

# 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 14-Jun-2021

Version: 1

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

### 1.1. Product identifier

Product Name	Universol Orange; 16-5-25+3.4MgO+TE
Product Code	2042-225HA
Unique Formula Identifier (UFI)	YAN5-30UN-4008-FMJQ
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 (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

Serious eye damage/eye irritation	Category 1 - (H318)
Oxidizing solids	Category 3 - (H272)

### 2.2. Label elements



Contains Potassium sulphate;  $K_2SO_4$ , Urea phosphate

Signal word

Danger

### Hazard statements

H318 - Causes serious eye damage

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

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

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

### 2.3. Other hazards

Causes mild skin irritation.

## 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)
Potassium nitrate; KNO <sub>3</sub> 7757-79-1	231-818-8	40 - 65%	Ox. Sol. 3 (H272)	-	01-2119488224-35	-	-
Ammonium nitrate; NH <sub>4</sub> NO <sub>3</sub> 6484-52-2	229-347-8	25 - 40%	Eye Irrit. 2 (H319) Ox. Sol. 3 (H272)	Eye Irrit. 2 :: C>=80%	01-2119490981-27	-	-
Potassium sulphate; K <sub>2</sub> SO <sub>4</sub> 7778-80-5	231-915-5	5 - 10%	Eye Dam. 1 (H318)	-	01-2119489441-34	-	-
Urea phosphate 4861-19-2	225-464-3	1 - 5%	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	-	-

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

Acute Toxicity Estimate

No information available

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50 - 4 hour - dust/mist - mg/L
Potassium nitrate; KNO <sub>3</sub>	3015	No data available	No data available
Ammonium nitrate; NH <sub>4</sub> NO <sub>3</sub>	2217	5000	88.8
Potassium sulphate; K <sub>2</sub> SO <sub>4</sub>	6600	No data available	No data available

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General advice

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). First aid measures should be executed by trained personnel only.

#### Inhalation

Remove to fresh air. In the case of inhalation of aerosol/mist consult a physician if necessary. If not breathing, give artificial respiration. If symptoms persist, call a physician. Dusty conditions are unlikely if product is used as intended. However, if prolonged inhalation of dust occurs, remove casualty to fresh air.

Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.
Ingestion	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**

Symptoms None known.

#### **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 precautions for fire-fighters 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 protective gloves/protective clothing and eye/face protection.

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 See Section 12 for additional Ecological Information. Do not flush into surface water or sanitary sewer system.

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

Methods for containment Prevent further leakage or spillage if safe to do so.

<b>Methods for cleaning up</b>	Take up mechanically, placing in appropriate containers for disposal. Use up product completely. Packaging material is industrial waste.
<b>Prevention of secondary hazards</b>	Clean contaminated objects and areas thoroughly observing environmental regulations.

#### 6.4. Reference to other sections

<b>Reference to other sections</b>	See section 8 for more information. See section 13 for more information.
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## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

<b>Advice on safe handling</b>	Ensure adequate ventilation. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with eyes. Avoid generation of dust. In case of insufficient ventilation, wear suitable respiratory equipment.
<b>General hygiene considerations</b>	Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke.

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

<b>Storage Conditions</b>	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.
<b>Packaging materials</b>	Keep in original container, tightly closed in a safe place.

### 7.3. Specific end use(s)

<b>Specific use(s)</b>	Fertilizer.
<b>Exposure scenario</b>	Mixture. Not required.
<b>Identified uses</b>	
<b>Risk Management Methods (RMM)</b>	The information required is contained in this Safety Data Sheet.
<b>Other Information</b>	

LGK (Germany) TRGS 510 5.1C

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Potassium nitrate; KNO <sub>3</sub>	-	-	-	TWA: 5.0 mg/m <sup>3</sup>	-
Potassium sulphate; K <sub>2</sub> SO <sub>4</sub>	-	-	-	TWA: 10.0 mg/m <sup>3</sup>	-
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Ammonium nitrate; NH <sub>4</sub> NO <sub>3</sub> - 6484-52-2	-	TWA: 10.0 mg/m <sup>3</sup>	-	-	-
Chemical name	Italy	Latvia	Lithuania	Luxembourg	Netherlands
Potassium nitrate; KNO <sub>3</sub> - 7757-79-1	-	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	-	-
Potassium sulphate; K <sub>2</sub> SO <sub>4</sub> - 7778-80-5	-	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	-	-

### Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

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

## 8.2. Exposure controls

<b>Personal protective equipment</b>	Wear normal, light working clothing
<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Hand protection</b>	Nitrile rubber (0.26 mm). Break through time. > 8 h.
<b>Skin and body protection</b>	Lightweight protective clothing.
<b>Respiratory protection</b>	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
<b>General hygiene considerations</b>	Handle in accordance with good industrial hygiene and safety practice.
<b>Environmental exposure controls</b>	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

<b>Physical state</b>	Solid
<b>Appearance:</b>	Powder(s).
<b>Color:</b>	Off-white, orange
<b>Odor:</b>	Fertilizer.

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>Melting Point/Freezing Point:</b>	No data available	None known
<b>Boiling Point/Range:</b>	No data available	None known
<b>Flammability (solid, gas):</b>	No data available	None known
<b>Flammability Limits in Air:</b>		None known
<b>Upper Flammability Limit:</b>	No data available	
<b>Lower Flammability Limit:</b>	No data available	
<b>Flash Point:</b>	No data available	None known
<b>Autoignition Temperature:</b>	No data available	None known
<b>Decomposition Temperature:</b>		None known
<b>pH</b>	3.8 (1 g/l)	None known
<b>pH (as aqueous solution)</b>	No data available	None known
<b>Kinematic Viscosity:</b>	No data available	None known
<b>Dynamic Viscosity:</b>	No data available	None known
<b>Water solubility</b>	No data available	None known
<b>Solubility(ies)</b>	No data available	None known
<b>Partition Coefficient:</b>	No data available	None known
<b>Vapor Pressure:</b>	No data available	None known
<b>Relative density</b>	No data available	None known
<b>Bulk density</b>	No data available	
<b>Density:</b>	No data available	
<b>Vapour density</b>	No data available	None known
<b>Particle characteristics</b>		
<b>Particle Size</b>	No data available	
<b>Particle Size Distribution</b>	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 Not sensitive.  
Sensitivity to static discharge Not sensitive.

### **10.3. Possibility of hazardous reactions**

**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** 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**

**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**

<b>Inhalation</b>	Specific test data for the substance or mixture is not available. Inhalation of dust in high concentration may cause irritation of respiratory system.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available. May cause irritation.
<b>Skin contact</b>	May cause irritation.
<b>Ingestion</b>	May cause gastrointestinal discomfort if consumed in large amounts.

#### **Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** No information available.

### Numerical measures of toxicity

Based on available data, the classification criteria are not met

#### Acute toxicity

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

ATEmix (oral) 73,122.00 mg/kg

0 % of the mixture consists of ingredient(s) of unknown toxicity

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Potassium nitrate; KNO <sub>3</sub>	= 3015 mg/kg ( Rat )	> 2000 mg/kg	> 527 mg/m <sup>3</sup>
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 sulphate; K <sub>2</sub> SO <sub>4</sub>	= 6600 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:

**Skin corrosion/irritation** No information available.

**Serious eye damage/eye irritation** No information available.

**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** Based on available data, the classification criteria are not met.

**Reproductive toxicity** Based on available data, the classification criteria are not met.

**STOT - single exposure** Based on available data, the classification criteria are not met.

**STOT - repeated exposure** Based on available data, the classification criteria are not met.

**Aspiration hazard** Based on available data, the classification criteria are not met.

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

## **SECTION 12: Ecological information**

### 12.1. Toxicity

**Ecotoxicity** Based on available data, the classification criteria are not met.

**Unknown aquatic toxicity** Contains 0 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Potassium sulphate; K <sub>2</sub> SO <sub>4</sub>	EC50: =2900mg/L (72h, Desmodesmus subspicatus)	LC50: 510 - 880mg/L (96h, Pimephales promelas) LC50: =3550mg/L (96h, Lepomis macrochirus) LC50: =653mg/L (96h, Lepomis macrochirus)	-	EC50: =890mg/L (48h, Daphnia magna)

### 12.2. Persistence and degradability

**Persistence and Degradability:** No information available.

### 12.3. Bioaccumulative potential

**Bioaccumulation** There is no data for this product.

Chemical name	Partition coefficient
Ammonium nitrate; $\text{NH}_4\text{NO}_3$	-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** No information available.

Chemical name	PBT and vPvB assessment
Potassium nitrate; $\text{KNO}_3$	The substance is not PBT / vPvB PBT assessment does not apply
Ammonium nitrate; $\text{NH}_4\text{NO}_3$	The substance is not PBT / vPvB PBT assessment does not apply Further information relevant for the PBT assessment is necessary
Potassium sulphate; $\text{K}_2\text{SO}_4$	The substance is not PBT / vPvB PBT assessment does not apply
Urea phosphate	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**

<b>14.1</b> UN-No:	1479
<b>14.2</b> Proper shipping name:	Oxidizing solid, N.O.S. (Potassium nitrate, Ammonium nitrate)
<b>14.3</b> Transport hazard class(es)	5.1
<b>14.4</b> Packing group: Limited Quantity	III 5 kg
<b>14.5</b> Marine Pollutant:	Not regulated
<b>14.6</b>	



EmS: F-A / S-Q  
Special Provisions 223, 274, 900  
14.7  
Bulk transport according Annex II of MARPOL and IBC Code No data available

#### ADR

14.1  
UN-No: 1479  
14.2  
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  
14.6  
Special Provisions 274  
Tunnel restriction code E  
Limited Quantity 5 kg

#### IATA

14.1  
UN number or ID number 1479  
14.2  
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  
14.6  
Special Provisions A3



## SECTION 15: Regulatory information

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

ICPE Classified installation: article 4706  
LGK (Germany) TRGS 510 5.1C  
Gefahrstoffverordnung (Germany) TRGS 511 C III

Chemical name	German WGK Section
Potassium nitrate; KNO <sub>3</sub>	1
Ammonium nitrate; NH <sub>4</sub> NO <sub>3</sub>	1
Potassium sulphate; K <sub>2</sub> SO <sub>4</sub>	1
Urea phosphate	Reg. no. 6537, hazard class 1 - slightly hazardous to water

#### 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 does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

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>	58.	-

#### Persistent Organic Pollutants

Not applicable

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

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

Not applicable

#### International Inventories:

##### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDL** - 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  
**AICS** - 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

H314 - Causes severe skin burns and eye damage

H319 - Causes serious eye irritation

H272 - May intensify fire; oxidizer

H318 - Causes serious eye damage

#### Legend

SVHC: Substances of Very High Concern for Authorization:

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

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

**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

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**Revision Date** 14-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**