

## Urea

33247H-5KG

Version 1.3

Revision Date 30.08.2022

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

#### 1.1. Product identifier

Product name : Urea

SDS-number : 000000021461

Type of product : Substance

Remarks : Document according to Art. 32 of Regulation (EC) 1907/2006.

Chemical name : Urea

CAS-No. : 57-13-6

REACH Registration Number : no data available

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

Use of the Substance/Mixture : Laboratory chemicals

Uses advised against : none

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

Company	: Honeywell Specialty Chemicals Seelze GmbH Wunstorfer Straße 40 30926 Seelze Germany	Honeywell International, Inc. 115 Tabor Road Morris Plains, NJ 07950-2546 USA
Telephone	: (49) 5137-999 0	
For further information, please contact:	: SafetyDataSheet@Honeywell.com	

#### 1.4. Emergency telephone number

Emergency telephone number : +1-703-527-3887 (ChemTrec-Transport)  
+1-303-389-1414 (Medical)

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Country based Poison : see chapter 15.1  
Control Center

### SECTION 2: Hazards identification

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

##### REGULATION (EC) No 1272/2008

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

#### 2.2. Label elements

##### REGULATION (EC) No 1272/2008

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

#### 2.3. Other hazards

Does not require a hazard warning label, but the normal safety precautions for handling of chemicals must be observed. Results of PBT and vPvB assessment, see chapter 12.5.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Chemical name	CAS-No. Index-No. REACH Registration Number EC-No.	Classification 1272/2008	Concentration	Remarks
Urea	57-13-6 200-315-5		100 %	N.C.*

N.C.\* - Non-hazardous substance - for information only

#### 3.2. Mixture

Not applicable

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Occupational Exposure Limit(s), if available, are listed in Section 8.  
For the full text of the H-Statements mentioned in this Section, see Section 16.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

*General advice:*

First aider needs to protect himself. Move out of dangerous area. Take off all contaminated clothing immediately.

*Inhalation:*

If inhaled, remove to fresh air. Call a physician if irritation develops or persists.

*Skin contact:*

After contact with skin, wash immediately with plenty of water.

*Eye contact:*

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

*Ingestion:*

Immediately give large quantities of water to drink. If accidentally swallowed obtain immediate medical attention.

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

No data available

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

Treat symptomatically.

Treat symptomatically.

See Section 11 for more detailed information on health effects and symptoms.

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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

*Suitable extinguishing media:*

Water spray  
Foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry powder

*Extinguishing media which shall not be used for safety reasons:*

High volume water jet

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

Fire may cause evolution of:  
Nitrogen oxides (NO<sub>x</sub>)  
Carbon oxides  
Ammonia

#### 5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.  
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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### SECTION 6: Accidental release measures

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

Ensure adequate ventilation.

#### 6.2. Environmental precautions

Should not be released into the environment.

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

Use mechanical handling equipment.  
Pick for disposal in tightly closed containers

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### 6.4. Reference to other sections

For personal protection see section 8.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

*Advice on protection against fire and explosion:*  
Normal measures for preventive fire protection.

*Hygiene measures:*  
General industrial hygiene practice.

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

*Further information on storage conditions:*  
Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place.  
Protect from atmospheric moisture and water. Protect from warmth.

### 7.3. Specific end use(s)

no additional data available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

#### DNEL/ PNEC-Values

Component	End-use/impact	Exposure duration	Value	Exposure routes	Remarks
Urea	Workers / Long-term systemic effects		292 mg/m3	Inhalation	
Urea	Workers /		292 mg/m3	Inhalation	

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	Acute systemic effects				
Urea	Workers / Long-term systemic effects		580mg/kg bw/d	Skin contact	
Urea	Workers / Acute systemic effects		580mg/kg bw/d	Skin contact	
Urea	Consumers / Long-term systemic effects		125 mg/m3	Inhalation	
Urea	Consumers / Acute systemic effects		125 mg/m3	Inhalation	
Urea	Consumers / Long-term systemic effects		580mg/kg bw/d	Skin contact	
Urea	Consumers / Acute systemic effects		580mg/kg bw/d	Skin contact	
Urea	Consumers / Long-term systemic effects		42mg/kg bw/d	Ingestion	
Urea	Consumers / Acute systemic effects		42mg/kg bw/d	Ingestion	

Component	Environmental compartment / Value	Remarks
Urea	Fresh water: 0,47 mg/l	Assessment factor: 100

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### 8.2. Exposure controls

#### Occupational exposure controls

The Personal Protective Equipment must be in accordance with EN standards:respirator EN 136, 140, 149; safety glasses EN 166; protective suit: EN 340, 463, 468, 943-1, 943-2; gloves EN 374, 511; safety shoes EN-ISO 20345.

Do not breathe dust.

Keep away from food, drink and animal feedingstuffs.

Wash hands before breaks and at the end of workday.

#### Personal protective equipment

##### *Respiratory protection:*

In the case of dust or aerosol formation use respirator with an approved filter.

##### *Hand protection:*

Glove material: Natural Latex

Break through time: > 480 min

Glove thickness: 0,6 mm

Lapren®706

Gloves must be inspected prior to use.

Replace when worn.

Remarks:Supplementary note: The specifications are based on information and tests from similar substances by analogy.

Due to varying conditions ( e.g.temperature or other strains) it must be considered that the usage of a chemical protective glove in practice may be much shorter than the permeation time determined in accordance with EN 374.

Since actual conditions of practical use often deviate from standardised conditions according EN 374 the glove manufacturer recommends to use the chemical protective glove in practice not longer than 50% of the recommended permeation time.

Manufacturer's directions for use should be observed because of great diversity of types .

Suitable gloves tested according EN 374 are supplied e.g. from KCL GmbH, D-36124 Eichenzell, Vertrieb@kcl.de

##### *Eye protection:*

Safety glasses

##### *Skin and body protection:*

Protective suit

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### Environmental exposure controls

Handle in accordance with local environmental regulations and good industrial practices.

## SECTION 9: Physical and chemical properties

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

Physical state	: solid
Colour	: white
Odour	: weak ammoniacal
Melting point (decomposition)	: 133 - 134 °C
Flammability	: The product is not flammable.
Upper explosion limit	: Not applicable
Lower explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No decomposition if used as directed.
pH	: 9 - 10 Concentration: 100 g/l at 20 °C
Auto-ignition temperature	: not auto-flammable
Viscosity, kinematic	: No data available
Water solubility	: ca. 1.080 g/l at 20 °C
Partition coefficient: n-	: log Pow -1,59



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octanol/water at: 25 °C

Vapour pressure : No data available

Density : ca. 1,32 g/cm<sup>3</sup>  
at 20 °C

Bulk density : ca. 720 - 830 kg/m<sup>3</sup>

Relative vapour density : No data available

### 9.2 Other Information

Evaporation rate : No data available

Viscosity, dynamic : No data available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No data available

### 10.2. Chemical stability

No decomposition if used as directed.

### 10.3. Possibility of hazardous reactions

No data available

### 10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.

### 10.5. Incompatible materials

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Strong oxidizing agents  
Nitrates  
Alkalis

### 10.6. Hazardous decomposition products

Ammonia  
Nitrous gases  
Carbon dioxide (CO<sub>2</sub>)  
Carbon monoxide

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

*Acute oral toxicity:*

LD<sub>50</sub>

Species: Rat

Value: 14.300 mg/kg

*Acute dermal toxicity:*

No data available

*Acute inhalation toxicity:*

No data available

*Skin irritation:*

Species: Rabbit

Classification: non-irritant

*Eye irritation:*

Species: Rabbit

Classification: non-irritant

*Respiratory or skin sensitisation:*

No data available

*Aspiration hazard:*

No data available

### 11.2. Information on other hazards

Endocrine disrupting properties

No data available

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*Other information:*

Not mutagenic in Ames Test

### SECTION 12: Ecological information

#### 12.1. Toxicity

*Toxicity to fish:*

LC50

Species: Leuciscus idus (Golden orfe)

Value: > 6.810 mg/l

Exposure time: 96 h

*Toxicity to aquatic plants:*

No data available

*Toxicity to aquatic invertebrates:*

LC50

Species: Daphnia magna (Water flea)

Value: > 10.000 mg/l

Exposure time: 48 h

#### 12.2. Persistence and degradability

*Biodegradability:*

DOC decrease

Biodegradation: 96 %

Result: Readily biodegradable.

#### 12.3. Bioaccumulative potential

Bioaccumulation is unlikely.

#### 12.4. Mobility in soil

No data available

#### 12.5. Results of PBT and vPvB assessment

No data available

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### 12.6. Endocrine disrupting properties

No data available

### 12.7. Other adverse effects

Chemical Oxygen Demand : Value: < 10 mg/g  
(COD)

Biologically degradable, when diluted may be degraded in biological purification plants.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

*Product:*

Dispose according to legal requirements.

*Packaging:*

Legal requirements are to be considered in regard of reuse or disposal of used packaging materials

*Further information:*

Provisions relating to waste:

EC Directive 2006/12/EC; 2008/98/EEC

Regulation No. 1013/2006

For personal protection see section 8.

## SECTION 14: Transport information

### 14.1 UN number

ADR/RID:Not dangerous goods    IMDG:Not dangerous goods    IATA:Not dangerous goods

### 14.2 UN proper shipping name

ADR/RID:Not dangerous goods

IMDG:Not dangerous goods

IATA:Not dangerous goods

### 14.3 Transport hazard class(es)

### 14.4 Packaging group

### 14.5 Environmental hazards

ADR/RID:no

Marine pollutant: no

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### 14.6 Special precautions for user

No data available

### 14.7 Maritime transport in bulk according to IMO instruments

No data available

## SECTION 15: Regulatory information

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

Basis	Value	Remarks
Substances of very high concern (SVHC)		This product does not contain substances of very high concern according to Regulation (EC) No Article 57 above the respective regulatory 1907/2006 (REACH), concentration limit of $\geq 0.1\%$ (w/w).

### Poison Control Center

Country	Phone Number
Austria	+4314064343
Belgium	070 245245
Bulgaria	(+359)29154233
Croatia	(+3851)23-48-342
Cyprus	+357 2240 5611
Czech Republic	+420224919293; +420224915402
Denmark	82121212
Estonia	16662; (+372)6269390
Finland	9471977
France	+33(0)145425959
Greece	+30 210 779 3777
Hungary	(+36-80)201-199

Country	Phone Number
Liechtenstein	+41 442515151
Lithuania	+370532362052
Luxembourg	070245245; (+352)80002-5500
Malta	+356 2395 2000
Netherlands	030-2748888
Norway	22591300
Poland	+48 42 25 38 400
Portugal	800250250
Romania	+40 21 318 3606
Slovakia (NTIC)	+421 2 54 774 166
Slovenia	+386 1 400 6051
Spain	+34915620420

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Iceland	5432222	Sweden	112 (begär Gifinformation); +46104566786
Ireland	+353(1)8092166	Switzerland	145
Italy	0382 24444	United Kingdom	(+44) 844 892 0111
Germany	Berlin : 030/19240		
	Bonn : 0228/19240		
	Erfurt : 0361/730730		
	Freiburg : 0761/19240		
	Göttingen : 0551/19240		
	Homburg : 06841/19240		
	Mainz : 06131/19240		
	Munich : 089/19240		
Latvia	+37167042473		

### Other inventory information

US. Toxic Substances Control Act  
On TSCA Inventory

Australia. Industrial Chemicals Act (AIC), as amended  
On the inventory, or in compliance with the inventory

Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL)  
All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List  
On the inventory, or in compliance with the inventory

Korea. Existing Chemicals Inventory (KECI)  
On the inventory, or in compliance with the inventory

Philippines. Inventory of Chemicals and Chemical Substances (PICCS)  
On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances (IECSC)  
On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand

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On the inventory, or in compliance with the inventory

Taiwan Chemical Substance Inventory (TCSI)

On the inventory, or in compliance with the inventory

### 15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

### Further information

All directives and regulations refer to amended versions.

Vertical lines in the left hand margin indicate a relevant amendment from the previous version.

Abbreviations:

EC European Community

CAS Chemical Abstracts Service

DNEL Derived no effect level

PNEC Predicted no effect level

vPvB Very persistent and very bioaccumulative substance

PBT Persistent, bioaccumulative und toxic substance

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