

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

#### 1.1. Product identifier

Product form : Mixture  
 Product name : WS NPK 20-20-20+TE  
 Type of product : Fertilizer  
 Product group : Blend

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

##### 1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial

##### 1.2.2. Uses advised against

No additional information available

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

Anorel NV  
 Lintsesteenweg 632  
 2540 Hove  
 T +3234880233  
[anorel@anorel.net](mailto:anorel@anorel.net) - [www.anorel.net](http://www.anorel.net)

#### 1.4. Emergency telephone number

Belgium	Centre Anti-Poisons/Antigifcentrum	(+32) 70 245 245
Ireland	National Poisons Information Centre	(+353) 1 8379964
United Kingdom	UK National Poisons Emergency	(+44) 870 600 6266
USA	INFOTRAC	(800) 535-5053

### SECTION 2: Hazards identification

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

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

Not classified

#### 2.2. Label elements

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

Child-resistant fastening : No  
 Tactile warning : No

#### 2.3. Other hazards

Adverse physicochemical, human health and environmental effects : May Cause skin irritation. May cause eye irritation.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
potassium nitrate	(CAS No) 7757-79-1 (EC no) 231-818-8 (REACH-no) 01-2119488224-35	20 - 50	Ox. Sol. 3, H272
ammonium dihydrogen phosphate	(CAS No) 7722-76-1 (EC no) 231-764-5 (REACH-no) 01-2119488166-29	20 - 50	Not classified

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urea	(CAS No) 57-13-6 (EC no) 200-315-5 (REACH-no) 01-2119463277-33	20 - 50	Not classified
Urea Phosphate	(CAS No) 4861-19-2 (EC no) 225-464-3 (REACH-no) 01-2119489460-34	1 - 10	Skin Corr. 1B, H314
tetrapotassium pyrophosphate, anhydrous	(CAS No) 7320-34-5 (EC no) 230-785-7 (REACH-no) 01-2119489369-18	1 - 10	Eye Irrit. 2, H319 Skin Irrit. 2, H315
boric acid substance listed as REACH Candidate	(CAS No) 10043-35-3 (EC no) 233-139-2 (EC index no) 005-007-00-2 (REACH-no) 01-2119486683-25	< 1	Repr. 1B, H360FD
Ethylenediaminetetraacetic acid, copper-dissodium complex	(CAS No) 14025-15-1 (EC no) 237-864-501 (REACH-no) 01-2119963944-23	< 1	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319

### Specific concentration limits:

Name	Product identifier	Specific concentration limits
boric acid	(CAS No) 10043-35-3 (EC no) 233-139-2 (EC index no) 005-007-00-2 (REACH-no) 01-2119486683-25	(C >= 5.5) Repr. 1B, H360FD

Full text of H-statements: see section 16

## 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. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- 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

- Symptoms/injuries after skin contact : May cause moderate irritation. Irritation.
- Symptoms/injuries after eye contact : May cause slight irritation. Eye irritation.

### 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. Avoid contact with skin and eyes.

#### 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 : Recover mechanically 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.

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.
- Hygiene measures : Wash contaminated clothing before reuse. 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

boric acid (10043-35-3)		
Belgium	Limit value (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (Borate, composés inorganiques de; Belgium; Time-weighted average exposure limit 8 h)
Belgium	Short time value (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup> (Borate, composés inorganiques de; Belgium; Short time value)

#### 8.2. Exposure controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Hand protection : Protective gloves
- Eye protection : Safety glasses
- Skin and body protection : Wear suitable protective clothing
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment
- 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
- Appearance : Crystalline powder.
- Colour : light brown.
- Odour : odourless.
- Odour threshold : No data available
- pH : No data available
- pH solution : 4.5
- Relative evaporation rate (butyl acetate=1) : No data available
- Melting point : No data available
- Freezing point : Not applicable
- Boiling point : No data available
- Flash point : Not applicable
- Auto-ignition temperature : Not applicable
- Decomposition temperature : No data available
- Flammability (solid, gas) : Non flammable
- Vapour pressure : No data available
- Relative vapour density at 20 °C : No data available
- Relative density : Not applicable
- Density : 1000 kg/m<sup>3</sup>
- Solubility : Soluble in water. Soluble in acetic acid.
- Log Pow : No data available
- Viscosity, kinematic : Not applicable
- Viscosity, dynamic : No data available
- Explosive properties : No data available
- Oxidising properties : No data available
- Explosive limits : Not applicable

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### 9.2. Other information

Bulk density : 1000 kg/m<sup>3</sup>

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

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

### 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 toxicological effects

Acute toxicity : Not classified

<b>urea (57-13-6)</b>	
LD50 oral rat	8471 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; 14300 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rat	> 3200 mg/kg (Rat; Literature study)
LD50 dermal rabbit	> 21000 mg/kg (Rabbit; Literature study)

<b>potassium nitrate (7757-79-1)</b>	
LD50 oral rat	3750 mg/kg (Rat)

<b>boric acid (10043-35-3)</b>	
LD50 oral rat	2660 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; >2600 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	> 2000 mg/kg Rabbit; Experimental value; FIFRA (40 CFR)

<b>ammonium dihydrogen phosphate (7722-76-1)</b>	
LD50 oral rat	5750 mg/kg (Rat)
LD50 dermal rabbit	> 7940 mg/kg (Rabbit)

<b>Ethylenediaminetetraacetic acid, copper-dissodium complex (14025-15-1)</b>	
LD50 oral rat	890 mg/kg

<b>Urea Phosphate (4861-19-2)</b>	
LD50 oral rat	≈ 2600 mg/kg

<b>tetrapotassium pyrophosphate, anhydrous (7320-34-5)</b>	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 4640 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	> 1.1 mg/l/4h

Skin corrosion/irritation : Not classified.  
Serious eye damage/irritation : Not classified  
Respiratory or skin sensitisation : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified

<b>Urea Phosphate (4861-19-2)</b>	
NOAEL (chronic, oral, animal/male, 2 years)	> 1500 mg/kg bodyweight
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified

Specific target organ toxicity (repeated exposure) : Not classified

<b>Urea Phosphate (4861-19-2)</b>	
NOAEL (oral, rat, 90 days)	≈ 250 mg/kg bodyweight/day

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### Urea Phosphate (4861-19-2)

Aspiration hazard : Not classified

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

#### urea (57-13-6)

LC50 fish 1	> 6810 mg/l (LC50; 96 h; Leuciscus idus; Static system)
EC50 Daphnia 1	> 10000 mg/l (EC50; 48 h; Daphnia magna)
Threshold limit algae 1	> 10000 mg/l (EC0; 168 h; Scenedesmus quadricauda; Static system; Fresh water)

#### potassium nitrate (7757-79-1)

LC50 fish 2	1378 mg/l (LC50; 96 h; Poecilia reticulata)
LC50 other aquatic organisms 2	490 mg/l (48 h; Daphnia magna)

#### ammonium dihydrogen phosphate (7722-76-1)

LC50 fish 1	155 ppm (LC50; 96 h)
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#### Urea Phosphate (4861-19-2)

LC50 fish 1	> 9100 mg/l
EC50 Daphnia 1	> 100 mg/l Daphnia magna
EC50 72h algae (1)	> 100 mg/l Desmodemus subspicatus

#### tetrapotassium pyrophosphate, anhydrous (7320-34-5)

LC50 fish 1	> 750 mg/l (LC50; 48 h)
EC50 Daphnia 1	> 100 mg/l Daphnia magna

### 12.2. Persistence and degradability

#### urea (57-13-6)

Persistence and degradability	Inherently biodegradable. Hydrolysis in water. Highly mobile in soil.
ThOD	0.27 g O <sub>2</sub> /g substance

#### potassium nitrate (7757-79-1)

Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

#### boric acid (10043-35-3)

Persistence and degradability	Biodegradability: not applicable. Biodegradability in soil: not applicable. No (test) data on mobility of the substance available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

#### ammonium dihydrogen phosphate (7722-76-1)

Persistence and degradability	Biodegradability in water: no data available.
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#### Urea Phosphate (4861-19-2)

Persistence and degradability	% biodegradation.
Biodegradation	≈ 100 %

#### tetrapotassium pyrophosphate, anhydrous (7320-34-5)

Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

### 12.3. Bioaccumulative potential

#### urea (57-13-6)

BCF fish 1	1 (BCF; 72 h; Brachydanio rerio)
BCF other aquatic organisms 1	11700 (BCF)

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<b>urea (57-13-6)</b>	
Log Pow	< -1.73 (Experimental value; EU Method A.8: Partition Coefficient)
Bioaccumulative potential	Bioaccumulation: not applicable.
<b>potassium nitrate (7757-79-1)</b>	
Bioaccumulative potential	No bioaccumulation data available.
<b>boric acid (10043-35-3)</b>	
BCF fish 2	< 0.1 (BCF; 60 days; Oncorhynchus tshawytscha; Flow-through system; Fresh water; Weight of evidence)
Log Pow	-1.09 (Experimental value; EU Method A.8: Partition Coefficient; 22 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
<b>ammonium dihydrogen phosphate (7722-76-1)</b>	
Bioaccumulative potential	Not bioaccumulative.
<b>Urea Phosphate (4861-19-2)</b>	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
<b>tetrapotassium pyrophosphate, anhydrous (7320-34-5)</b>	
Bioaccumulative potential	Bioaccumulation: not applicable.

### 12.4. Mobility in soil

<b>urea (57-13-6)</b>	
Log Koc	Koc,0.037-0.064; Experimental value
<b>boric acid (10043-35-3)</b>	
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.

### 12.5. Results of PBT and vPvB assessment

Component	
Urea Phosphate (4861-19-2)	PBT: not relevant – no registration required vPvB: not relevant – no registration required
tetrapotassium pyrophosphate, anhydrous (7320-34-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

### 12.6. 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.

## SECTION 14: Transport information

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

### 14.1. UN number

Not regulated for transport

### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable  
Proper Shipping Name (IMDG) : Not applicable  
Proper Shipping Name (IATA) : Not applicable  
Proper Shipping Name (ADN) : Not applicable  
Proper Shipping Name (RID) : Not applicable

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR) : Not applicable

#### IMDG

Transport hazard class(es) (IMDG) : Not applicable

#### IATA

Transport hazard class(es) (IATA) : Not applicable

#### ADN

Transport hazard class(es) (ADN) : Not applicable

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### RID

Transport hazard class(es) (RID) : Not applicable

### 14.4. Packing group

Packing group (ADR) : Not applicable  
Packing group (IMDG) : Not applicable  
Packing group (IATA) : Not applicable  
Packing group (ADN) : Not applicable  
Packing group (RID) : Not applicable

### 14.5. Environmental hazards

Dangerous for the environment : No  
Marine pollutant : No  
Other information : No supplementary information available

### 14.6. Special precautions for user

#### - Overland transport

No data available

#### - Transport by sea

No data available

#### - Air transport

No data available

#### - Inland waterway transport

No data available

#### - Rail transport

No data available

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

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

Contains no REACH substances with Annex XVII restrictions  
Contains no substance on the REACH candidate list  $\geq 0,1\%$  / SCL  
Contains no REACH Annex XIV substances

#### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Ox. Sol. 3	Oxidising Solids, Category 3
Repr. 1B	Reproductive toxicity, Category 1B
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H272	May intensify fire; oxidiser
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H319	Causes serious eye irritation
H360FD	May damage fertility. May damage the unborn child

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SDS EU (REACH Annex II)

*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*