



# Safety Data Sheet

Issue Date: 05-Aug-2014

Revision Date: 05-Aug-2014

Version: 1

## 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

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

**Recommended Use:** Fertilizer  
Restricted to professional users  
**Uses Advised Against:** Consumer use.

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

#### Manufacturer

Everris International BV  
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*

<b>Serious Eye Damage or Eye Irritation</b>	Category 1 - (H318)
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*Classification according 67/548/EC and 88/379/EC or 1999/45/EC*

Xi - Irritant



#### R-code(s)

Xi;R41

Full text of R-phrases: see section 16

### 2.2. Label elements

**Product Identifier:**



**Signal Word:**

Danger

**Hazard Statements:**

H318 - Causes serious eye damage

Contains Ureaphosphate, Magnesium nitrate hexahydrate;  $Mg(NO_3)_2 \cdot 6H_2O$ , Nitric acid ammonium calcium salt, Ammonium Nitrate;  $NH_4NO_3$

**Precautionary Statements - EU (§28, 1272/2008)**

P280 - Wear protective gloves/protective clothing/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/physician

**Other hazards (UN-GHS)**

MAY BE HARMFUL IF SWALLOWED. H316 - Causes mild skin irritation.

**Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Substances**

Ingredients	EC-No.	CAS-No	Weight %	Classification according to 67/548/EEC	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
Ammonium Nitrate; $NH_4NO_3$	229-347-8	6484-52-2	25 - 40%	O;R8 Xi;R36	Eye Irrit. 2 (H319) Ox. Sol. 3 (H272)	01-2119490981-27
Nitric acid ammonium calcium salt	239-289-5	15245-12-2	10 - 25%	Xn;R22 Xi;R41	Eye Dam. 1 (H318) Acute Tox. 4 (H302)	01-2119493947-16
Ureaphosphate	225-464-3	4861-19-2	5 - 10%	C;R34	Skin Corr. 1B (H314)	01-2119489460-34
Iron EDTA; Fe-EDTA	239-802-2	15708-41-5	0.1 - 1%	NE	Not classified	01-2119496228-27
Manganese-EDTA, Mn-EDTA	239-407-5	15375-84-5	0.1 - 1%	NE	Not classified	01-2119493600-40
Copper-EDTA; Cu-EDTA	237-864-5	14025-15-1	< 0.1%	Xn;R22	Acute Tox. 4 (H302)	01-2119963944-23
Boric Acid; $H_3BO_3$	233-139-2	10043-35-3	< 0.1%	Repr.Cat.2;R60-6 1	Repr. 1B (H360FD)	01-2119486683-25
Sodium molybdate; $Na_2MoO_4 \cdot 2H_2O$	231-551-7	7631-95-0	< 0.1%	NE	Not classified	01-2119489495-21

Full text of R-phrases: see section 16

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>	Move to fresh air. If not breathing, give artificial respiration. If symptoms persist, call a physician.
<b>Skin Contact:</b>	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.
<b>Eye Contact:</b>	Rinse thoroughly with plenty of water, also under the eyelids.
<b>Ingestion:</b>	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person.
<b>Protection of First-Aiders:</b>	Low hazard for usual industrial or commercial handling.

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

**Symptoms:** None under normal processing

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

**Notes to Physician:** 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. Use dry chemical, CO<sub>2</sub>, water spray or "alcohol" foam.

##### **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**

Coordinate fire extinguishing measures to fire in surrounding area.

### **Section 6: ACCIDENTAL RELEASE MEASURES**

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

**Personal Precautions:** Ensure adequate ventilation.

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

#### **6.2. Environmental precautions**

Do not allow product to enter the environment uncontrolled.

#### **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.

LGK (Germany)

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Packaging Materials:

Bags or Bulk.

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

Specific use(s)

Fertilizer; Read and follow label instructions; www.everris.com

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

**8.1. Control parameters**

<i>Ammonium Nitrate; NH4NO3</i>	
Czech Republic OEL	10.0 mg/m <sup>3</sup> TWA
<i>Iron EDTA; Fe-EDTA</i>	
Spain Occupational Exposure Limits Data - Time Weighted Average (TWA):	TWA: 1 mg/m <sup>3</sup>
Portugal	TWA: 1 mg/m <sup>3</sup>
Finland	TWA: 1 mg/m <sup>3</sup>
Denmark	TWA: 1 mg/m <sup>3</sup>
Switzerland	TWA: 1 mg/m <sup>3</sup>
<i>Manganese-EDTA, Mn-EDTA</i>	
Czech Republic OEL	1 mg/m <sup>3</sup> TWA
Ireland	TWA: 0.2 mg/m <sup>3</sup>
<i>Copper-EDTA; Cu-EDTA</i>	
Finland	TWA: 1 mg/m <sup>3</sup>
Austria	STEL 4 mg/m <sup>3</sup> STEL 0.4 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup>
<i>Boric Acid; H3BO3</i>	
Latvia - Occupational Exposure Limits - TWAs	10 mg/m <sup>3</sup> TWA
Bulgaria - Occupational Exposure Limits - TWAs	5.0 mg/m <sup>3</sup> TWA (as B, listed under Boron and its inorganic compounds)
Spain Occupational Exposure Limits Data - Time Weighted Average (TWA):	STEL: 6 mg/m <sup>3</sup> TWA: 2 mg/m <sup>3</sup>
Portugal	STEL: 6 mg/m <sup>3</sup> TWA: 2 mg/m <sup>3</sup>
Portugal - TWAs	2 mg/m <sup>3</sup> TWA
Switzerland	STEL: 10 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup>
<i>Sodium molybdate; Na2MoO4+2H2O</i>	
UK oes/mel:	TWA: 5 mg/m <sup>3</sup>
France - Occupational Exposure Limits - 8 Hour VMEs	TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>
Czech Republic OEL	5 mg/m <sup>3</sup> TWA
Spain Occupational Exposure Limits Data - Time Weighted Average (TWA):	TWA: 0.5 mg/m <sup>3</sup>
Portugal	TWA: 0.5 mg/m <sup>3</sup>
Finland - Occupational Exposure Limits - 8 hour	6 mg/m <sup>3</sup>
Finland	TWA: 0.5 mg/m <sup>3</sup>
Denmark	TWA: 5 mg/m <sup>3</sup>
Austria	STEL 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>
Switzerland	TWA: 5 mg/m <sup>3</sup>
Poland	STEL: 10 mg/m <sup>3</sup> TWA: 4 mg/m <sup>3</sup>
Norway	TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>
Ireland	TWA: 10 mg/m <sup>3</sup> TWA: 0.5 mg/m <sup>3</sup>

France - Valeurs Limites d'exposition (VLE)	5 mg/m <sup>3</sup>
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**Derived No Effect Level (DNEL)**

No data available

**Predicted No Effect Concentration (PNEC)**

No data available.

**8.2. Exposure controls**

**Engineering Measures to Reduce Exposure:** Ensure adequate ventilation, especially in confined areas.

**Personal protective equipment**

Eye/Face Protection: Wear face-shield and protective suit for abnormal processing problems.  
 Hand protection: Nitrile rubber (0.26 mm). Break through time. > 8 h.  
 Respiratory Protection: In case of insufficient ventilation wear suitable respiratory equipment  
 Skin and Body Protection: Lightweight protective clothing  
 Hygiene Measures: Follow good housekeeping practices. When using, do not eat, drink or smoke. Keep away from food, drink and animal feeding stuffs.

**Environmental exposure controls** Do not allow into any sewer, on the ground or into any body of water.

**Section 9: PHYSICAL AND CHEMICAL PROPERTIES**

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

<b>Physical State:</b>	Solid
<b>Appearance:</b>	Crystals, Prills, flakes and powder
<b>Color:</b>	Off-white.
<b>Odor:</b>	Not significant
<b>pH:</b>	no data available
<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>	Non-flammable
<b>Vapor Pressure:</b>	Solid, not applicable
<b>Vapor Density:</b>	Solid, not applicable
<b>Specific Gravity:</b>	no data available
<b>Water Solubility:</b>	Soluble in water
<b>Solubility(ies)</b>	no data available
<b>Partition Coefficient:</b>	Solid, not applicable
<b>Autoignition Temperature:</b>	not applicable
<b>Decomposition Temperature:</b>	no data available
<b>Explosive Properties:</b>	Doesn't present explosion hazard. Based on data of ingredients.

**9.2. Other information**

**Bulk density:** +/- 0.97 kg/dm<sup>3</sup>

**Section 10: STABILITY AND REACTIVITY**

**10.1. Reactivity**

Not reactive.

**10.2. Chemical stability**

Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions**

**Hazardous Decomposition Products:**

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

**Possibility of Hazardous Reactions:**

None under normal processing.

**10.4. Conditions to avoid**

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

**10.5. Incompatible materials**

**10.6. Hazardous decomposition products**

None under normal processing.

**Section 11: TOXICOLOGICAL INFORMATION**

**11.1. Information on toxicological effects**

**Acute Toxicity**

**Product Information:**

**Inhalation:** May cause irritation of respiratory tract.  
**Eye Contact:** Causes serious eye damage.  
**Skin Contact:** May cause irritation.  
**Ingestion:** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.  
**Unknown Acute Toxicity:** 0% of the mixture consists of ingredient(s) of unknown toxicity.  
**The following values are calculated based on chapter 3.1 of the GHS document:**  
**ATEmix (oral):** 2,187.00 mg/kg

**Component Information:**

Ingredients	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ammonium Nitrate; NH4NO3	= 2217 mg/kg ( Rat )		> 88.8 mg/L ( Rat ) 4 h
Nitric acid ammonium calcium salt	= 2000 mg/kg ( Rat )		
Ureaphosphate	2600 mg/kg		
Boric Acid; H3BO3	= 2660 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 0.16 mg/L ( Rat ) 4 h
Sodium molybdate; Na2MoO4+2H2O	= 4233 mg/kg ( Rat )	> 2000 mg/kg (Rat)	> 2080 mg/m <sup>3</sup> ( Rat ) 4 h

**Skin Corrosion or Irritation** See also section 3.  
**Serious Eye Damage or Eye Irritation** See also section 3.  
**Sensitization** See also section 3.  
**Mutagenic effects** See also section 3.  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

**Reproductive Toxicity**

Ingredients	EU - GHS - SV - CLP (1272/2008) - Reproductive Toxicity
Boric Acid; H3BO3	Reproductive Toxicity - Repr. 1B: H360FD May damage fertility. May damage the unborn child. (C >= 5.5 %)

**Teratogenicity** No data available.  
**STOT - Single Exposure** No known effects under normal use conditions.  
**STOT - Repeated Exposure** None under normal use conditions.  
**Aspiration Hazard** No data available.

**Section 12: ECOLOGICAL INFORMATION**

**12.1. Toxicity**

Do not allow product to enter the environment uncontrolled.

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Ingredients	Algae/aquatic plants	Fish	Crustacea
Nitric acid ammonium calcium salt		447: 48 h Carassius auratus mg/L LC50	
Boric Acid; H3BO3			115 - 153: 48 h Daphnia magna mg/L EC50

**12.2. Persistence and degradability**

No information available.

**12.3. Bioaccumulative potential**

Ingredients	LOGPOW
Ammonium Nitrate; NH4NO3	-3.1
Nitric acid ammonium calcium salt	0
Boric Acid; H3BO3	-0.757

**12.4. Mobility in soil**

No information available.

**12.5. Results of PBT and vPvB assessment**

No information available.

**12.6. Other adverse effects**

not applicable

**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 re-use empty containers. Dispose of as unused product.

**Other Information:**

Use up product completely. Packaging material is industrial waste.

**Section 14: TRANSPORT INFORMATION**

**IMO / IMDG**

<b>14.1</b> UN-No:	Not regulated
<b>14.2</b> Proper shipping name:	Not regulated
<b>14.3</b> Hazard Class:	Not regulated
<b>14.4</b> Packing group:	Not regulated
<b>14.5</b> Marine Pollutant:	Not regulated
<b>14.6</b> Special Provisions	None
<b>14.7</b> Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not regulated

**ADR/RID**

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

**IATA**

<b>14.1</b>	
<b>UN-No:</b>	Not regulated
<b>14.2</b>	
<b>Proper shipping name:</b>	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**

Component	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% )	Use restricted. See item 58. (Conditions of restrictions 27 June 2010)

**National regulations**

*France*

**ICPE (FR):** Not regulated

*Germany*

**Gefahrstoffverordnung (Germany) TRGS 511** Not regulated

**LGK (Germany)** 13

**Water Endangering Class (WGK):** 1 (Everris classification)

Component	German WGK Section
Ammonium Nitrate; NH <sub>4</sub> NO <sub>3</sub> 6484-52-2 ( 25 - 40% )	class 1
Ureaphosphate 4861-19-2 ( 5 - 10% )	class 1
Iron EDTA; Fe-EDTA 15708-41-5 ( 0.1 - 1% )	class 2
Boric Acid; H <sub>3</sub> BO <sub>3</sub> 10043-35-3 ( < 0.1% )	class 1
Sodium molybdate; Na <sub>2</sub> MoO <sub>4</sub> +2H <sub>2</sub> O 7631-95-0 ( < 0.1% )	class 1

**European Union**

Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

**15.2. Chemical safety assessment**

Not required. Substance(s) usage is covered according to Reach regulation 1907/2006.

**Section 16: OTHER INFORMATION**

Text of R Phrases mentioned in Section 3



- R8 - Contact with combustible material may cause fire
- R36 - Irritating to eyes
- R41 - Risk of serious damage to eyes
- R22 - Harmful if swallowed
- R34 - Causes burns
- R61 - May cause harm to the unborn child
- R60 - May impair fertility

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

- H360FD - May damage fertility. May damage the unborn child
- 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 statement: CLP (EU) specific hazard statement.

**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. 453/2010  
Regulation (EC) No 1272/2008

**Prepared by:** Regulatory Affairs Department (INFO-MSDS@EVERRIS.COM)

**Issue Date:** 05-Aug-2014

**Revision Date:** 05-Aug-2014

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

**This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

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**End of Safety Data Sheet**