





# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Issue date: 09/06/2020 Revision date: 16/02/2024 Supersedes version of: 09/06/2020 Version: 2.0

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

#### 1.1. Product identifier

Product form : Substance

Substance name : UREA REFERENCE STANDARD, OAS

Chemical name : Urea
EC-No. : 200-315-5
CAS-No. : 57-13-6
Product code : R66017
Product group : End product
Other means of identification : Urea

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

#### 1.2.1. Relevant identified uses

Main use category : Professional use
Use of the substance/mixture : Laboratory chemicals
Function or use category : Laboratory chemicals

#### 1.2.2. Uses advised against

No additional information available

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

OEA Labs Ltd The Generator Quay House The Gallery Kings Wharf The Quay EX2 4AN Exeter – Devon United Kingdom T +44(0)1579 384174

technical@oealabs.com - oealabs.com

#### 1.4. Emergency telephone number

No additional information available

## **SECTION 2: Hazards identification**

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

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

## Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

## 2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

#### 2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII





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# **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Substance type : Mono-constituent

: UREA REFERENCE STANDARD, OAS Name

CAS-No. : 57-13-6 EC-No. : 200-315-5

Name	Product identifier		Classification according to Regulation (EC) No. 1272/2008 [CLP]
UREA	CAS-No.: 57-13-6 EC-No.: 200-315-5	100	Not classified

#### 3.2. Mixtures

Not applicable

## **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water. First-aid measures after eye contact

: Rinse eyes with water as a precaution.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

No additional information available

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

Treat symptomatically.

## **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

# 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

## **SECTION 6: Accidental release measures**

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

## 6.1.1. For non-emergency personnel

**Emergency procedures** : Ventilate spillage area.





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#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment.

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

Methods for cleaning up : Mechanically recover the product.

Other information : Dispose of materials or solid residues at an authorized site.

## 6.4. Reference to other sections

For further information refer to section 13.

## **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the

product.

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

Storage conditions : Store in a well-ventilated place. Keep cool.

## 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

LIDEA DEFEDENCE STANDARD, OAS (57.42.6)		
UREA REFERENCE STANDARD, OAS (57-13-6)		
Bulgaria - Occupational Exposure Limits		
Local name	Карбамид	
OEL TWA	10 mg/m³	
Regulatory reference	Наредба № 13 от 30.12.2003 г. за защита на работещите от рискове, свързани с експозиция на химични агенти при работа (изм. и доп. ДВ. бр. 47 от 2021 г., в сила от 04.06.2021 г.)	
Latvia - Occupational Exposure Limits		
Local name	Urīnviela	
OEL TWA	10 mg/m³	
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325	
Lithuania - Occupational Exposure Limits		
Local name	Urea (karbamidas, šlapalas)	
IPRV (OEL TWA)	10 mg/m³	
Regulatory reference	LIETUVOS HIGIENOS NORMA HN 23:2011 (Nr. V-695/A1-272, 2018-06-12)	













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UREA (57-13-6)		
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## 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

## 8.2. Exposure controls

# 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

## 8.2.2. Personal protection equipment

## Personal protective equipment symbol(s):







## 8.2.2.1. Eye and face protection

## Eye protection:

Safety glasses

## 8.2.2.2. Skin protection

#### Skin and body protection:

Wear suitable protective clothing

## Hand protection:

Protective gloves





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#### 8.2.2.3. Respiratory protection

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

#### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

#### **Environmental exposure controls:**

Avoid release to the environment.

# **SECTION 9: Physical and chemical properties**

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

Physical state : Solid Colour : white.

Molecular mass : 60.06 g/mol Source: ChemIDplus

Odour : Perceptible odour. : Not available Odour threshold : 134 °C Melting point : Not applicable Freezing point Boiling point : Not available Flammability : Non flammable. **Explosive limits** : Not applicable : Not applicable Lower explosion limit Upper explosion limit : Not applicable Flash point : Not applicable Auto-ignition temperature : Not applicable Decomposition temperature : Not available рΗ : 7.2 Source: HSDB pH solution : Not available

Viscosity, dynamic : 1.78 cP Source: OECD Screening Information Data Set Solubility : Water: 545000 mg/l at 25 °C Source: ChemIDplus

: Not applicable

Partition coefficient n-octanol/water (Log Kow) : Not available

Partition coefficient n-octanol/water (Log Pow) : -2.11 Source: HSDB

Vapour pressure : 0.000012 mm Hg Temp.: 25 °C

Vapour pressure at 50°C : Not available
Density : Not available
Relative density : 1.323 Source: HSDB

Relative vapour density at 20°C : 2.07 Source: Calculated value based on molecular weight and mean molecular weight of air

Particle size : Not available

## 9.2. Other information

Viscosity, kinematic

# 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

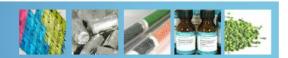
No additional information available

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.





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#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## **SECTION 11: Toxicological information**

## 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified Acute toxicity (dermal) : Not classified Acute toxicity (inhalation) : Not classified

UREA RE	FERENCE	STANDARD,	OAS (57-1	13-6)

LD50 oral rat 8470 mg/kg Source: GESTIS

#### **UREA (57-13-6)**

LD50 dermal

LD50 oral rat 8470 mg/kg Source: GESTIS

Skin corrosion/irritation : Not classified

pH: 7.2 Source: HSDB

**UREA (57-13-6)** 

pH 7.2 Source: HSDB

Serious eye damage/irritation : Not classified

pH: 7.2 Source: HSDB

8200 mg/kg

## **UREA (57-13-6)**

pH 7.2 Source: HSDB

Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

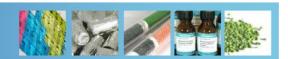
## **UREA REFERENCE STANDARD, OAS (57-13-6)**

Viscosity, kinematic Not applicable

## 11.2. Information on other hazards

No additional information available





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## **SECTION 12: Ecological information**

## 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse

effects in the environment.

Hazardous to the aquatic environment, short-term

acute)

: Not classified

Hazardous to the aquatic environment, long-term

(chronic)

: Not classified

Not rapidly degradable

Not rapidly degradable		
UREA REFERENCE STANDARD, OAS (57-13-6)		
LC50 - Fish [1]	22500 mg/l Source: OECD Screening Information Data Set	
EC50 72h - Algae [1]	24541.9 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)	
EC50 96h - Algae [1]	42184 mg/l Source: Ecological Structure Activity Relationships	
UREA (57-13-6)		
LC50 - Fish [1]	22500 mg/l Source: OECD Screening Information Data Set	
EC50 - Other aquatic organisms [1]	3910 mg/l	
EC50 72h - Algae [1]	24541.9 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)	
EC50 96h - Algae [1]	42184 mg/l Source: Ecological Structure Activity Relationships	

## 12.2. Persistence and degradability

No additional information available

## 12.3. Bioaccumulative potential

UREA REFERENCE STANDARD, OAS (57-13-6)		
Partition coefficient n-octanol/water (Log Pow) -2.11 Source: HSDB		
UREA (57-13-6)		
Partition coefficient n-octanol/water (Log Pow)	-2.11 Source: HSDB	

## 12.4. Mobility in soil

No additional information available

# 12.5. Results of PBT and vPvB assessment

No additional information available

# 12.6. Endocrine disrupting properties

No additional information available

## 12.7. Other adverse effects

No additional information available

# **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.





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## **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

## 14.6. Special precautions for user

#### **Overland transport**

Not regulated

# Transport by sea

Not regulated

#### Air transport

Not regulated

## Inland waterway transport

Not regulated

## Rail transport

Not regulated

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

Not applicable

# **SECTION 15: Regulatory information**

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

## 15.1.1. EU-Regulations

# **REACH Annex XVII (Restriction List)**

Not listed on REACH Annex XVII

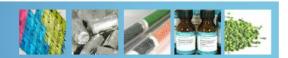
#### **REACH Annex XIV (Authorisation List)**

Not listed on REACH Annex XIV (Authorisation List)

#### **REACH Candidate List (SVHC)**

Not listed on the REACH Candidate List





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#### **PIC Regulation (Prior Informed Consent)**

Not listed on the PIC list (Regulation EU 649/2012)

#### **POP Regulation (Persistent Organic Pollutants)**

Not listed on the POP list (Regulation EU 2019/1021)

#### Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

#### **Explosives Precursors Regulation (2019/1148)**

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

#### **Drug Precursors Regulation (273/2004)**

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.1.2. National regulations

#### Germany

Joint storage table

Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG).

Observe restrictions according Act on the Protection of Young People in Employment

(JArbSchG).

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to AwSV; ID No. 118).

Storage class (LGK, TRGS 510) : LGK 13 - Non-combustible solids.

LGK 1	LGK 2A	LGK 2B	LGK 3	LGK 4.1A
LGK 4.1B	LGK 4.2	LGK 4.3	LGK 5.1A	LGK 5.1B
LGK 5.1C	LGK 5.2	LGK 6.1A	LGK 6.1B	LGK 6.1C
LGK 6.1D	LGK 6.2	LGK 7	LGK 8A	LGK 8B
LGK 10	LGK 11	LGK 12	LGK 13	LGK 10-13

Joint storage not permitted for : LGK 1, LGK 6.2, LGK 7. Joint storage with restrictions permitted for : LGK 4.1A, LGK 5.1C.

Joint storage permitted for : LGK 2A, LGK 2B, LGK 3, LGK 4.1B, LGK 4.2, LGK 4.3, LGK 5.1A, LGK 5.1B, LGK 5.2,

LGK 6.1A, LGK 6.1B, LGK 6.1C, LGK 6.1D, LGK 8A, LGK 8B, LGK 10, LGK 11, LGK 12,

LGK 13, LGK 10-13.

Hazardous Incident Ordinance (12. BImSchV) : Is not subject to the Hazardous Incident Ordinance (12. BImSchV)

#### **Netherlands**

ABM category : B(4) - low hazard for aquatic organisms

SZW-lijst van kankerverwekkende stoffen : The substance is not listed SZW-lijst van mutagene stoffen : The substance is not listed SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed SZW-lijst van reprotoxische stoffen – : The substance is not listed

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid

SZW-lijst van reprotoxische stoffen - Ontwikkeling

: The substance is not listed

**Switzerland** 

Storage class (LK) : NG - Non-hazardous

## 15.2. Chemical safety assessment

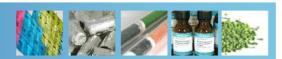
No chemical safety assessment has been carried out

## **SECTION 16: Other information**

## **Abbreviations and acronyms:**

ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways





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Abbreviations and acro	onyms:
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

The classification complies with

: ATP 12

Safety Data Sheet (SDS)\_OEA, EU





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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.