

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

Last Revision Date 23-Oct-2024

Version: 2

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

1.1. Product identifier

Product Name	Universol Hard Water Special; 9-9-41+TE
Product Code	2071-225HA
Unique Formula Identifier (UFI)	RTQ5-S0V5-000M-MHFK
Safety data sheet number	2071-225HA

REACH registration number	Not applicable
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)

Reason why uses advised against Use advised against in Chemical Safety Assessment per REACH Annex I point 7 2.3

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-RA@ICL-GROUP.COM
Non-Emergency Telephone Number +31 (0) 418655700

1.4. Emergency telephone number

IN CASE OF AN EMERGENCY CALL: +44 1235 239 670 (24/7)

Europe	112
Austria	+43 1 406 43 43
Belgium	+32 (0) 70 245 245
Denmark	+45 8212 1212
Finland	0800 147 111
France	+33 (0)1 45 42 59
Ireland	01 809 2566
Netherlands	088 755 8000 (24/7)
Norway	+47 22 59 13 00
Poland	+48 42 2538 400
Portugal	+351 800 250 250
Spain	+34 91 562 04 20
Sweden	112
Switzerland	Tox Info SW 145 (24h)
United Kingdom	111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

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 (EU Index 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 sulphate; K_2SO_4 (7778-80-5)	231-915-5	10 - 25%	Eye dam. 1 (H318)	-	01-2119489441-34	-	-
Potassium pentahydrogen bis(phosphate); $PeKacid$ (14887-42-4)	238-961-5	5 - 10%	Eye Irrit. 2 (H319)	-	01-2119510125-56	-	-
Ammonium nitrate; NH_4NO_3 (6484-52-2)	229-347-8	1 - 5%	Eye irrit. 2 (H319) Ox. Sol. 3 (H272)	Eye Irrit. 2 :: 10%≤C<100%	01-2119490981-27	-	-

*The exact percentage (concentration) of composition has been withheld as a trade secret

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 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L
Potassium sulphate; K ₂ SO ₄	6600	2000	No data available
Potassium pentahydrogen bis(phosphate); PeKacid	No data available	2000	No data available
Ammonium nitrate; NH ₄ NO ₃	2217	5000	0.527

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 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.
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.
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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.

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.

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 containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children.

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.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

Other Information

PGS-7 (The Netherlands)

1.3/C

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Potassium sulphate; K ₂ SO ₄	-	-	-	TWA: 10.0 mg/m ³	-
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Ammonium nitrate; NH ₄ NO ₃	-	TWA: 10.0 mg/m ³	-	-	-
Chemical name	Italy MDLPS	Latvia	Lithuania	Luxembourg	Netherlands
Potassium sulphate; K ₂ SO ₄	-	TWA: 10 mg/m ³	TWA: 10 mg/m ³	-	-

Biological occupational exposure limits

Derived No Effect Level (DNEL)

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.

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
Odor: Fertilizer.

Property	Values	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:	Not applicable	
Lower Flammability Limit:	Not applicable	
Flash Point:	No data available	None known
Autoignition Temperature:	No data available	None known

Decomposition Temperature:		None known
pH	No data available	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 Not applicable

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 use conditions. 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.
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Numerical measures of toxicity

Acute toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Potassium sulphate; K ₂ SO ₄	= 6600 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
Potassium pentahydrogen bis(phosphate); PeKacid	-	> 2000 mg/kg (Rat)	-
Ammonium nitrate; NH ₄ NO ₃	= 2217 mg/kg (Rat)	> 5000 mg/kg (Rat)	> 0.527 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. 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	Not applicable.

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: =653mg/L (96h, Lepomis macrochirus) LC50: =3550mg/L (96h, Lepomis macrochirus) LC50: 510 - 880mg/L (96h, Pimephales promelas)	-	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.

Component Information

Chemical name	Partition coefficient
Ammonium nitrate; NH ₄ 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

Chemical name	PBT and vPvB assessment
Potassium sulphate; K ₂ SO ₄	The substance is not PBT / vPvB
Potassium pentahydrogen bis(phosphate); PeKacid	Not applicable PBT assessment does not apply
Ammonium nitrate; NH ₄ NO ₃	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties

12.7. Other adverse effects

. No information available.

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:	III
Limited Quantity	5 kg
<u>14.5</u>	
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>	
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:	III
<u>14.5</u>	
Environmental hazards	Not regulated
<u>14.6</u>	
Special Provisions	274
Tunnel restriction code	E
Limited Quantity	5 kg

IATA

<u>14.1</u>	
UN number or ID number	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	III
<u>14.5</u>	
Environmental hazards	Not regulated
<u>14.6</u>	
Special Provisions	A3



SECTION 15: Regulatory information

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

National regulations

Denmark

Sikkerhedsgruppe DK

C

France

Germany

Gefahrstoffverordnung (Germany) TRGS 511

Water hazard class (WGK)

C III

slightly hazardous to water (WGK 1)

Chemical name	German WGK Section
Potassium sulphate; K_2SO_4	Reg. no. 255, hazard class 1 - slightly hazardous to water
Potassium pentahydrogen bis(phosphate); $PeKacid$	Reg. no. 9510, hazard class 1 - slightly hazardous to water
Ammonium nitrate; NH_4NO_3	Reg. no. 212, hazard class 1 - slightly hazardous to water

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 Annex XVII	Substance subject to authorization per REACH Annex XIV
Ammonium nitrate; NH_4NO_3	Use restricted. See entry 58.	-

REGULATION (EU) 2019/1148 on the marketing and use of explosives precursors

Chemical name	REGULATION (EU) 2019/1148 on the marketing and use of explosives precursors
Ammonium nitrate; NH_4NO_3	Present (16% by weight of N in relation to AN or higher)

Acquisition, introduction, possession or use of this product by the general public is restricted by Regulation (EU) 2019/1148. All suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point.

Named dangerous substances per Seveso Directive (2012/18/EU)

Chemical name	Lower-tier requirements (tons)	Upper-tier requirements (tons)
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Ammonium nitrate; NH ₄ NO ₃	5000	10.000
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Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

EU - Plant Protection Products (1107/2009/EC)

Biocidal Products Regulation (EU) No 528/2012 (BPR)

International Inventories:

TSCA This product complies with USINV
PICCS: This product does not comply with phil:
Australian Inventory of Chemical Substances This product does not comply with AICS

Legend:

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

H272 - May intensify fire; oxidizer
H302 - Harmful if swallowed
H315 - Causes skin irritation
H318 - Causes serious eye damage
H319 - Causes serious eye irritation
H360FD - May damage fertility. May damage the unborn child

Legend

SVHC: Substances of Very High Concern for Authorization:
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Classification procedure

- Calculation method
- Expert judgment and weight of evidence determination

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
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)

Last Revision Date 23-Oct-2024

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