GoudenKorrel®

SAFETY DATA SHEET
VERVACTOR®

Prepared in accordance with COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No. 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

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

Date of preparation	12.04.2022
Date of revision	06.06.2024

1.1. Product identifier

Trade name		**VERVACTOR®**
Name of the substance		Polyhalite mixed with Potassium chloride and calcium carbonate
Synonyms		Polyhalite, Potassium Chloride, Calcium Carbonate
Identifier	POLYHALITE	Mol. Formula - $K_2MgCa_2[SO_4]_4 \cdot 2H_2O$ CAS No.: 15278-29-2 EC / List No.: 604-869-2
Identifier	POTASSIUM CHLORIDE	Mol. Formula - KCl CAS No.: 7447-40-7 EC / List No.: 231-211-8
Identifier	CALCIUM CARBONATE	Mol. Formula - $CaCO_3$ CAS No.: 471-34-1 EC / List No.: 207-439-9

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use	Agriculture, as a mineral fertilizer
Uses advised against:	Uses advised against have not been identified

1.3. Details of the supplier of the safety data sheet

Company	GoudenKorrel S.A.
Address	Kaliska, ul. Fabryczna 5 87-840 Lubień Kujawski
Telephone number:	+48 607 777 111
E-mail	kontakt@goudenkorrel.com
Website	www.goudenkorrel.com

1.4. Emergency telephone number:

Emergency telephone number:	112 Public-safety answering point (PSAP)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP classification	Classification according to Regulation (EC) No. 1272/2008 - unclassified

2.2. Label elements

Other labeling information (CLP)	Classification according to Regulation (EC) No. 1272/2008 - unclassified

2.3. Other hazards

PBT / vPvB	The substance does not meet current criteria for vPvB (very persistent and very bioaccumulative)
Other hazards	Substances have not been included in the list established in accordance with Article 59(1) of Regulation (EC) 1907/2006 as having endocrine disrupting properties, there is no information on their endocrine disrupting properties according to the criteria of Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.2. Mixture

Additional information	No admixtures that would require classification and labeling	
Substance	CAS identifier	ECHA identifier
Polyhalite	15278-29-2	604-869-2
Potassium chloride	7447-40-7	231-211-8
Calcium carbonate	471-34-1	207-439-9

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General advice	No special measures required.
Inhalation	Elevate the affected person from the place of exposure, place in a comfortable semi-reclining or sitting position. Supply fresh air; seek medical advice in case of symptoms.
Skin contact	Immediately remove contaminated clothing and rinse skin profusely with lukewarm running water; seek medical advice if irritation persists.
Eye contact	Immediately flush eyes with plenty of cool water, preferably running water, for at least 10 minutes. Remove contact lenses, avoid strong jets of water due to the risk of mechanical damage to the cornea. If symptoms persist, seek medical advice.
Ingestion	Do not cause vomiting. Rinse mouth with water. Drink plenty of water. If symptoms persist, seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed

Acute symptoms and effects	Irritation, redness, tearing, burning and itching of the eye. Itching and local redness of the skin. Slight irritation of the respiratory system, nasal and oral mucosa, and coughing. After ingestion, damage to the gastrointestinal mucosa, vomiting and diarrhea may occur. Ingestion of a large amount may cause heart disorders due to excess potassium.

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

Other information	Follow the recommendations in section 4.1.

SECTION 5: PROCEEDING IN CASE OF FIRE

5.1. Extinguishing media

Suitable extinguishing media	Use extinguishing agents suitable for surrounding materials
Unsuitable extinguishing media	Not specified

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazard	The chemical is not classified as flammable. The chemical is non-flammable.

5.3. Advice for fire fighters

Personal protective equipment	Special fire protection is not required. In the event of fire, hazard information available in section 10, point 10.6

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal protective equipment	Wear individual protective equipment. Avoid dust formation. Wear respiratory protective device against fumes, dust and aerosol. Wear protective clothing.

6.2. Environmental precautions

Environmental precautions	Avoid the release of large quantities of the mixture into the environment or watercourses. Exercise caution to avoid contamination of waterways or sewers, and notify appropriate services in case of accidental contamination.

6.3. Methods and material for containment and cleaning up

Cleaning	Sweep and pick up carefully. If necessary, use vacuum cleaner with water spray system or cleaning systems (with high efficiency particulate filters). Prevent dust in the air. Wear personal protective equipment in accordance with national regulations.

6.4. Reference to other sections

Other instructions	Section 8 for the use of personal protective equipment and Section 13 waste handling.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Handling	Ensure gravity ventilation. Use protective equipment. Use work methods that minimize dust generation. Avoid inhalation of dust.

7.2. Conditions for safe storage, including information on any incompatibilities

Storage	Store the fertilizer in a dry and sunless place, in the temperature range of 0°C to +30°C, taking care not to allow the product to freeze and protecting it from negative temperatures. Keep out of the reach of children, pets and livestock, away from water and food sources.

7.3. Specific end use(s)

Other	No specific uses identified.

SECTION 8: EXPOSURE CONTROL AND PERSONAL PROTECTION EQUIPMENT

8.1. Control parameters

MAXIMUM ALLOWABLE CONCENTRATION IN POLAND			
Name and CAS No. of chemical substance		DNS	Legal basis
Polyhalite	CAS 15278-29-2	-	Regulation of the Minister of Family, Labor and Social Policy of 12 June 2018 on the maximum permissible concentrations and intensities of factors harmful to health in the work environment.
Potassium chloride	CAS 7447-40-7	-	
Calcium carbonate	CAS 471-34-1	10 mg/m^3	

DNEL VALUES				
		Polyhalite	Potassium chloride	Calcium carbonate
Long-term systemic effects	Skin	-	303 mg/kg	-
Acute systemic effects		-	910 mg/kg	-

Long-term systemic effects	Respiratory tract	-	1064 mg/m^3	6.36 mg/m^3
Acute systemic effects		-	5320 mg/m^3	-

	PNEC VALUES		
	Polyhalite	Potassium chloride	Calcium carbonate
Freshwater	-	0.1 mg/l	-
Seawater	-	0.1 mg/l	-
Wastewater treatment plant	-	10 mg/l	-

8.2. Exposure controls

Precautions to prevent exposure	To prevent accidental exposure, dust accumulation should be prevented. It is recommended to use appropriate personal protective equipment. Protective glasses should be worn unless the risk of contact with eyes can be completely excluded due to the specific application (e.g. closed process). In addition, protective clothing and shoes should be worn.
Eye or face protection	Safety goggles must be used. For dust, wear tight-fitting goggles with side shields or encased wide-angle goggles.
Skin protection	Use CE Mark approved nitrile impregnated gloves. Use clothing that completely covers the skin, full length pants, long sleeved blouses. Protective footwear that protects against dust penetration.
Respiratory protection	Use suitable respiratory protection against particles depending on risk level.
Thermal hazards	The substance is not a fire (thermal) hazard, so no special measures are required in this respect.
Environmental exposure controls	Based on all available data, the product is not considered to be hazardous to the environment. Do not allow undiluted product or large quantities of it to reach ground water, surface water or sewage system.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

PARAMETER	VALUE
Physical state	Solid
Color	Gray, gray-white, gray-pink
Odor	Odorless
Melting/freezing point	Not specified
Boiling point or initial boiling point and boiling range	Not specified
Flammability of materials	Non-flammable product
Lower and upper explosive limit	Not applicable

Ignition point	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not applicable
pH	7.6
Kinematic viscosity	Not applicable
Solubility	Substance completely soluble in water
Partition coefficient n-octanol / water	Not applicable
Vapor pressure	Not applicable
Density or relative density	1.3 T/m^3
Relative vapor density	Not applicable
Particle characteristics	98% of the product is in the form of pellets with a size of 2-5 mm

9.2. Other information

Other properties	No further information

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity	Non-reactive during storage, use and application under normal temperature conditions and recommended use.

10.2. Chemical stability

Chemical stability	Stable during storage, use and application under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Hazardous reactions	No dangerous reactions known.

10.4. Conditions to avoid

Conditions to avoid	Unnecessary exposure to weather, moisture and high temperatures. Proximity to sources of heat or fire.

10.5. Incompatible materials

Incompatible materials	No further information

10.6. Hazardous decomposition products

Hazardous decomposition products	Possible formation of toxic gases during combustion; sulfur oxides, oxygen, magnesium oxide, hydrogen chloride

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation No. 1272/2008

HAZARD CLASSES	ASSESSMENT
Classification according to GHS (1272/2008/EC, CLP)	This substance does not meet the criteria for classification according to Regulation No. 1272/2008/EC
Acute toxicity	Not classified as causing acute toxicity
Skin corrosion/irritation	Not classified as causing skin corrosion/irritation
Serious eye damage/irritation	Not classified as causing serious eye damage or eye irritation
Skin or respiratory sensitization	Not classified as a respiratory or skin sensitizer
Germ cell mutagenicity	Not classified as mutagenic to germ cells
Carcinogenicity	Not classified as carcinogenic
Reproductive toxicity	Not classified as toxic for reproduction
Toxic effects on target organs - single exposure	Not classified as toxic to target organs (single exposure)
Toxic effects on target organs - repeated exposure	Not classified as toxic to target organs (repeated exposure)
Aspiration hazard	Not classified as posing an aspiration hazard

SYMPTOMS RELATED TO PHYSICAL, CHEMICAL AND TOXICOLOGICAL PROPERTIES	
In case of ingestion	Possible vomiting, nausea, gastrointestinal distress, excessive thirst
In case of getting into eyes	No data available
In case of inhalation	No data available
In case of getting on skin	No data available
Other information	None

11.2. Information on other hazards

Other information	No information on endocrine disrupting properties according to the criteria specified in the relevant regulations ((EC) No. 1907/2006, (EU) 2017/2100, (EU) 2018/605)).

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Toxicity	Not classified as hazardous to the aquatic environment

12.2. Persistence and degradability

Degradability	Methods to determine biodegradation are not suitable for inorganic materials.

12.3. Bioaccumulative potential

Bioaccumulation	Low potential

12.4. Mobility in soil

Mobility	Soluble in water

12.5. Results of PBT and vPvB assessment

PBT / vPvB	The substance does not meet current criteria for vPvB (very persistent and very bioaccumulative)

12.6. Endocrine disrupting properties

Effects on the endocrine system	No information on endocrine disrupting properties.

12.7. Other harmful side effects

Other information	No further relevant information available

SECTION 13: HANDLING OF WASTES

13.1. Waste treatment methods

Suitable methods of disposal	Waste handling should be carried out in accordance with applicable regulations and procedures. Depending on the degree of contamination, it can be used as a fertilizer for agricultural purposes or sent to a specialized company for disposal. In case of spillage, handling information are available in Section 6.

SECTION 14: TRANSPORT INFORMATION

Fertilizers are not classified, they are not considered hazardous materials according to the UN Orange Book and international transport codes, e.g. RID - railroad; ADR - road transport; IMDG - sea transport.

14.1. UN number or ID number

UN NO. / ID	Not applicable

14.2. UN Proper shipping name

UN name	Not applicable

14.3. Transport hazard class(es)

Hazard classes	Not applicable

14.4. Packing group

Packing group	Not applicable

14.5. Environmental hazards

Environmental hazards	Not applicable

14.6. Special precautions for users

Precautions	Not applicable

14.7. Sea transport in bulk according to IMO instruments

Sea transport	Not applicable

SECTION 15: REGULATORY INFORMATION

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

EUROPEAN UNION REGULATIONS	
Normative document	REGULATION (EC) No. 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.
Normative document	COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No. 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).
Normative document	REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006.

NATIONAL REGULATIONS	
Normative document	Act of 25 February 2011 on chemical substances and their mixtures.
Normative document	Law of 14 December 2012 on waste
Normative document	Act of 13 June 2013 on packaging and packaging waste management.

15.2. Chemical safety assessment

Assessment process	According to REACH regulation, no chemical safety assessment is required

SECTION 16: OTHER INFORMATION

Changes made	Section 1-15 with reference to doc. Commission Regulation (EU) 2020/878 of 18 June 2020.
Explanation of abbreviations and acronyms	Mol. Form. Chemical formula CAS No.: Numerical meaning assigned to a chemical EC / List No.: International classification of enzymes ECHA European Chemicals Agency DNEL Derived non-health effect level PNEC Predicted no-effect concentration PBT Persistent, bioaccumulative harmful substance vPvB Very persistent, highly bioaccumulative substance UN ID No. assigned to hazardous substances Substance identification No.
Reference sources	The data sheet was created on the basis of the manufacturer's data, safety data sheets of suppliers of raw materials, data from online databases, taking into account the currently valid legal regulations
Training	Persons having direct contact with the product should be familiarized with this Safety Data Sheet.