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 15-Oct-2024 Version: 3

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

1.1. Product identifier

Product Name Universol Opal High N; 20-6-10+2MgO+TE

Product Code 2997-225HA

Unique Formula Identifier (UFI) VA98-G00R-M00V-5N2A

Safety data sheet number 2997-225HA

REACH registration number

Pure substance/mixture

Not applicable
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]

2.2. Label elements



Signal word Warning

Hazard statements

H319 - Causes serious eye irritation

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

P280 - Wear eye protection/ face protection

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

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 (EU	Weight-%	Classification		REACH	M-Factor	M-Factor
	Index No)		according to	concentration	registration		(long-term)
			Regulation	limit (SCL)	number		
			(EC) No.				
			1272/2008				
			[CLP]				
Ammonium nitrate;	229-347-8	25 - 40%	Eye irrit. 2 (H319)		01-2119490981-	-	-
NH4NO3			Ox. Sol. 3 (H272)	10%<=C<100%	27		
(6484-52-2)							
Potassium nitrate; KNO ₃	231-818-8	10 - 25%	Ox. Sol. 3 (H272)	-	01-2119488224-	-	-
(7757-79-1)					35-0020		
Urea phosphate;	225-464-3	1 - 5%	Skin Corr. 1B	-	01-2119489460-	-	-
CH7N2O5P			(H314)		34		
(4861-19-2)							
Boric acid; H ₃ BO ₃	233-139-2	< 0.1%	Repr. 1B	-	01-2119486683-	-	-
(10043-35-3)	(005-007-00-2)		(H360FD)		25		

^{*}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
Ammonium nitrate; NH ₄ NO ₃	2217	5000	0.527

N; 20-6-10+2MgO+TE

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L
Potassium nitrate; KNO₃	3015	5000	0.527
Boric acid; H ₃ BO ₃	2660	2000	2.12

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

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.

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 contactWash skin with soap and water. In the case of skin irritation or allergic reactions see a

physician.

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

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.

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 precautionsAvoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Other information Refer to protective measures listed in Sections 7 and 8.

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.

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 sectionsSee 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. Keep away from frost.

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

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	-
Boric acid; H ₃ BO ₃	-	-	TWA: 2 mg/m ³	TWA: 5.0 mg/m ³	-
			STEL: 6 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	France	Germany TRGS	Germany DFG	Greece	Hungary
Boric acid; H₃BO₃	-	TWA: 0.5 mg/m ³	TWA: 10 mg/m ³ Peak: 10 mg/m ³	-	-
Chemical name	Italy MDLPS	Latvia	Lithuania	Luxembourg	Netherlands
Potassium nitrate; KNO ₃	-	TWA: 5 mg/m ³	TWA: 5 mg/m ³	-	-
Boric acid; H ₃ BO ₃	-	TWA: 10 mg/m ³	TWA: 10 mg/m ³	-	-
Chemical name	Norway	Poland	Portugal	Romania	Slovakia
Boric acid; H ₃ BO 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 STEL: 1.0 mg/m ³	TWA: 2 mg/m ³ STEL: 6 mg/m ³	-	TWA: 1.8 mg/m ³ STEL: 1.8 mg/m ³	-

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.

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.

Skin and body protectionWear 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

2997-225HA --- Universol Opal High N; 20-6-10+2MgO+TE

Appearance:Powder(s), PrillsColor:GreenishOdor:Fertilizer.

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

Melting Point/Freezing Point:No data availableNone knownBoiling Point/Range:No data availableNone knownFlammability (solid, gas):No data availableNone known

Flammability Limits in Air:

Upper Flammability Limit:

Not applicable

Not applicable

Upper Flammability Limit:Not applicableLower Flammability Limit:Not applicable

Flash Point: No data available None known Autoignition Temperature: No data available None known

Decomposition Temperature:None known

PH

4.7

0 1 g/l

pH (as aqueous solution) No data available None known No data available **Kinematic Viscosity:** None known None known No data available **Dynamic Viscosity:** None known No data available Water solubility Solubility(ies) No data available None known **Partition Coefficient:** No data available None known **Vapor Pressure:** No data available None known No data available None known

Relative density

Bulk density

Density:

No data available

No data available

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
Sensitivity to static discharge

Not sensitive.
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

N; 20-6-10+2MgO+TE

Incompatible materials Keep away from catalysts like derivates 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. None under normal use conditions. 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 Specific test data for the substance or mixture is not available. May cause irritation.

Prolonged contact may cause redness and 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 May cause redness and tearing of the eyes.

Numerical measures of toxicity

Acute toxicity

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

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50	
Ammonium nitrate; NH ₄ N ₆	= 2217 mg/kg (Rat)	> 5000 mg/kg (Rat)	> 0.527 mg/L (Rat) 4 h	
Potassium nitrate; KNO	= 3015 mg/kg (Rat)	> 5000 mg/kg (Rat)	> 0.527 mg/L (Rat)4 h	
Urea phosphate; CH ₇ N ₂ O	₅ P = 2600 mg/kg (Rat)	-	-	
Boric acid; H₃BO₃	= 2660 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 2.12 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 serious eye irritation.

N; 20-6-10+2MgO+TE

Respiratory or skin sensitization Based on available data, the classification criteria are not met.

Germ cell mutagenicityBased on available data, the classification criteria are not met.

CarcinogenicityBased 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	Repr. 1B
10043-35-3	

STOT - single exposure STOT - repeated exposure Aspiration hazard 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

Endocrine disrupting properties

Not applicable.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

Unknown aquatic toxicity

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

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
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
Ammonium nitrate; NH₄NO₃		-3.1
	Boric acid; H ₃ BO ₃	-1.09

12.4. Mobility in soil

Mobility in soilno data available.Mobilityno data available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

Chemical name	PBT and vPvB assessment
Ammonium nitrate; NH4NO3	The substance is not PBT / vPvB
Potassium nitrate; KNO₃	The substance is not PBT / vPvB
Urea phosphate; CH ₇ N ₂ O ₅ P	The substance is not PBT / vPvB
Boric acid; H ₃ BO 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.

Not regulated

Not regulated

SECTION 14: Transport information

IMDG

14.1 UN-No:

14.2

Proper shipping name: Not regulated

14.3

Transport hazard class(es) Not regulated

14.4

Packing group: Not regulated

14.5

Marine Pollutant:

14.6

Special Provisions None

Bulk transport according Annex II of MARPOL and IBC Code No data available

ADR

14.1 UN-No: Not regulated

14.2

Proper shipping name: Not regulated

14.3

Transport hazard class(es) Not regulated

14.4

Packing group: Not regulated

14.5

Environmental hazards Not regulated

14.6

Special Provisions None

IATA

14.1

UN number or ID number Not regulated

14.2

Proper shipping name: Not regulated

14.3

Transport hazard class(es)

Not regulated

14.4

Packing group Not regulated

<u>14.5</u>

Environmental hazards Not regulated

<u>14.6</u>

Special Provisions None

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

ICPE Classified installation: article 1230, 1331 (Type III)

Germany

Gefahrstoffverordnung (Germany) TRGS 511 C I

Water hazard class (WGK) non-hazardous to water (nwg)

Chemical name	German WGK Section
Ammonium nitrate; NH₄NO₃	Reg. no. 212, hazard class 1 - slightly hazardous to water
Potassium nitrate; KNO₃	Reg. no. 346, hazard class 1 - slightly hazardous to water
Urea phosphate; CH ₇ N ₂ O₅P	Reg. no. 6537, hazard class 1 - slightly hazardous to water
Boric acid; H ₃ BO ₃	Reg. no. 315, hazard class 1 - slightly hazardous to water

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	Substance subject to authorization
	Annex XVII	per REACH Annex XIV
	Use restricted. See entry 58.	-
Ammonium nitrate; NH4NO3	·	
	Use restricted. See entry 30.	-
Boric acid; H ₃ BO ₃	Use restricted. See entry 75.	

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 ₄ NO ₃	Present (16% by weight of N in relation to AN or higher)	
Potassium nitrate; KNO ₃	Present	

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)
	5000	10.000
Ammonium nitrate; NH ₄ NO ₃		

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

Not applicable

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

Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
	Product-type 8: Wood preservatives
Boric acid; H ₃ BO ₃	

International Inventories:

TSCA
PICCS:
This product complies with USINV
This product does not comply with phil:
This product does not comply with AICS

Substances

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

H314 - Causes severe skin burns and eye damage

H315 - Causes skin irritation

H319 - Causes serious eve irritation

H360FD - May damage fertility. May damage the unborn child

Legend

2997-225HA --- Universol Opal High N; 20-6-10+2MgO+TE

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 15-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

This information contained herein is, to the best of Everris' knowledge and belief, accurate and reliable as of the date of preparation of this document. However, no warranty or guarantee, express or implied, is made as to the accuracy or reliability, and Everris shall not be liable for any loss or damage arising out of the use thereof. No authorization is given or implied to use any patented invention without a license. In addition, Everris shall not be liable for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices or from any hazards inherent in the nature of the product.

End of Safety Data Sheet