 |
| Chronic Health Hazard | : |   |
| Flammability          | : | 0 |
| Physical Hazard       | : | 0 |

### NFPA Rating

|                   |   |   |
|-------------------|---|---|
| Health hazard     | : | 0 |
| Fire Hazard       | : | 0 |
| Reactivity Hazard | : | 0 |

### Further Information

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