

**SAFETY DATA SHEET****Urea NP 38-8 / Urea NPK 28-13-10**

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 NP 38-8 / Urea NPK 28-13-10  
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](mailto: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.
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### 2.2. Label elements

Other label information (CLP)	No labeling. In accordance with current regulations, this product has not been classified as hazardous.
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### 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.	70 - 80 %	
Ammonium sulphate	CAS No.: 7783-20-2 EC No.: 231-984-1	CLP classification, notes: Not classified.	5 - 30 %	
Monoammonium phosphate	CAS No.: 7722-76-1 EC No.: 231-764-5	CLP classification, notes: Not classified.	10 - 20 %	
Potassium chloride	CAS No.: 7447-40-7 EC No.: 231-211-8	CLP classification, notes: Not classified.	10 - 20 %	
Sodium chloride	CAS No.: 7647-14-5 EC No.: 231-598-3	CLP classification, notes: Not classified.	< 1 %	
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

<sup>2</sup>Substance with a workplace exposure limit

Description of the mixture	The exact composition varies depending on the product. Urea NP 38-8 does not contain the following ingredients: - potassium chloride - sodium chloride.
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.

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

Acute symptoms and effects	Dust may irritate the eyes and the respiratory tract. Ingestion may cause nausea, vomiting and diarrhea.
Delayed symptoms and effects	None known.

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

Other information	Treat symptomatically.
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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media	Use an extinguishing agent suitable for the surrounding fire.
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#### 5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	The product may form combustible dust concentrations in the air during handling.
Hazardous combustion products	During fire, toxic gases and vapours may be evolved. Carbon dioxide (CO <sub>2</sub> ). Carbon monoxide (CO). Ammonia. Phosphorus oxides (PO <sub>x</sub> ). Sulphur oxides (SO <sub>x</sub> ).

#### 5.3. Advice for firefighters

Personal protective equipment	Wear appropriate protective equipment and self-contained breathing apparatus.
Other information	Avoid inhalation of fire fumes. Take care of fire waste and contaminated extinguishing water in accordance with local regulations.

### SECTION 6: Accidental release measures

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

General measures	Ensure adequate ventilation. Remove all sources of ignition. Avoid generation and spreading of dust.
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.
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## 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.
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## 6.4. Reference to other sections

Additional information	Safe handling: see point 7. Personal protective equipment: see point 8. Waste disposal: see point 13.
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# 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).
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## Protective safety measures

Safety measures to prevent fire	Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge.
Preventive measures to prevent aerosol and dust generation	Prevent formation of dust. Any deposit of dust which cannot be avoided must be regularly removed.
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	Store away from food, drink and animal feedstuffs. For incompatible materials see point 10.5.
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## Conditions for safe storage

Technical measures and storage conditions	Store in a cool, dry, well-ventilated area. Protect from humidity and water.
Packaging compatibilities	Store in tightly closed container.

## 7.3. Specific end use(s)

Specific use(s)	The use stated in section 1.2.
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## SECTION 8: Exposure controls / personal protection

### 8.1. Control parameters

Substance	Identification	Exposure limits	TWA Year
Dusts, respirable dust		Limit value (8 h) : 4 mg/m <sup>3</sup>	
Dusts, total inhalable dust		Limit value (8 h) : 10 mg/m <sup>3</sup>	
Propylene glycol	CAS No.: 57-55-6	Country of origin: United Kingdom Limit value (8 h) : 150 ppm Limit value (8 h) : 474 mg/m <sup>3</sup> Comments: total vapour and particulates Limit value (8 h) : 10 mg/m <sup>3</sup> Comments: particulates	
Control parameters comments	Compliance with the accepted occupational exposure limits values should be controlled on a regular basis.		

### DNEL / PNEC

Substance	Urea
DNEL	<p><b>Group:</b> Professional <b>Value:</b> 292 mg/m<sup>3</sup> <b>Comments:</b> Acute / Long-term inhalation (systemic)</p> <p><b>Group:</b> Professional <b>Value:</b> 580 mg/kg bw/day <b>Comments:</b> Acute / Long-term dermal (systemic)</p> <p><b>Group:</b> Consumer <b>Value:</b> 125 mg/m<sup>3</sup> <b>Comments:</b> Acute / Long-term inhalation (systemic)</p> <p><b>Group:</b> Consumer <b>Value:</b> 580 mg/kg bw/day <b>Comments:</b> Acute / Long-term dermal (systemic)</p> <p><b>Group:</b> Consumer <b>Value:</b> 42 mg/kg bw/day <b>Comments:</b> Acute / Long-term oral (systemic)</p>
PNEC	<p><b>Route of exposure:</b> Freshwater <b>Value:</b> 0,047 mg/l</p> <p><b>Route of exposure:</b> Saltwater <b>Value:</b> 0,047 mg/l</p>
Substance	Potassium chloride
DNEL	<p><b>Group:</b> Professional <b>Route of exposure:</b> Long-term dermal (systemic) <b>Value:</b> 303 mg/kg bw/day</p> <p><b>Group:</b> Professional <b>Route of exposure:</b> Long-term inhalation (systemic)</p>

PNEC	<b>Value:</b> 1064 mg/m <sup>3</sup>
	<b>Group:</b> Professional
	<b>Route of exposure:</b> Acute dermal (systemic)
	<b>Value:</b> 910 mg/kg bw/day
	<b>Group:</b> Professional
	<b>Route of exposure:</b> Acute inhalation (systemic)
	<b>Value:</b> 5320 mg/kg bw/day
	<b>Group:</b> Consumer
	<b>Route of exposure:</b> Long-term dermal (systemic)
	<b>Value:</b> 182 mg/kg bw/day
<b>Group:</b> Consumer	
<b>Route of exposure:</b> Long-term inhalation (systemic)	
<b>Value:</b> 273 mg/m <sup>3</sup>	
<b>Group:</b> Consumer	
<b>Route of exposure:</b> Long-term oral (systemic)	
<b>Value:</b> 91 mg/kg bw/day	
<b>Group:</b> Consumer	
<b>Route of exposure:</b> Acute inhalation (systemic)	
<b>Value:</b> 1365 mg/m <sup>3</sup>	
<b>Group:</b> Consumer	
<b>Route of exposure:</b> Acute dermal (systemic)	
<b>Value:</b> 910 mg/kg bw/day	
<b>Group:</b> Consumer	
<b>Route of exposure:</b> Acute oral (systemic)	
<b>Value:</b> 455 mg/kg bw/day	
<b>Route of exposure:</b> Freshwater	
<b>Value:</b> 0,1 mg/l	
<b>Route of exposure:</b> Saltwater	
<b>Value:</b> 0,1 mg/l	
<b>Route of exposure:</b> Sewage treatment plant STP	
<b>Value:</b> 10 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	Use tight-fitting safety goggles (EN 166).
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## Hand protection

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

## Skin protection

Suitable protective clothing	Wear appropriate protective clothing.
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## 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.  Value: 190 °C Comments: Monoammonium phosphate
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/cm <sup>3</sup> Comments: Urea Temperature: 20 °C

Solubility	Medium: Water Value: 624 000 mg/l Comments: Urea Temperature: 20 °C
	Medium: Water Value: 1038 g/l Comments: Ammonium sulphate Temperature: 20 °C
	Medium: Water Value: 100 g/l Comments: Monoammonium phosphate 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.
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#### 10.2. Chemical stability

Stability	Chemically stable under normal storage conditions.
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#### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No dangerous reactions under normal use and storage conditions.
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#### 10.4. Conditions to avoid

Conditions to avoid	Protect from moisture and heat. Keep away from sources of ignition.
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#### 10.5. Incompatible materials

Materials to avoid	Acids. Bases. Oxidising agents. Copper. Copper alloys. Combustible substances.
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#### 10.6. Hazardous decomposition products

Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Contact with strong bases liberates ammonia.
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Harmful compounds may be evolved during fire. Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NO<sub>x</sub>). Sulphur oxides (SO<sub>x</sub>). Phosphorus oxides (PO<sub>x</sub>).

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Substance	Urea
Acute toxicity	<b>Type of toxicity:</b> Acute <b>Effect tested:</b> LD50 <b>Route of exposure:</b> Oral <b>Value:</b> 14300 mg/kg <b>Animal test species:</b> Rat
Substance	Ammonium sulphate
Acute toxicity	<b>Effect tested:</b> LD50 <b>Route of exposure:</b> Oral <b>Value:</b> 3000 mg/kg <b>Animal test species:</b> Rat
Substance	Potassium chloride
Acute toxicity	<b>Effect tested:</b> LD50 <b>Route of exposure:</b> Oral <b>Value:</b> 3020 mg/kg <b>Animal test species:</b> 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.

### Symptoms of exposure

In case of ingestion	May cause irritation of the gastrointestinal tract.
In case of inhalation	Dust in high concentrations may cause irritation.
Other information	None reported.

## SECTION 12: Ecological information

### 12.1. Toxicity

Substance	Ammonium sulphate
Aquatic toxicity, fish	<b>Toxicity type:</b> Acute <b>Value:</b> 126 mg/kg <b>Effect dose concentration :</b> LC50 <b>Test duration:</b> 96 hour(s) <b>Species:</b> Poecilia reticulata
Substance	Potassium chloride
Aquatic toxicity, fish	<b>Toxicity type:</b> Acute <b>Value:</b> 880 mg/l <b>Effect dose concentration :</b> LC50 <b>Test duration:</b> 96 hour(s) <b>Species:</b> Pimephales promelas
Substance	Potassium chloride
Aquatic toxicity, algae	<b>Toxicity type:</b> Acute <b>Value:</b> > 100 mg/l <b>Effect dose concentration :</b> IC50 <b>Test duration:</b> 72 hour(s) <b>Species:</b> Desmodemus subspicatus
Substance	Ammonium sulphate
Aquatic toxicity, crustacean	<b>Toxicity type:</b> Acute <b>Value:</b> 292 mg/kg <b>Effect dose concentration :</b> LC50 <b>Test duration:</b> 48 hour(s) <b>Species:</b> Daphnia magna
Substance	Potassium chloride
Aquatic toxicity, crustacean	<b>Toxicity type:</b> Acute <b>Value:</b> 440 - 880 mg/l <b>Effect dose concentration :</b> EC50 <b>Test duration:</b> 48 hour(s) <b>Species:</b> Daphnia magna
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	<b>Value:</b> 96 % <b>Comments:</b> 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.
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## 15.2. Chemical safety assessment

Chemical safety assessment performed	No
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## SECTION 16: Other information

Training advice	Read safety data sheet.
Key literature references and sources for data	Product specifications by manufacturer SDSs for product components Urea (CAS number: 57-13-6): REACH registration information (disseminated by ECHA) EH40/2005 Workplace exposure limits (3rd ed, 2018)
Abbreviations and acronyms used	DNEL: Derived No-Effect Level EC50: Effective concentration: concentration which kills or immobilises 50 % of exposed organisms IC50: Inhibitory concentration: concentration which reduces a biological function by 50 % LC50: Lethal concentration 50 % (median lethal concentration): concentration which kills 50 % of exposed organisms LD50: Lethal dose 50 % (median lethal dose): dose which kills 50 % of exposed organisms NOEC: No Observed Effect Concentration: concentration at which no effects are observed 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.