Safety Data Sheet

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision Date 15-Jun-2021

Version: 1

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

1.1. Product identifier Product Name Product Code Unique Formula Identifier (UFI) Pure substance/mixture

Universol Hard water 211; 23-10-10+2MgO+TE 2032-225HA 8FM5-10XP-200A-U6R2 Mixture

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

Recommended UseFertilizer (PC12). Restricted to professional users.Uses Advised AgainstConsumer use (SU21)

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 Non-Emergency Telephone Number +31 (0) 418655700

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

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008	
Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Oxidizing solids	Category 3 - (H272)

2.2. Label elements



Warning

Hazard statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H272 - May intensify fire; oxidizer

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

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P220 - Keep/Store away from clothing/ combustible materials

P280 - Wear protective gloves/protective clothing and eye/face protection

P337 + P313 - If eye irritation persists: Get medical advice/attention

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	EC No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	REACH registration number	M-Factor	M-Factor (long-term)
Ammonium nitrate; NH₄NO₃ 6484-52-2	229-347-8	40 - 65%	Eye Irrit. 2 (H319) Ox. Sol. 3 (H272)	Eye Irrit. 2 :: C>=80%	01-2119490981-27	-	-
Urea phosphate 4861-19-2	225-464-3	10 - 25%	Skin Corr. 1B (H314)	Skin Corr. 1B :: C>=25% Skin Irrit. 2 :: 10%<=C<25% Eye Irrit. 2 :: 10%<=C<25% Skin Irrit. 3 :: C<=10%	01-2119489460-34	-	-
Potassium nitrate; KNO ₃ 7757-79-1	231-818-8	10 - 25%	Ox. Sol. 3 (H272)	-	01-2119488224-35	-	-

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

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50 - 4 hour - dust/mist - mg/L
Ammonium nitrate; NH₄NO ₃	2217	5000	88.8
Potassium nitrate; KNO ₃	3015	No data available	No data available

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air. Get medical attention immediately if symptoms occur.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
Skin contact	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.

Ingestion	Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.		
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).		
4.2. Most important symptoms and effects, both acute and delayed			
Symptoms	May cause redness and tearing of the eyes. Burning sensation.		
4.3. Indication of any immediate medical attention and special treatment needed			
Note to physicians	Treat symptomatically.		

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Thermal decomposition can lead to release of irritating and toxic gases and vapors The product itself does not burn May intensify fire; oxidizer

Hazardous Combustion Products Thermal decomposition can lead to release of toxic/corrosive gases and vapors.

5.3. Advice for firefighters

Special protective equipment and 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	Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required.	
Other information	Refer to protective measures listed in Sections 7 and 8.	
For emergency responders	Use personal protection recommended in Section 8. Prevent entry into waterways, sewers, basements or confined areas.	
6.2. Environmental precautions		
Environmental precautions	Prevent further leakage or spillage if safe to do so.	
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 cleaning up	Take up mechanically, placing in appropriate containers for disposal. Use up product completely. Packaging material is industrial waste.	
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.	

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.
General hygiene considerations	Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing.
7.2. Conditions for safe storage, inc	cluding any incompatibilities
Storage Conditions	KEEP OUT OF REACH OF CHILDREN AND PETS. 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.
Packaging materials	Keep in original container, tightly closed in a safe place.
7.3. Specific end use(s)	
Specific use(s)	Fertilizer.
Exposure scenario	Mixture. Not required.
ldentified uses Risk Management Methods (RMM)	The information required is contained in this Safety Data Sheet.
Other Information	

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Potassium nitrate; KNO3	-	-	-	TWA: 5.0 mg/m ³	-
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Ammonium nitrate; NH4NO3 - 6484-52-2	-	TWA: 10.0 mg/m ³	-	-	-
Chemical name	Italy	Latvia	Lithuania	Luxembourg	Netherlands
Potassium nitrate; KNO ₃ - 7757-79-1	-	TWA: 5 mg/m³	TWA: 5 mg/m³	-	-

Biological occupational exposure limits

Derived No Effect Level (DNEL)	No information available.
Predicted No Effect Concentration	No information available.
(PNEC)	

8.2. Exposure controls

Personal protective equipment	Wear normal, light working clothing
Eye/face protection	If splashes are likely to occur, wear safety glasses with side-shields.
Hand protection	Wear suitable gloves. Impervious gloves.
Skin and body protection	Wear suitable protective clothing. Long sleeved clothing.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations	Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing.
Environmental exposure controls	Local authorities should be advised if significant spillages cannot be contained. Prevent product from entering drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid	
Appearance:	Powder(s). Prills.	
Odor:	Fertilizer.	
Off-white		
Property_	<u>Values</u>	Remarks • Method
Melting Point/Freezing Point:	No data available	None known
Boiling Point/Range:	No data available	None known
Flammability (solid, gas):	No data available	None known
Flammability Limits in Air:		None known
Upper Flammability Limit:	No data available	
Lower Flammability Limit:	No data available	
Flash Point:	No data available	None known
Autoignition Temperature:	No data available	None known
Decomposition Temperature:		None known
рН	3.0 (1 g/l)	None known
pH (as aqueous solution)	No data available	None known
Kinematic Viscosity:	No data available	None known
Dynamic Viscosity:	No data available	None known
Water solubility	No data available	None known
Solubility(ies)	No data available	None known
Partition Coefficient:	No data available	None known
Vapor Pressure:	No data available	None known
Relative density	No data available	None known
Bulk density	No data available	
Density:	No data available	
Vapour density	No data available	None known
Particle characteristics		
Particle Size	No data available	
Particle Size Distribution	No data available	

9.2. Other information

9.2.1. Information with regard to physical hazard classes Not applicable

9.2.2. Other safety characteristics No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Not reactive.	
10.2. Chemical stability		
Stability	Stable under normal conditions.	
Specific methods: Sensitivity to mechanical impact Sensitivity to static discharge	Not sensitive. Not sensitive.	
10.3. Possibility of hazardous react	tions	
Possibility of hazardous reactions	None under normal processing.	
10.4. Conditions to avoid		
Conditions to avoid	Keep away from open flames, hot surfaces and sources of ignition.	
10.5. Incompatible materials		
Incompatible materials	Strong acids. Strong bases. Strong oxidizing agents.	
10.6. Hazardous decomposition products		
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 hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.	
Eye contact	Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.	
Skin contact	Causes skin irritation.	
Ingestion	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.	
Symptoms related to the physical, chemical and toxicological characteristics		
Symptoms	Redness. May cause redness and tearing of the eyes.	
Numerical measures of toxicity		

Acute toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ammonium nitrate; NH4NO3	= 2217 mg/kg (Rat)	> 5000 mg/kg	> 88.8 mg/L (Rat)4 h
Urea phosphate	2600 mg/kg	-	-
Potassium nitrate; KNO3	= 3015 mg/kg (Rat)	> 2000 mg/kg	> 527 mg/m³

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

Skin corrosion/irritation	Classification based on data available for ingredients. Irritating to skin.
Serious eye damage/eye irritation	Classification based on data available for ingredients. Causes serious eye irritation.
Respiratory or skin sensitization	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity Reproductive toxicity	Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.
STOT - single exposure STOT - repeated exposure Aspiration hazard Endocrine disrupting properties	Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met Based on available data, the classification criteria are not met This product does not contain any known or suspected endocrine disruptors.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

12.2. Persistence and degradability

Persistence and Degradability: No information available.

12.3. Bioaccumulative potential

Bioaccumulation

There is no data for this product.

Component Information

Chemical name	Partition coefficient
Ammonium nitrate; NH4NO3	-3.1

12.4. Mobility in soil

Mobility in soil no data available.

Mobility no data available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

Chemical name	PBT and vPvB assessment
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Ammonium nitrate; NH4NO3	The substance is not PBT / vPvB PBT assessment does not apply Further
	information relevant for the PBT assessment is necessary
Urea phosphate	The substance is not PBT / vPvB PBT assessment does not apply
Potassium nitrate; KNO3	The substance is not PBT / vPvB PBT assessment does not apply

12.6. Endocrine disrupting properties

Endocrine disrupting properties This product does not contain any known or suspected endocrine disruptors.

12.7. Other adverse effects

SECTION 13: Disposal considerations		
13.1. Waste treatment methods		
Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.	
Contaminated packaging	Do not reuse empty containers.	
Other Information	Use up product completely. Packaging material is industrial waste. If material is uncontaminated, collect and reuse as recommended for product.	

SECTION 14: Transport information

IMDG		
<u>14.1</u>		
UN-No:	1479	
<u>14.2</u>		
Proper shipping name:	Oxidizing solid, N.O.S. (Potassium nitrate, Ammonium nitrate)	
<u>14.3</u>		
Transport hazard class(es)	5.1	
<u>14.4</u>		
Packing group:		
Limited Quantity	5 kg	
14.5		
Marine Pollutant:	Not regulated	
<u>14.6</u>	/	
EmS:	F-A / S-Q	
Special Provisions	223, 274, 900	
<u>14.7</u>		
Bulk transport according Annex II of MARPOL and IBC Code No data available		

ADR	
<u>14.1</u>	4.470
UN-No: 14.2	1479
Proper shipping name:	Oxidizing solid, N.O.S. (Potassium nitrate, Ammonium nitrate)
14.3 Transport hazard class(es)	5.1
14.4	
Packing group:	III
14.5 Environmental hazards	Not regulated
<u>14.6</u>	
Special Provisions	274
Tunnel restriction code	E
Limited Quantity	5 kg

ΙΑΤΑ	
<u>14.1</u>	4.170
UN number or ID number 14.2_	1479
Proper shipping name:	Oxidizing solid, N.O.S. (Potassium nitrate, Ammonium nitrate)
<u>14.3</u> Transport hazard class(es)	5.1
14.4	0.1
Packing group	III
<u>14.5</u> Environmental hazards	Not regulated
14.6	
Special Provisions	A3
A	



SECTION 15: Regulatory information

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

National regulations

ICPE

Germany

Gefahrstoffverordnung (Germany) TRGS 511 Water hazard class (WGK) Classified installation: article 4706

C III non-hazardous to water (nwg)

Chemical name	German WGK Section
Ammonium nitrate; NH₄NO₃	1
Urea phosphate	Reg. no. 6537, hazard class 1 - slightly hazardous to
	water
Potassium nitrate; KNO ₃	1

Netherlands

European Union

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

Take note of Directive 94/33/EC on the protection of young people at work

Not to be used by professional users below 18 years of age, see the National Working Environment Authorities Executive Order on young peoples dangerous work.

Authorizations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH	Substance subject to authorization
	Annex XVII	per REACH Annex XIV
	58.	-
Ammonium nitrate; NH 4NO3		

Persistent Organic Pollutants

Not applicable

Not applicable

Named dangerous substances per Seveso Directive (2012/18/EU)			
Chemical name	Lower-tier requirements (tons) Upper-tier requirements (tons)		
	350	2500	
Ammonium nitrate; NH 4NO3			

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

EU - Biocides

International Inventories:

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

Chemical Safety Report

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

SECTION 16: Other information

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

Full text of H-Statements referred to under section 3

H272 - May intensify fire; oxidizer

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

Legend

SVHC: Substances of Very High Concern for Authorization:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Classification procedure		
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used	
Acute oral toxicity	Calculation method	
Acute dermal toxicity	Calculation method	
Acute inhalation toxicity - gas	Calculation method	
Acute inhalation toxicity - vapor	Calculation method	
Acute inhalation toxicity - dust/mist	Calculation method	
Skin corrosion/irritation	Calculation method	
Serious eye damage/eye irritation	Calculation method	

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Respiratory sensitization	Calculation method
Skin sensitization	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database European Food Safety Authority (EFSA) EPA (Environmental Protection Agency) Acute Exposure Guideline Level(s) (AEGL(s)) U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act U.S. Environmental Protection Agency High Production Volume Chemicals Food Research Journal Hazardous Substance Database International Uniform Chemical Information Database (IUCLID) Japan GHS Classification Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS) NIOSH (National Institute for Occupational Safety and Health) National Library of Medicine's ChemID Plus (NLM CIP) National Library of Medicine's PubMed database (NLM PUBMED) National Toxicology Program (NTP) New Zealand's Chemical Classification and Information Database (CCID) Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program Organization for Economic Co-operation and Development Screening Information Data Set World Health Organization Prepared by Regulatory Affairs Department (INFO-MSDS@EVERRIS.COM) **Revision Date** 15-Jun-2021

Restrictions on use Restricted to professional users

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

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End of Safety Data Sheet