

**Material Safety Data Sheet**

According to EU Regulation 1907/2006 in the current version

Date 10.01.2016

Version 2.0

UREA**1. Identification of the substance/preparation and the company**

Trade name: Urea
Utilization: Cosmetic raw material
Supplier company: **Elemental SRL**, Piata Cazarmii no.15, 410188-Oradea, jud.Bihor, Romania
identification: Tel/Fax: +40259-436.755, office@elemental.eu
Emergency: RO: numar national pentru cazuri de urgenta: 021 3183606 Institutul de Sanatate Publica Bucuresti. International emergency number: +49 180 2273-112

2. Hazards Identification**2.1 Classification of the substance or mixture**

This substance is not classified as dangerous according to European Union legislation.

2.2 Label elements Labelling (REGULATION (EC) No 1272/2008)

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

2.3 Other hazards

None known.

3. Composition / Information on ingredients**3.1 Substance**

Formula $\text{CO}(\text{NH}_2)_2$ $\text{CH}_4\text{N}_2\text{O}$ (Hill) EC-No. 200-315-5 Molar mass 60,06 g/mol

Remarks: No disclosure requirement according to Regulation (EC) No. 1907/2006.

3.2 Mixture

Not applicable

4. First Aid**4.1 Description of first aid measures**

After inhalation: fresh air.

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

After eye contact: rinse out with plenty of water.

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

Nausea, Vomiting, Cough, Shortness of breath

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

5. Fire-fighting Measures**5.1 Extinguishing media**

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media: For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible. Ambient fire may liberate hazardous vapours. Fire may cause evolution of: Ammonia, nitrous gases

5.3 Advice for firefighters

Special protective equipment for firefighters: Stay in danger area only with self-contained breathing apparatus.



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Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. Further information: Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system

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.

Advice for emergency responders: Protective equipment see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials 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 Indications about waste treatment see section 13.

7. Handling and Storage

7.1 Precautions for safe handling

Advice on safe handling: no special precautions.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions: Tightly closed container, in a cool dry place.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1 no other specific uses are stipulated.

8. Exposure Controls and Personal Protection

8.1 Control parameters

Derived No Effect Level (DNEL)

Worker DNEL, longterm Systemic effects inhalation 292 mg/m³

Worker DNEL, longterm Systemic effects dermal 580 mg/kg Body weight

Worker DNEL, acute Systemic effects inhalation 292 mg/m³

Worker DNEL, acute Systemic effects dermal 580 mg/kg Body weight

Consumer DNEL, longterm Systemic effects inhalation 125 mg/m³

Consumer DNEL, longterm Systemic effects dermal 580 mg/kg Body weight

Consumer DNEL, longterm Systemic effects oral 42 mg/kg Body weight

Consumer DNEL, acute Systemic effects inhalation 125 mg/m³

Consumer DNEL, acute Systemic effects dermal 580 mg/kg Body weight

Consumer DNEL, acute Systemic effects oral 42 mg/kg Body weight

Predicted No Effect Concentration (PNEC) PNEC: Fresh water 0,047 mg/l

8.2 Exposure controls

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See section 7.

Individual protection measures



Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of



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the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Eye/face protection: Safety glasses recommended.

Hand protection: Glove material: Nitrile rubber Glove thickness: 0,11 mm Break through time: > 480. The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374. 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.

Respiratory protection: required when dusts are generated. Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances. 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.

9. Physical and Chemical Properties

Appearance:	solid beads
Colour:	white
Odour:	ammoniacal
pH at 100 g/l 20°C:	ca.9
Bulk density:	720 - 760 kg/m ³
Melting point:	133 °C Method: DIN 53181
Boiling point & range:	decomposition below boiling point
Flash point:	not applicable
Solubility:	in water ca. 1.000 g/l at 20 °C
Density:	1,34 g/cm ³ at 20 °C
Vapour pressure:	< 0,1 hPa at 20 °C
Flamability:	the product is not flammable
Explosion limit:	not classified as explosive
Decomposition temperature:	> 132 °C

10. Stability and Reactivity

10.1 Reactivity: See section 10.3

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, chromates/perchromates, Fluorine, nitrates, strong oxidising agents, hydrogen peroxide, titanium tetrachloride.

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: Strong heating (decomposition).

10.5 Incompatible materials: no relevant information available.

10.6 Hazardous decomposition products in the event of fire: See section 5.

11. Toxicological Information

11.1 Information on toxicological effects



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11.1 Information on toxicological effects

Acute oral toxicity: LD50 Rat: 8.471 mg/kg (RTECS)

Symptoms: Nausea, Vomiting

Acute inhalation toxicity: This information is not available.

Acute dermal toxicity: LD50 Rat: 8.200 mg/kg (IUCLID)

Skin irritation - Rabbit Result: No irritation (IUCLID)

Eye irritation - Rabbit Result: No eye irritation (IUCLID)

Sensitisation - Human experience Result: negative (IUCLID)

Germ cell mutagenicity

Genotoxicity in vitro - Ames test Result: negative (IUCLID)

Carcinogenicity: This information is not available.

Reproductive toxicity: This information is not available.

Teratogenicity: This information is not available.

Specific target organ toxicity - single exposure: This information is not available.

Specific target organ toxicity - repeated exposure: This information is not available.

Aspiration hazard: This information is not available.

11.2 Further information

Substances which occur in nature. No toxic effects are to be expected when the product is handled appropriately.

Handle in accordance with good industrial hygiene and safety practice.

12. Ecological Information

12.1 Toxicity

Toxicity to fish: LC50 *Leuciscus idus* (Golden orfe): > 6.810 mg/l; 96 h (IUCLID)

Toxicity to daphnia and other aquatic invertebrates: EC50 *Daphnia magna* (Water flea): > 10.000 mg/l; 24 h (IUCLID).

Toxicity to algae: IC5 *Scenedesmus quadricauda* (Green algae): > 10.000 mg/l; 7 d (Lit.) (maximum permissible toxic concentration).

Toxicity to bacteria: EC5 *Pseudomonas putida*: > 10.000 mg/l; 16 h (Lit.) (maximum permissible toxic concentration).

12.2 Persistence and degradability

Biodegradability: 96 %; 16 d OECD Test Guideline 302B Readily eliminated from water

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water log Pow: -1,59 (25 °C) OECD Test Guideline 107 Bioaccumulation is not expected.

12.4 Mobility in soil: No information available.

12.5 Results of PBT and vPvB assessment: Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

12.6 Other adverse effects: Additional ecological information- Discharge into the environment must be avoided

13. Disposal Considerations

Recommendation: Must be disposed of in compliance with the respective national regulations.

14. Transport Information

General recommendations: Not classified as dangerous in the meaning of transport regulations.

UN no: not classified

Road (ADR/RID): not classified

Air (IATA/ICAO): not classified

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Sea (IMDG): not classified

Special precautions for user: See section 6-8

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC: not relevant

15. Additional Regulatory Information

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

EU regulations - Major Accident Hazard: SEVESO III Legislation: Not applicable

National legislation - Storage class: 10 - 13. Dust explosion class: St1

15.2 Chemical Safety Assessment

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

16. Other Information

Training advice: Provide adequate information, instruction and training for operators.

Labelling (67/548/EEC or 1999/45/EC): The product does not need to be labelled in accordance with EC directives or respective national laws.

Disclaimer:

This material safety data sheet does not constitute a guarantee of the properties of the product and is not a contractual legal report. The information is given in good faith on the basis of our best knowledge of the product at the indicated time. However, we cannot accept responsibility or liability for any consequences arising from its use, no warranty for correctness and completeness is given. We caution the users against the incurred possible risks when the product is used at other ends than the use for which it was initially planned. It is the user's responsibility during handling, storage and product use to consult the main regulatory texts in force regarding workers and environment protection.