SAFETY DATA SHEET

Urea N 46

The safety data sheet is in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Date issued	28.02.2020

1.1. Product identifier

Product name	Urea N 46
Information on the packaging	Size of packaging: 500 kg

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

Main intended use	PC-FER-3 Soil improvers
Secondary uses	PC-FER-1 Fertilisers
Industrial use	Yes
Professional use	Yes
Consumer use	No

1.3. Details of the supplier of the safety data sheet

Company name	Belor Agro Oy
Postal address	Salorankatu 5-7
Postcode	24240
City	Salo
Country	Finland
Telephone number	+358 500 933 158
Email	info@beloragro.fi
Website	http://www.beloragro.fi
Enterprise No.	FI2132672-0

1.4. Emergency telephone number

Emergency telephone	Telephone number: +358 800 147 111 or +358 9 471 977 Open 24 hours a day. Description: Poison Information Centre (in Finland), P.O. Box 790 (Tukholmankatu 17), 00029 HUS

Identification, comments	Telephone number: 112 Description: Emergency telephone number (in Finland) Please contact the Emergency Centre in your own country, e.g. 112 in European Union countries.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

CLP classification, notes	In accordance with CLP/GHS regulation (EC) No 1272/2008, the product has not been classified as hazardous.

2.2. Label elements

Other label information (CLP)	No labeling. In accordance with current regulations, this product has not been classified as hazardous.

2.3. Other hazards

PBT / vPvB	For results of PBT and vPvB assessment, see point 12.5.
Health effect	Dust in high concentrations may irritate eyes, respiratory system and skin.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents	Notes
Urea	CAS No.: 57-13-6 EC No.: 200-315-5	CLP classification, notes: Not classified.	> 99 %	
Propylene glycol	CAS No.: 57-55-6 EC No.: 200-338-0 REACH Reg. No.: 01-2119456809-23-XXXX	CLP classification, notes: Not classified.	< 0,5 %	2

[2]Substance with a workplace exposure limit

Substance comments	The full text for all hazard statements are displayed in point 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	If inhaled, move exposed person to fresh air and keep at rest. Get medical attention if symptoms persist or are severe.
Skin contact	Remove contaminated clothing. Wash contaminated skin thoroughly with water and soap. Get medical attention if skin irritation persists. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 10 minutes, holding eyelids open. Remove contact lenses, if present and easy to do, and continue rinsing. Get medical attention if eye irritation occurs.

Ingestion	Rinse mouth with water and then drink plenty of water. Do NOT induce vomiting. Get medical advice/attention if you feel unwell.

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

Acute symptoms and effects	Dust may irritate the eyes and the respiratory tract.
Delayed symptoms and effects	None known.

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

Other information	Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Use an extinguishing agent suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	During fire, toxic gases and vapours may be evolved. Carbon dioxide (CO2). Carbon monoxide (CO).

5.3. Advice for firefighters

Personal protective equipment	Wear appropriate protective equipment and self-contained breathing apparatus.
Other information	Avoid inhalation of fire fumes.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal protection measures	Avoid breathing dust. Avoid contact with skin and eyes. Wear appropriate personal protective equipment.

6.2. Environmental precautions

Environmental precautionary measures	Avoid release into drains, sewers or waterways. Keep animals away from large spills.

6.3. Methods and material for containment and cleaning up

Clean up	Collect product with a vacuum cleaner or by brushing. Collect in tightly sealed containers for disposal.

6.4. Reference to other sections

Additional information	Safe handling: see point 7. Personal protective equipment: see point 8. Waste disposal: see point 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Ensure adequate ventilation. Avoid breathing dust. Avoid contact with eyes. Avoid repeated or prolonged contact with skin or clothing. Use appropriate personal protective equipment while handling the product (see point 8).

Protective safety measures

Advice on general occupational hygiene	Handle in accordance with good industrial hygiene and safety practices. Do not eat, drink or smoke when using this product. Wash hands and exposed skin areas before breaks and after handling the product. Wash contaminated clothes before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Conditions to avoid	For incompatible materials see point 10.5.

Conditions for safe storage

Technical measures and storage conditions	Store in a cool, dry, well-ventilated area.

7.3. Specific end use(s)

Specific use(s)	The use stated in section 1.2.

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Substance	Identification	Exposure limits	TWA Year
Propylene glycol	CAS No.: 57-55-6	Country of origin: United Kingdom Limit value (8 h) : 150 ppm Limit value (8 h) : 474 mg/m³ Comments: total vapour and particulates Limit value (8 h) : 10 mg/m³ Comments: particulates	
Dusts, respirable dust		Limit value (8 h) : 4 mg/m³	
Dusts, total inhalable dust		Limit value (8 h) : 10 mg/m³	
Control parameters comments	Compliance with the accepted occupational exposure limits values should be controlled on a regular basis.		

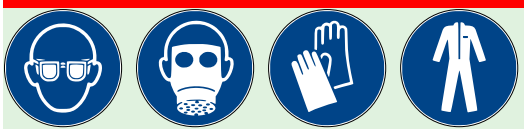
DNEL / PNEC

Substance	Urea
DNEL	**Group:** Professional **Value:** 292 mg/m³ **Comments:** Acute / Long-term inhalation (systemic) **Group:** Professional **Value:** 580 mg/kg bw/day

	Comments: Acute / Long-term dermal (systemic) **Group:** Consumer **Value:** 125 mg/m³ **Comments:** Acute / Long-term inhalation (systemic) **Group:** Consumer **Value:** 580 mg/kg bw/day **Comments:** Acute / Long-term dermal (systemic) **Group:** Consumer **Value:** 42 mg/kg bw/day **Comments:** Acute / Long-term oral (systemic)
PNEC	**Route of exposure:** Freshwater **Value:** 0,047 mg/l **Route of exposure:** Saltwater **Value:** 0,047 mg/l

8.2. Exposure controls

Safety signs



Precautionary measures to prevent exposure

Technical measures to prevent exposure	Ensure adequate ventilation.

Eye / face protection

Suitable eye protection	Wear suitable protective goggles if there is a risk of eye contact or conditions are dusty.

Hand protection

Suitable gloves type	Wear appropriate chemical resistant safety gloves (EN 374).
Suitable materials	Contact glove manufacturer for specific advice on glove selection.

Skin protection

Suitable protective clothing	Wear appropriate protective clothing.

Respiratory protection

Respiratory protection necessary at	If it is not possible to reduce exposure levels to below exposure limit values by ventilation or if dust forms, use appropriate respirator.
Recommended type of equipment	Dust mask/respirator. Particle filter (type P2/P3). Consult with respirator manufacturer to determine respirator selection, use, and limitations.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Solid: granular
Odour	Unknown.
Odour limit	Comments: Unknown.
pH	Comments: Unknown.
Melting point / melting range	Value: 133,3 °C Comments: Urea, at atmospheric pressure.
Boiling point / boiling range	Comments: Urea decomposes before the boiling point is reached.
Flash point	Comments: Not applicable.
Evaporation rate	Comments: Not applicable.
Flammability (solid, gas)	Not flammable.
Explosion limit	Comments: Unknown.
Vapour pressure	Value: 0,002 Pa Comments: Urea Temperature: 25 °C
Vapour density	Comments: Not applicable.
Density	Value: 1,33 g/cm³ Comments: Urea Temperature: 20 °C
Solubility	Medium: Water Value: 624 000 mg/l Comments: Urea Temperature: 20 °C
Partition coefficient: n-octanol/ water	Value: -1.73 Comments: Urea Temperature: 20 °C
Spontaneous combustability	Comments: Unknown.
Decomposition temperature	Comments: Unknown.
Viscosity	Comments: Not applicable.
Explosive properties	Not classified as explosive.
Oxidising properties	Not classified as oxidising.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Not reactive under normal use and storage conditions.

10.2. Chemical stability

Stability	Chemically stable under normal storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No dangerous reactions under normal use and storage conditions.

10.4. Conditions to avoid

Conditions to avoid	Protect from moisture and heat.

10.5. Incompatible materials

Materials to avoid	Strong acids. Strong bases. Strong oxidizing agents.

10.6. Hazardous decomposition products

Hazardous decomposition products	Harmful compounds may be evolved during fire. Carbon monoxide (CO). Carbon dioxide (CO2). Nitrogen oxides (NOx).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Substance	Urea
Acute toxicity	**Type of toxicity:** Acute **Effect tested:** LD50 **Route of exposure:** Oral **Value:** 14300 mg/kg **Animal test species:** Rat
Other toxicological data	There is no toxicological data available about the product as such. The product is not classified as acutely toxic.

Other information regarding health hazards

Assessment of skin corrosion / irritation, classification	The product is not classified as irritant or corrosive to skin.
Assessment of eye damage or irritation, classification	The product is not classified as damaging or irritating to eyes.
Sensitisation	The product is not classified as a respiratory or skin sensitiser.
Mutagenicity	The product is not classified as a mutagen.
Assessment of carcinogenicity, classification	The product is not classified as a carcinogen.
Reproductive toxicity	The product is not classified as toxic to reproduction.
Assessment of specific target organ toxicity - single exposure, classification	The product is not classified as toxic to specific target organs at a single exposure.
Assessment of specific target organ toxicity - repeated exposure, classification	The product is not classified as toxic to specific target organs at repeated exposure.
Assessment of aspiration hazard, classification	The product is not classified as an aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity	There is no ecotoxicological data available about the product as such. The product is not classified as hazardous to the environment. Avoid uncontrolled release to the environment.

12.2. Persistence and degradability

Substance	Urea
Biodegradability	**Value:** 96 % **Comments:** Readily biodegradable. **Test period:** 16 day(s)

12.3. Bioaccumulative potential

Bioaccumulation, evaluation	Unlikely to bioaccumulate.

12.4. Mobility in soil

Adsorption coefficient	Value: 0,037 - 0,064 Comments: Urea

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	Chemical safety assessment has not been performed for the product, no information available about ingredients.

12.6. Other adverse effects

Additional ecological information	None reported.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate methods of disposal for the contaminated packaging	After usage, empty the packing completely.
Other information	Dispose of in compliance with local and national regulations.

SECTION 14: Transport information

14.1. UN number

Comments	The product is not classified for transportation.

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

14.5. Environmental hazards

IMDG Marine pollutant	No.

14.6. Special precautions for user

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Transport in bulk (yes/no)	No

SECTION 15: Regulatory information

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

Legislation and regulations	Regulation (EU) 2019/1009 laying down rules on the making available on the market of EU fertilising products and amending Regulations (EC) No 1069/2009 and (EC) No 1107/2009 and repealing Regulation (EC) No 2003/2003.

15.2. Chemical safety assessment

Chemical safety assessment performed	No

SECTION 16: Other information

Training advice	Read safety data sheet.
Abbreviations and acronyms used	DNEL: Derived No-Effect Level LD50: Lethal dose 50 % (median lethal dose): dose which kills 50 % of exposed organisms PNEC: Predicted No-Effect Concentration TWA: Time-weighted average
Version	1
Prepared by	Sweco AB
Comments	The information of this safety data sheet is based on existing public information sources, such as current legislation, available at the time of publication of the completed safety data sheet, and information on the Customer's products that has been provided by the Customer to Sweco. The Customer is responsible that the information provided to Sweco is accurate and up to date.