
Safety Data Sheet

Product Name	Urea
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Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identification:**Product Description:** Urea**Synonyms:** Carbamide, Carbonyldiamide**CAS-No:** 57-13-6**EC-No.:** 200-315-5**Molecular Formula:** CH₄N₂O**REACH Registration No:** 01-2119463277-33-XXXX**1.2. Relevant identified uses of the substance or mixture and uses advised against:****Recommended Use:** Laboratory chemicals and Pharmaceutical excipient**1.3. Details of the supplier of the safety data sheet:**

- **Company** **Finar Limited**
184-186/P, Chacharwadi Vasna,
Sarkhej-Bavla Highway,
Ta.: Sanand, Dist.: Ahmedabad-382110, Gujarat, India.
Web: www.finarchemicals.com
- **E-Mail Address** safety.finar@aceto.com; info.finar@aceto.com

1.4. Emergency Telephone Number:

- For Emergency contact on: +91 - 2717 - 616 717

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SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture:

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

2.2. Label Elements:

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

2.3. Other Hazards:

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances: Urea

3.2. Mixtures:

Component	CAS-No	EC-No.	Weight %
Urea	57-13-6	200-315-5	>95

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures:

- **If inhaled**

After inhalation: fresh air.

- **If Contact with skin**

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

- **In case of eye contact**

After eye contact: rinse out with plenty of water. Remove contact lenses.

- **If swallowed**

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

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.

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

No data available

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media:

Suitable Extinguishing Media- Use water, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2. Special hazards arising from the substance or mixture:

Carbon oxides

Nitrogen oxides (NO_x)

Combustible.

Development of hazardous combustion gases or vapours possible in the event of fire.

5.3. Advice for firefighters:

In the event of fire, wear self-contained breathing apparatus.

5.4 Further Information:

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.

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:

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4. Reference to other sections:

For disposal see Sections 13.

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SECTION 7: HANDLING AND STORAGE**7.1. Precautions for 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.

7.2. Conditions for safe storage, including any incompatibilities:**Storage conditions**

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

Incompatible Materials.

Strong oxidizing agents.

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:****Ingredients with workplace control parameters****8.2. Exposure Controls:****Personal Protective Equipment:****- Eye & Face Protection-**

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

- Hand Protection -

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact: -

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested:KCL 741 Dermatril® L

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the

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designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Splash contact: -

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: KCL 741 Dermatril® L

- **Respiratory Protection-**

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type P1

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

- **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:** White
- **Physical State:** Powder
- **Odor:** Ammonia like
- **Odor Threshold:** No data available
- **pH:** 7.5 – 9.5 10% aq solution
- **Melting Point:** 132°C - 135 °C
- **Critical Temperature:** No data available
- **Vapor Pressure:** 1.25 mm Hg @ 25 °C
- **Relative Density:** No data available

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- **Specific Gravity / Density:** No data available
- **Auto-Ignition Temperature:** No data available
- **Decomposition Temperature:** > 132°C
- **Volatility:** No data available
- **Bulk Density:** 720-760 kg/m³
- **Viscosity, dynamic:** No data available
- **Viscosity, Kinematic:** No data available
- **Water/Oil Dist. Co eff.:** No data available
- **Partition Co-efficient: n-octanol/Water:** log Pow: < -1.73 at 22 °C - Regulation (EC) No. 440/2008, Annex, A.8 - Bioaccumulation is not expected.
- **Ionicity (in Water):** No data available
- **Lower Explosion Limit:** No data available
- **Upper Explosion Limit:** No data available
- **Boiling Point/Range:** No data available
- **Flash Point:** No data available
- **Water Solubility:** 624 g/l at 20 °C

9.2. Other information:

- **Molecular Formula:** CH₄N₂O
- **Molecular Weight:** 60.06 g/mol

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity:

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

10.2. Chemical stability:

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

10.3. Possibility of hazardous reactions:

Exothermic reaction with:

metallic chlorides

Chlorites

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- chromates/perchromates
- Fluorine
- nitrates
- strong oxidising agents
- hydrogen peroxide
- Generates dangerous gases or fumes in contact with:
- bases
- chlorinated solvents
- Risk of explosion/exothermic reaction with:
- ammonium nitrate
- calcium hypochlorite
- Chlorine
- chromyl chloride
- Nitroso compound
- sodium hypochlorite
- nitrosyl compounds
- phosphorus pentachloride
- perchlorates
- nitrites
- Nitro compounds

10.4. Conditions to avoid:

Incompatible products. Excess heat. Avoid dust formation. Protect from moisture.

10.5. Incompatible materials:

Strong oxidizing agents

10.6. Hazardous decomposition products:

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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Remarks: (RTECS)

Symptoms: Nausea, Vomiting

Inhalation: No data available

Dermal: No data available

Skin irritation

Skin - Rabbit

Result: No skin irritation - 4 h

(OECD Test Guideline 404)

Eye irritation

Eyes - Rabbit

Result: slight irritation

(OECD Test Guideline 405)

Sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Teratogenicity

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

11.2 Further Information:

RTECS: YR6250000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Substances which occur in nature

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No toxic effects are to be expected when the product is handled appropriately.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity:

Toxicity to fish

No data available

Toxicity to daphnia and other aquatic invertebrates

No data available

Toxicity to algae

Ex - Scenedesmus quadricauda (Green algae) - > 10.000 mg/l – 8 d Remarks: (Lit.) (urea)

12.2 Persistence and degradability:

No data available

12.3 Bioaccumulate potential:

No data available

12.4 Mobility in soil:

No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects:

Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

13.1 Waste treatment 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.

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SECTION 14: Transport information

	Land transport (ADR/RID)	Air transport (IATA)	Sea transport (IMDG)
14.1 UN number	-		
14.2 Proper shipping name	Not dangerous goods		
14.3 Class	-		
14.4 Packing group	-		
14.5 Environmentally hazardous	-		
14.6 Special precautions for user	No	No	No
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code			
Not Relevant			

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment:

For this product a chemical safety assessment was not carried out.

SECTION 16: Other information

Training advice

Provide adequate information, instruction and training for operators.

References: Not available

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