

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 16-Jun-2021

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	2009-225HA
Unique Formula Identifier (UFI)	HGJ5-E02J-000X-MCAK
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

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

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

P220 - Keep/Store away from clothing/ combustible materials

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)
Potassium nitrate; KNO ₃ 7757-79-1	231-818-8	40 - 65%	Ox. Sol. 3 (H272)	-	01-2119488224-35	-	-
Potassium sulphate; K ₂ SO ₄ 7778-80-5	231-915-5	10 - 25%	Eye Dam. 1 (H318)	-	01-2119489441-34	-	-
Boric acid; H ₃ BO ₃ 10043-35-3	233-139-2	0.1 - 1%	Repr. 1B (H360FD)	Repr. 1B :: C>=5.5%	01-2119486683-25	-	-

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
Potassium nitrate; KNO ₃	3015	No data available	No data available
Potassium sulphate; K ₂ SO ₄	6600	No data available	No data available
Boric acid; H ₃ BO ₃	2660	2000	0.16

This product contains one or more candidate substance(s) of very high concern (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Chemical name	CAS No	SVHC candidates
Boric acid; H ₃ BO ₃	10043-35-3	Present

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice

Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Inhalation

Remove to fresh air. Get medical attention immediately if symptoms occur.

Eye contact

Get immediate medical advice/attention. 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.

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

Note to physicians	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
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Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
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Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
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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.
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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.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin, eyes or clothing. 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.
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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

7.1. Precautions for safe handling

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.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including 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.

Identified 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; KNO ₃	-	-	-	TWA: 5.0 mg/m ³	-
Potassium sulphate; K ₂ SO ₄	-	-	-	TWA: 10.0 mg/m ³	-
Boric acid; H ₃ BO ₃	-	-	TWA: 2 mg/m ³ STEL: 6 mg/m ³	TWA: 5.0 mg/m ³	-
Chemical name	France	Germany	Germany MAK	Greece	Hungary
Boric acid; H ₃ BO ₃ - 10043-35-3	-	TWA: 0.5 mg/m ³	TWA: 10 mg/m ³ Peak: 10 mg/m ³	-	-
Chemical name	Italy	Latvia	Lithuania	Luxembourg	Netherlands
Potassium nitrate; KNO ₃ - 7757-79-1	-	TWA: 5 mg/m ³	TWA: 5 mg/m ³	-	-
Potassium sulphate; K ₂ SO ₄ - 7778-80-5	-	TWA: 10 mg/m ³	TWA: 10 mg/m ³	-	-
Boric acid; H ₃ BO ₃ - 10043-35-3	-	TWA: 10 mg/m ³	TWA: 10 mg/m ³	-	-
Chemical name	Norway	Poland	Portugal	Romania	Slovakia
Boric acid; H ₃ BO ₃ - 10043-35-3	-	-	TWA: 2 mg/m ³ STEL: 6 mg/m ³	-	-
Chemical name	Slovenia	Spain	Sweden	Switzerland	United Kingdom
Boric acid; H ₃ BO ₃ -	TWA: 0.5 mg/m ³	TWA: 2 mg/m ³	-	TWA: 1.8 mg/m ³	-

10043-35-3	STEL: 1 mg/m ³	STEL: 6 mg/m ³		STEL: 1.8 mg/m ³	
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Biological occupational exposure limits

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

8.2. Exposure controls

Personal protective equipment Wear normal, light working clothing

Eye/face protection Tight sealing safety goggles.

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective 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 Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

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).
Color: Off-white
Odor: Fertilizer.

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
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
pH	3.9	@ 1 g/l
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	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 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.
Eye contact	Causes serious eye damage.
Skin contact	Specific test data for the substance or mixture is not available. May cause 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. Burning. May cause blindness.

Numerical measures of toxicity

Acute toxicity

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

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Potassium nitrate; KNO ₃	= 3015 mg/kg (Rat)	> 2000 mg/kg	> 527 mg/m ³
Potassium sulphate; K ₂ SO ₄	= 6600 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
Boric acid; H ₃ BO ₃	= 2660 mg/kg (Rat)	> 2000 mg/kg	> 0.16 mg/L (Rat) 4 h

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

Skin corrosion/irritation May cause skin irritation.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes burns. Risk of serious damage to eyes.

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.

Chemical name	European Union
Boric acid; H ₃ BO ₃ 10043-35-3	Repr. 1B

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

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

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

		Lepomis macrochirus)		
Boric acid; H ₃ BO ₃	-	-	-	EC50: 115 - 153mg/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.

Component Information

Chemical name	Partition coefficient
Boric acid; H ₃ BO ₃	-0.757

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
Potassium nitrate; KNO ₃	The substance is not PBT / vPvB PBT assessment does not apply
Potassium sulphate; K ₂ SO ₄	The substance is not PBT / vPvB PBT assessment does not apply
Boric acid; H ₃ BO ₃	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

14.1	
UN-No:	1486
14.2	
Proper shipping name:	Potassiumnitrate Mixture
14.3	
Transport hazard class(es)	5.1
14.4	

Packing group: Limited Quantity 14.5	III 5 kg
Marine Pollutant: 14.6	no data available
EmS: Special Provisions 14.7	F-A / S-Q 964, 967
Bulk transport according Annex II of MARPOL and IBC Code	No data available

ADR

14.1	
UN-No:	1486
14.2	
Proper shipping name:	Potassiumnitrate Mixture
14.3	
Transport hazard class(es)	5.1
14.4	
Packing group:	III
14.5	
Environmental hazards	Not regulated
14.6	
Special Provisions	None
Tunnel restriction code	E
Limited Quantity	5 kg

IATA

14.1	
UN number or ID number	1486
14.2	
Proper shipping name:	Potassiumnitrate Mixture
14.3	
Transport hazard class(es)	5.1
14.4	
Packing group	III
14.5	
Environmental hazards	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

ICPE	Classified installation: article 1230
Germany Gefahrstoffverordnung (Germany) TRGS 511 Water hazard class (WGK)	Not regulated non-hazardous to water (nwg)

Chemical name	German WGK Section
Potassium nitrate; KNO ₃	1
Potassium sulphate; K ₂ SO ₄	1
Boric acid; H ₃ BO ₃	1

Netherlands

Chemical name	Netherlands - List of Carcinogens	Netherlands - List of Mutagens	Netherlands - List of Reproductive Toxins
Boric acid; H ₃ BO ₃	-	-	Fertility Category 1B Development Category 1B

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 Annex XVII	Substance subject to authorization per REACH Annex XIV
Boric acid; H ₃ BO ₃	30.	-

Persistent Organic Pollutants

Not applicable

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

Not applicable

EU - Biocides

Chemical name	EU - Biocides
Boric acid; H ₃ BO ₃	Product-type 8: Wood preservatives

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
- 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

H302 - Harmful if swallowed
H315 - Causes skin irritation
H318 - Causes serious eye damage
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	
<i>Classification according to Regulation (EC) No. 1272/2008 [CLP]</i>	<i>Method Used</i>
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
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 16-Jun-2021

Restrictions on use Restricted to professional users

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

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End of Safety Data Sheet