

# Safety Data Sheet

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Version: 4

## Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

**Product Name** Universol Soft Water 312R 18-7-12+6CaO+2MgO+TE  
**Product Code:** 20340225EA  
**Synonyms:** Universol Soft Water 312R 18-3.1-10+4.3CaO+1.2Mg+TE  
**Pure substance/mixture** Mixture.

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

**Recommended Use** Fertilizer (PC12). Restricted to professional users.  
**Uses Advised Against:** Consumer use [SU 21].

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

Everris International B.V. Nijverheidsweg 1-5; 6422 PD Heerlen (NL); Tel: +31 (0)45-5609100; Fax: +31 (0)45-5609190.

**For further information, please contact:** INFO-MSDS@EVERRIS.COM.

**1.4. Emergency telephone number:** IN CASE OF AN EMERGENCY CALL: +44 1235 239 670 (24h).

## Section 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

Mixture

Regulation (EC) No 1272/2008 (CLP)

<b>Eye Irritation</b>	Category 1 - (H318)
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### 2.2. Label elements



**Signal Word:** Danger

### Hazard Statements:

H318 - Causes serious eye damage

*Contains Urea phosphate, Nitric acid ammonium calcium salt*

### Precautionary Statements:

P280 - Wear eye protection/ face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor

### Other hazards (UN-GHS)

H316 - Causes mild skin irritation

H303 - May be harmful if swallowed

## Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Chemical Name	EC-No.	CAS No	Weight %	Classification according Regulation (EC) 1272/2008 [CLP]	REACH registration number
Ammonium nitrate; NH <sub>4</sub> NO <sub>3</sub>	229-347-8	6484-52-2	25 - 40%	Eye Irrit. 2 (H319) Ox. Sol. 3 (H272)	01-2119490981-27
Potassium nitrate; KNO <sub>3</sub>	231-818-8	7757-79-1	10 - 25%	Ox. Sol. 3 (H272)	01-2119488224-35
Nitric acid ammonium calcium salt	239-289-5	15245-12-2	10 - 25%	Eye Dam. 1 (H318) Acute Tox. 4 (H302)	01-2119493947-16
Urea phosphate	225-464-3	4861-19-2	5 - 10%	Skin Corr. 1B (H314)	01-2119489460-34

Full text of H- and EUH-phrases: see section 16

## Section 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

<b>General Advice:</b>	First aid measures should be executed by trained personnel only.
<b>Inhalation</b>	If not breathing, give artificial respiration. If symptoms persist, call a physician. If fumes from reactions are inhaled, move to fresh air immediately.
<b>Skin Contact:</b>	If skin irritation persists, call a physician.
<b>Eye Contact:</b>	Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.
<b>Ingestion:</b>	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.

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

None under normal processing

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

None under normal processing.

## Section 5: FIRE FIGHTING MEASURES

### 5.1. Extinguishing media

Suitable Extinguishing Media: Coordinate fire extinguishing measures to fire in surrounding area.

Unsuitable Extinguishing Media: High volume water jet.

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

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

### 5.3. Advice for firefighters

Use extinguishing agent suitable for type of surrounding fire. In the event of fire and/or explosion do not breathe fumes. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

## Section 6: ACCIDENTAL RELEASE MEASURES

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

**Personal Precautions:** Ensure adequate ventilation. Wear personal protective equipment. Evacuate personnel to safe areas.

**For Emergency Responders:** Use personal protection recommended in Section 8.

### 6.2. Environmental precautions

Do not allow material to contaminate ground water system.

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

*Methods for Containment:* Prevent further leakage or spillage if safe to do so.  
*Methods for Cleanup:* Take up mechanically and collect in suitable container for disposal.

**6.4. Reference to other sections**

§ 8, 12, 13.

**Section 7: HANDLING AND STORAGE**

**7.1. Precautions for safe handling**

General hygiene considerations: Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. When using, do not eat, drink or smoke.

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

Technical measures/storage conditions: Keep container tightly closed in a dry and well-ventilated place. For quality reasons: Keep out of reach of direct sunlight, store under dry conditions, partly used packaging should be closed well. Keep away from flammable material.

Packaging Materials: Store in original container. Store in a closed container.  
 LGK (Germany) 13

**7.3. Specific end use(s)**

Specific use(s): Fertilizer; [www.everris.com](http://www.everris.com); Read and follow label instructions  
 Exposure scenario: Mixture. Not required.

**Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1. Control parameters**

<i>Ammonium nitrate; NH<sub>4</sub>NO<sub>3</sub></i>	
Australia	N.A.
Czech Republic OEL	10.0 mg/m <sup>3</sup> TWA
<i>Potassium nitrate; KNO<sub>3</sub></i>	
Australia	> 10 mg/m <sup>3</sup>
Bulgaria - OEL- TWAs	5.0 mg/m <sup>3</sup> TWA
Latvia - OEL - TWAs	5 mg/m <sup>3</sup> TWA

**Derived No Effect Level (DNEL)**

Component	Oral	Dermal	Inhalation
Ammonium nitrate; NH <sub>4</sub> NO <sub>3</sub> 6484-52-2 ( 25 - 40% )	36 mg/m <sup>3</sup>	5.12 mg/kg bw/day	8.9 mg/m <sup>3</sup>
Potassium nitrate; KNO <sub>3</sub> 7757-79-1 ( 10 - 25% )		20.8 mg/kg bw/day	36.7 mg/m <sup>3</sup>

**Predicted No Effect Concentration (PNEC)**

No data available

Component	Fresh Water	Freshwater sediment	Sea Water	Sea sediment	Soil	Impact on Sewage Treatment
Ammonium nitrate; NH <sub>4</sub> NO <sub>3</sub> 6484-52-2 ( 25 - 40% )						18 mg/l
Potassium nitrate; KNO <sub>3</sub> 7757-79-1 ( 10 - 25% )	0.45 mg/l		0.045 mg/l			18 mg/l

**8.2. Exposure controls**

**Personal protective equipment**

**Eye/Face Protection** Wear face-shield and protective suit for abnormal processing problems.

<b>Hand protection</b>	Gloves. Nitrile rubber (0.26 mm). Break through time. > 8 h.
<b>Respiratory Protection</b>	Not required; except in case of aerosol formation. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit
<b>Skin and body protection:</b>	Lightweight protective clothing
<b>Hygiene Measures:</b>	When using, do not eat, drink or smoke. Keep away from food, drink and animal feeding stuffs.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

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

<b>Physical State:</b>	Solid
<b>Appearance:</b>	Prills and powder
<b>Color:</b>	Off-white.
<b>Odor:</b>	None
<b>Bulk density:</b>	+/- 0.97 kg/dm <sup>3</sup>
<b>Melting Point/Freezing Point:</b>	No data available
<b>Boiling Point/Range:</b>	Solid. Not applicable.
<b>Flash Point:</b>	Solid. Not applicable.
<b>Evaporation Rate:</b>	Solid. Not applicable.
<b>Flammability (solid, gas):</b>	Not flammable
<b>Vapor Pressure:</b>	Solid. Not applicable.
<b>Vapour density</b>	Solid. Not applicable.
<b>Relative density</b>	No data available
<b>Water Solubility:</b>	No data available
<b>Solubility(ies)</b>	No data available
<b>Partition Coefficient:</b>	Solid. Not applicable.
<b>Autoignition Temperature:</b>	No data available
<b>Decomposition temperature:</b>	No data available
<b>Explosive Properties:</b>	Doesn't present explosion hazard.
<b><u>9.2. Other information</u></b>	
<b>VOC Content (%):</b>	Solid. Not applicable.

## Section 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

Not reactive.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

None under normal processing. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

### 10.4. Conditions to avoid

For quality reasons: Keep out of reach of direct sunlight, store under dry conditions, partly used packaging should be closed well.

### 10.5. Incompatible materials

Keep away from catalysts like derivatives of hexavalent chromium and metal halides. Keep away from flammable products (fuels) like charcoal, wood, flour, soot etc.

### 10.6. Hazardous decomposition products

None under normal processing. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

## Section 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

#### Product Information

If this product is a mixture, the classification is not based on toxicology studies for this product, but is based solely on toxicology studies for ingredients found within this product. More detailed substance and/or ingredient information may be provided in the other sections of this SDS

**Information on the Likely Routes of Exposure (inhalation, ingestion, skin and eye contact):**

**Inhalation** Inhalation of dust in high concentration may cause irritation of respiratory system.  
**Eye contact** Causes serious eye damage.  
**Skin Contact** May cause irritation.  
**Ingestion** May cause gastrointestinal discomfort if consumed in large amounts.

**Information on Toxicological Effects**

None known

**Acute Toxicity**

The following values are calculated based on chapter 3.1 of the GHS document:

*ATEmix (oral):* 2,187.00 mg/kg

*ATEmix (dermal):* 10,934.00 mg/kg

**Unknown Acute Toxicity:** 0% of the mixture consists of ingredient(s) of unknown toxicity.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ammonium nitrate; NH <sub>4</sub> NO <sub>3</sub>	= 2217 mg/kg ( Rat )	> 5000 mg/kg	> 88.8 mg/L ( Rat ) 4 h
Potassium nitrate; KNO <sub>3</sub>	= 3015 mg/kg ( Rat )	> 2000 mg/kg	> 527 mg/m <sup>3</sup>
Nitric acid ammonium calcium salt	300 - 2000 mg/kg ( Rat )	> 2000 mg/kg ( Rat )	
Urea phosphate	2600 mg/kg		

**Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure:**

If this product is a mixture, the classification is not based on toxicology studies for this product, but is based solely on toxicology studies for ingredients found within this product. More detailed substance and/or ingredient information may be provided in the other sections of this SDS

**Serious eye damage/eye irritation** Classification based on individual ingredients of the mixture.  
**Respiratory or skin sensitization** Classification based on individual ingredients of the mixture.  
**Germ Cell Mutagenicity** Classification based on individual ingredients of the mixture.  
**Carcinogenicity** Classification based on individual ingredients of the mixture.  
**Reproductive Toxicity** Classification based on individual ingredients of the mixture.  
**STOT - Single Exposure** Classification based on individual ingredients of the mixture.  
**STOT - Repeated Exposure** Classification based on individual ingredients of the mixture.  
**Aspiration Hazard** Classification based on individual ingredients of the mixture.

**Section 12: ECOLOGICAL INFORMATION**

**12.1. Toxicity**

**Ecotoxicity**

**Unknown Aquatic Toxicity**

Should not be released into the environment  
 0% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Ammonium nitrate; NH <sub>4</sub> NO <sub>3</sub>	-	65 - 85: 48 h Cyprinus carpio mg/L LC50 semi-static	-	-
Nitric acid ammonium calcium salt	-	447: 48 h Carassius auratus mg/L LC50	-	-

**12.2. Persistence and degradability**

**Persistence and Degradability:** No persistent or cumulative effects were observed.

**12.3. Bioaccumulative potential**  
**Bioaccumulation:**

Does not bioaccumulate.

Chemical Name	LOGPOW
Ammonium nitrate; NH <sub>4</sub> NO <sub>3</sub>	-3.1
Nitric acid ammonium calcium salt	0

**12.4. Mobility in soil** No data available.

**12.5. PBT and vPvB assessment** No data available.

**12.6. Other adverse effects** No data available.

**Section 13: DISPOSAL CONSIDERATIONS**

**13.1. Waste treatment methods**

**Disposal of Wastes:** Disposal should be in accordance with applicable regional, national and local laws and regulations.  
**Contaminated Packaging:** Do not reuse container.  
**Other Information** Use up product completely. Packaging material is industrial waste.

**Section 14: TRANSPORT INFORMATION**

**IMO / IMDG**

**14.1 UN-No:** Not regulated  
**14.2 Proper shipping name:** Not regulated  
**14.3 Hazard Class:** Not regulated  
**14.4 Packing group:** Not regulated  
**14.5 Marine Pollutant:** No information available  
**14.6 Special Provisions** None  
**14.7 Bulk transport according Annex II of MARPOL and IBC Code** No data available

**ADR/RID**

**14.1 UN-No:** Not regulated  
**14.2 Proper shipping name:** Not regulated  
**14.3 Hazard Class:** Not regulated  
**14.4 Packing group:** Not regulated  
**14.5 Environmental Hazard** Not regulated  
**14.6 Special Provisions** None

**IATA**

**14.1 UN-No:** Not regulated  
**14.2 Proper shipping name:** Not regulated

<b>14.3</b>	
<b>Hazard Class:</b>	Not regulated
<b>14.4</b>	
<b>Packing group:</b>	Not regulated
<b>14.5</b>	
<b>Environmental Hazard</b>	Not regulated
<b>14.6</b>	
<b>Special Provisions</b>	None

**Section 15: REGULATORY INFORMATION**

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

**Belgium**

Component	Belgium - Major Accidents - Qualifying Quantities for Safety Reporting	Belgium - Major Accidents - Qualifying Quantities for Accident Prevention
Ammonium nitrate; NH <sub>4</sub> NO <sub>3</sub> 6484-52-2 ( 25 - 40% )	2500 tonne (technical grade; (a) this applies to Ammonium nitrate in which the Nitrogen content as a result of Ammonium nitrate is (i) between 24.5% and 28% by weight and which contain <=0.4% total combustible or (ii) >28% by weight and which contain <=0.2% combustible substances (b) aqueous Ammonium nitrate solutions in which the concentration of Ammonium nitrate is >80% by weight)	350 tonne
Potassium nitrate; KNO <sub>3</sub> 7757-79-1 ( 10 - 25% )	10000 tonne; 5000 tonne	5000 tonne (in cases where this dangerous substance falls within category P5a Flammable liquids or P5b Flammable liquids, then for the purposes of this Regulation the lowest qualifying quantities applies); 1250 tonne

**Denmark**

Denmark No data available

**France**

ICPE Classified installation: article 4706

**Germany**

LGK (Germany) 13  
 Water Endangering Class (WGK): 1 (Everris classification)  
 Gefahrstoffverordnung (Germany) TRGS 511 Not regulated

Component	German WGK Section
Ammonium nitrate; NH <sub>4</sub> NO <sub>3</sub> 6484-52-2 ( 25 - 40% )	1
Potassium nitrate; KNO <sub>3</sub> 7757-79-1 ( 10 - 25% )	1
Nitric acid ammonium calcium salt 15245-12-2 ( 10 - 25% )	3
Urea phosphate 4861-19-2 ( 5 - 10% )	class 1

Component	EU - Explosives Precursors Marketing and Use (98/2013) - Substances Subject to Suspicious Transactions Reporting	EU - REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances
Ammonium nitrate; NH <sub>4</sub> NO <sub>3</sub> 6484-52-2 ( 25 - 40% )	Present (in concentration of 16% by weight of Nitrogen in relation to Ammonium nitrate or higher)	Use restricted. See item 58. (Conditions of restrictions 27 June 2010)
Potassium nitrate; KNO <sub>3</sub> 7757-79-1 ( 10 - 25% )	Present	
Nitric acid ammonium calcium salt 15245-12-2 ( 10 - 25% )	Present	

**15.2 Chemical safety assessment**

Substance(s) usage is covered according to Reach regulation 1907/2006

Take note of Dir. 98/24/EC on the protection of the health and safety of workers from risks related to chemical agents at work

Chemical Name	Restricted substance per REACH Annex XVII	Substance subject to authorization per REACH Annex XIV
Ammonium nitrate; NH <sub>4</sub> NO <sub>3</sub>	Use restricted. See item 58.	

Chemical Name	Lower-tier requirements (tons)	Upper-tier requirements (tons)
Ammonium nitrate; NH <sub>4</sub> NO <sub>3</sub>	350	2500

**Section 16: OTHER INFORMATION**

**Full text of H-Statements referred to under sections 2 and 3**

- H319 - Causes serious eye irritation
- H302 - Harmful if swallowed
- H318 - Causes serious eye damage
- H314 - Causes severe skin burns and eye damage
- H272 - May intensify fire; oxidizer

**Key or legend to abbreviations and acronyms used in the safety data sheet**

- RID: Regulations Concerning the International Transport of Dangerous Goods by Rail
- ICAO: International Civil Aviation Organization
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonized System of Classification and Labeling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- PNEC: Predicted No Effect Concentration
- DNEL: Derived No-Effect Level
- REACH: Registration, Evaluation, Authorization of Chemicals
- CLP: EU-GHS; Classification, Labelling and Packaging
- OEL: Occupational Exposure Limit
- TWA: Time Weighted Average
- ATE: Acute Toxicity Estimate
- EUH phrase: CLP (EU) specific hazard statement
- LD50: Lethal dose, 50%.
- LC50: Lethal concentration, 50%.
- SVHC: Substance of Very High Concern.

**Classification procedure**

- Calculation method
- Expert judgment and weight of evidence determination

**Key literature references and sources for data**

According to EC Regulation 1907/2006 (Reach), Regulation EU No. 2015/830. Regulation (EC) No 1272/2008 (CLP).

**Prepared by**

Regulatory Affairs Department (INFO-MSDS@EVERRIS.COM)

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**Restrictions on use**

Restricted to professional users

**Reason for revision**

\*\*\* Indicates changes since the last revision. This version replaces all previous versions

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