Safety Data Sheet

Issue Date: 13-May-2015 **Revision Date:** 16-Feb-2016 **Version:** 1

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

1.1. Product identifier

Product Name: **Universol Special 127; 5-10-36+5MgO+TE**
Product Code **20090225EB**

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

Serious Eye Damage or Eye Irritation	Category 1 - (H318)
Oxidizing solids	Category 3 - (H272)

2.2. Label elements
Product Identifier:

Signal Word:
Danger

Hazard Statements:
H318 - Causes serious eye damage
H272 - May intensify fire; oxidizer
Contains Potassium sulphate; K_2SO_4

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

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P221 - Take any precaution to avoid mixing with combustibles
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/physician

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Ingredients	EC-No.	CAS-No	Weight %	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
Potassium Nitrate; KNO_3	231-818-8	7757-79-1	40 - 65%	Ox. Sol. 3 (H272)	01-2119488224-35
Potassium sulphate; K_2SO_4	231-915-5	7778-80-5	10 - 25%	Eye Dam. 1 (H318)	01-2119489441-34
Boric Acid; H_3BO_3	233-139-2	10043-35-3	0.1 - 1%	Repr. 1B (H360FD)	01-2119486683-25

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

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General Advice: First aid measures should be executed by trained personnel only.

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If symptoms persist, call a physician.

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

Eye Contact: Rinse thoroughly with plenty of water, also under the eyelids. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.

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.

Protection of First-Aiders: 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. Flooding quantities of water.

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. The product itself does not burn. May intensify fire; oxidizer.

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. 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 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) 5.1B
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

Potassium Nitrate; KNO_3	
Australia TWA	> 10 mg/m³
Bulgaria - Occupational Exposure Limits - TWAs	5.0 mg/m³ TWA
Latvia - Occupational Exposure Limits - TWAs	5 mg/m³ TWA
Potassium sulphate; K_2SO_4	
Bulgaria - Occupational Exposure Limits - TWAs	10.0 mg/m³ TWA
Latvia - Occupational Exposure Limits - TWAs	10 mg/m³ TWA
Boric Acid; H_3BO_3	
Australia TWA	12 mg/m³
Belgium - 8 Hr TWA	2 mg/m³ TWA borate
Bulgaria - Occupational Exposure Limits - TWAs	5.0 mg/m³ TWA (as B, listed under Boron and its inorganic compounds)
German mak	TWA: 10 mg/m³ Ceiling / Peak: 10 mg/m³ TWA: 0.5 mg/m³
Latvia - Occupational Exposure Limits - TWAs	10 mg/m³ TWA

Portugal	STEL: 6 mg/m³ TWA: 2 mg/m³
Spain OEL - Time Weighted Average (TWA):	STEL: 6 mg/m³ TWA: 2 mg/m³
Switzerland	STEL: 10 mg/m³ TWA: 10 mg/m³

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:	Tightly fitting safety goggles
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

Physical State:	Solid
Appearance:	Crystals, powder
Color:	Off-white.
Odor:	Not significant
pH:	no data available
Melting Point/Freezing Point:	no data available
Boiling Point/Range:	Solid, Not Applicable
Flash Point:	Solid, Not Applicable
Evaporation Rate:	Solid, Not Applicable
Flammability (solid, gas):	Non-flammable
Vapor Pressure:	Solid, Not Applicable
Vapor Density:	Solid, Not Applicable
Specific Gravity:	no data available
Water Solubility:	Soluble in water
Solubility(ies)	no data available
Partition Coefficient:	Solid, Not Applicable
Autoignition Temperature:	Not Applicable
Decomposition Temperature:	no data available
Explosive Properties:	Doesn't present explosion hazard. Based on data of ingredients.
Oxidizing Properties:	May intensify fire; oxidizer.

9.2. Other information

Bulk density:	+/- 1.18 kg/dm3

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): 35,176.00 mg/kg

Component Information:

Ingredients	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium Nitrate; KNO_3	= 3015 mg/kg (Rat)	> 2000 mg/kg	> 527 mg/m³
Potassium sulphate; K_2SO_4	= 6600 mg/kg (Rat)		
Boric Acid; H_3BO_3	= 2660 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 0.16 mg/L (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; H_3BO_3	Reproductive Toxicity - Repr. 1B: H360FD May damage fertility. May damage the unborn child. (C >= 5.5 %)

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

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

Potassium sulphate; K_2SO_4	2900: 72 h Desmodesmus subspicatus mg/L EC50	3550: 96 h Lepomis macrochirus mg/L LC50 static 510 - 880: 96 h Pimephales promelas mg/L LC50 static 653: 96 h Lepomis macrochirus mg/L LC50	890: 48 h Daphnia magna mg/L EC50
Boric Acid; H_3BO_3			115 - 153: 48 h Daphnia magna mg/L EC50

12.2. Persistence and degradability
No data available.

12.3. Bioaccumulative potential

Ingredients	LOGPOW
Boric Acid; H_3BO_3	-0.757

12.4. Mobility in soil
No data available.

12.5. Results of 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 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

14.1
UN-No: 1486
14.2
Proper shipping name: Potassium nitrate Mixture
14.3
Hazard Class: 5.1
14.4
Packing group: III
14.5
Marine Pollutant: No information available
14.6
EmS: F-A / S-Q
Special Provisions 964, 967
14.7
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not regulated

ADR/RID

14.1
UN-No: 1486
14.2
Proper shipping name: Potassium nitrate Mixture
14.3

Hazard Class:	5.1
14.4	
Packing group:	III
14.5	
Environmental Hazard	Not regulated
14.6	
Special Provisions	None
Tunnel restriction code	E
Limited Quantity	5 kg

IATA

14.1	
UN-No:	1486
14.2	
Proper shipping name:	Potassium nitrate Mixture
14.3	
Hazard Class:	5.1
14.4	
Packing group:	III
14.5	
Environmental Hazard	Not regulated
14.6	
Special Provisions	None

Section 15: REGULATORY INFORMATION

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

National regulations

Belgium

Denmark

Danish Sikkerhedsgruppe	Not regulated

France

ICPE	Classified installation: article 1230

Germany

Gefahrstoffverordnung (Germany) TRGS 511	Not regulated
LGK (Germany)	5.1B
Water Endangering Class (WGK):	1 (Everris classification)

Component	German WGK Section
Potassium Nitrate; KNO_3 7757-79-1 (40 - 65%)	class 1
Potassium sulphate; K_2SO_4 7778-80-5 (10 - 25%)	class 1
Boric Acid; H_3BO_3 10043-35-3 (0.1 - 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

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

H360FD - May damage fertility. May damage the unborn child
H318 - Causes serious 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)
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This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

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End of Safety Data Sheet