

Safety Data Sheet
according to 1907/2006/EC, Article 31

Printing date 25.08.2007

Revision: 25.08.2007

1 Identification of substance:

- **Product details:**
- **Trade name:** Urea
- **Article number:** 4111, 0345, 0346, 4203, 4206-01, 4203-08, 8642-26, 4204
- **Application of the substance / the preparation**
Chemicals for synthesis
Laboratory chemicals
- **Manufacturer/Supplier:**
Mallinckrodt Baker B.V
P.O.Box 1
7400 AA Deventer
The Netherlands
- **Informing department:**
Quality Systems & Regulatory Affairs
E-mail : sjors.duteweert@covidien.com
- **Emergency information:**
Environment Health & Safety department
during normal opening times (8 am till 5.30 pm) tel: (+31)(0) 570 687500

Tel(+31)(0) 570-687500
Fax(+31)(0) 570-687574
E-mail : jtbaker.nl@covidien.com

2 Hazards identification

- **Hazard designation:** void
- **Information pertaining to particular dangers for man and environment** void

3 Composition/information on ingredients

- **Chemical characterization:**
- **CAS No. Designation:**
57-13-6 Urea
- **Identification number(s):** Elnecs no. 200-315-5
- **EINECS Number:** 200-315-5

4 First aid measures

- **General information** No special measures required.
- **After inhalation** Supply fresh air; consult doctor in case of symptoms.
- **After skin contact** The product is not skin irritating.
- **After eye contact** Rinse opened eye for several minutes under running water.
- **After swallowing** Rinse out mouth and then drink plenty of water.

5 Fire fighting measures

- **Suitable extinguishing agents**
CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- **Protective equipment:** Wear self-contained breathing apparatus.

6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** No special measures required.

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- **Measures for cleaning/collecting:** Collect mechanically.
- **Additional information:** No dangerous materials are released.

7 Handling and storage

- **Handling**
- **Information for safe handling:** Store in cool, dry place in tightly closed containers.
- **Information about protection against explosions and fires:** no special requirements
- **Storage**
- **Requirements to be met by storerooms and containers:** No special requirements.
- **Information about storage in one common storage facility:** Store away from oxidizing agents.
- **Further information about storage conditions:** Store under dry conditions.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with critical values that require monitoring at the workplace:**
- **Additional information:** The lists that were valid during the compilation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**
The usual precautionary measures should be adhered to in handling the chemicals.
- **Breathing equipment:**
Breathing protection recommended.
Filter P2.
- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
Butyl rubber, BR
Chloroprene rubber, CR
Recommended thickness of the material: ≥ 0.7 mm
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Not required.
- **Body protection:** Protective work clothing.

9 Physical and chemical properties:

- **General Information**

Form:	Crystalline powder
Colour:	White
Smell:	Ammonia-like
- **Change in condition**

Melting point/Melting range:	135°C
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· Boiling point/Boiling range:	Not determined
· Flash point:	n/a
· Inflammability (solid, gaseous)	Product is not inflammable.
· Danger of explosion:	Product is not explosive.
· Density at 20°C	1.323 g/cm ³
· Settled apparent density at 20°C	725-760 kg/m ³
· Solubility in / Miscibility with Water at 20°C:	590 g/l
· pH-value (100 g/l) at 20°C:	7.1-8.4
· Segregation coefficient (n-octanol/water) at 25°C:	-1.59 log POW

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** Heat, boiling temperatures.
- **Materials to be avoided:** Strong oxidizers
- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of composition:** Ammonia

11 Toxicological information

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

Oral LD50 14500 mg/kg (rat)

· **Primary irritant effect:**

· **on the skin:** No irritant effect.

· **on the eye:** redness

· **Sensitization:** No sensitizing effect known.

· **Additional toxicological information:**

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

The material is not subject to classification according to EC lists in the last version.

12 Ecological information:

· **Ecotoxicological effects:**

· **Aquatic toxicity:**

EC50/24h >10000 mg/l (daphnia magna)

LC50/96h >6810 mg/l (Orfe, golden (Leuciscus Idus))

· **General notes:**

Water hazard class (D) 1 (Assessment by list): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

13 Disposal considerations

· **Product:**

· **Recommendation** Smaller quantities can be disposed with household garbage.

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- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleaning agent:** Water, if necessary with cleaning agent.

*** 14 Transport information**

- | | |
|---|-----|
| · Land transport ADR/RID and GGVS/GGVE (cross-border/domestic) | n/a |
| · ADR/RID-GGVS/E Class: | - |
| · Maritime transport IMDG/GGVSea: | |
| · IMDG/GGVSea Class: | - |
| · Air transport ICAO-TI and IATA-DGR: | |
| · ICAO/IATA Class: | - |

*** 15 Regulatory information**

- **Designation according to EC guidelines:**
The product is not subject to identification regulations under EC Directives and the Ordinance on Hazardous Materials (GefStoffV).
The material is not subject to classification according to EC lists and other sources of literature known to us.
Observe the normal safety regulations when handling chemicals

*** 16 Other information:**

- These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*
- **Department issuing data specification sheet:** Quality Assurance Department
 - **Contact:** Sjors duteweert
 - *** Data compared to the previous version altered.**