

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Trade name: Polygrain****1.2 Relevant identified uses of the substance or mixture and uses advised against****Application of the substance / the mixture** Soil additive, water and nutrient reservoir**1.3 Details of the supplier of the safety data sheet****Manufacturer/Supplier:****Green Legacy GmbH**

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**1.4 Emergency telephone number:**

+43 664 1480436

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Mon - Fri: 09:00 - 16:00 h

**Germany:** Poison Information Centre Mainz: +49 6131 19240 (Consultancy in German and English)**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

The product is not classified, according to the CLP regulation.

**2.2 Label elements****Labelling according to Regulation (EC) No 1272/2008** void**Hazard pictograms** void**Signal word** void**Hazard statements** void**Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

**Additional information:**

Product contains: Reportable explosives precursors. Making available, introduction, possession and use according to Regulation (EU) 2019/1148, Article 9.

**2.3 Other hazards**

Spilt product forms slippery coatings with water or moisture!

Fine dust can form explosive mixtures with air.

**Results of PBT and vPvB assessment****PBT:** The mixture does not contain PBT substances  $\geq 0,1$  %.**vPvB:** The mixture does not contain vPvB substances  $\geq 0,1$  %.

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**Determination of endocrine-disrupting properties**

The product does not contain substances with endocrine-disrupting properties  $\geq 0.1$  %(w/w).

**SECTION 3: Composition/information on ingredients****3.2 Mixtures****Description:**

Mixture of substances listed below with nonhazardous additions.

Contains synthetic polymers.

**Dangerous components:**

CAS: 9004-34-6 EINECS: 232-674-9	Cellulose substance with a Community workplace exposure limit	50 - < 75%
CAS: 25608-12-2 Polymer	Potassium polyacrylate, crosslinked substance with a Community workplace exposure limit	25 - < 50%

**Additional information:** For the wording of the listed hazard phrases refer to section 16.

**SECTION 4: First aid measures****4.1 Description of first aid measures****General information:**

In case of discomfort or doubt, seek medical advice.

If unconscious, use a stable lateral position and do not administer anything through mouth.

**After inhalation:** Supply fresh air; consult doctor in case of complaints.

**After skin contact:**

Wash with plenty of soap and water.

Seek medical treatment in case of complaints.

**After eye contact:**

Rinse opened eye for several minutes under running water.

Remove contact lenses, if present and easy to do. Continue rinsing.

Do not rub the eye dry, as mechanical friction can also cause corneal damage.

Seek medical treatment in case of complaints.

**After swallowing:**

Rinse mouth.

Do NOT induce vomiting.

Call a doctor immediately.

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

No further relevant information available.

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

Depending on the condition of the patients, the doctor must assess the symptoms and the overall general condition.

**SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable extinguishing agents:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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**For safety reasons unsuitable extinguishing agents:** Water with full jet

**5.2 Special hazards arising from the substance or mixture**

Dust can form explosive mixtures with air.

In case of fire, the following can be released:

CO<sub>x</sub>, NO<sub>x</sub>

**5.3 Advice for firefighters**

**Protective equipment:** Wear self-contained respiratory protective device.

**Additional information**

Do not inhale explosion gases or combustion gases.

Cool endangered receptacles with water spray.

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Restricted access to the affected area until cleaning work is completed.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Avoid contact with skin and eyes.

Avoid formation of dust.

Spilt product forms slippery coatings with water or moisture!

Avoid breathing dust.

Keep away from ignition sources.

**6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

**6.3 Methods and material for containment and cleaning up:**

Pick up mechanically.

Avoid formation of dust.

Dispose of the material collected according to regulations.

Ensure adequate ventilation.

Clean again.

**6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

Ensure adequate ventilation.

Keep receptacles tightly sealed.

Avoid contact with skin and eyes.

Prevent formation of dust.

Product contains synthetic polymers. Do not ingest and do not pour down the drain.

When using near surface water, keep a minimum distance of 10 metres.

Avoid breathing dust.

Use personal protective equipment as required.

Observe protective measures and safety instructions.

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**Information about fire - and explosion protection:**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Dust can combine with air to form an explosive mixture.

**7.2 Conditions for safe storage, including any incompatibilities****Storage:****Requirements to be met by storerooms and receptacles:**

Store in a dry, cool, well-ventilated area.

Store in accordance with local/regional/national/international regulations.

**Information about storage in one common storage facility:**

Store away from foodstuffs.

Store away from feeding stuff.

**Further information about storage conditions:**

Keep container tightly sealed.

Store in the dark.

Protect from moisture.

Keep out of reach of children and pets.

**Recommended storage temperature:** room temperature**Storage class:** 11**7.3 Specific end use(s)** No further relevant information available.**SECTION 8: Exposure controls/personal protection****8.1 Control parameters****Ingredients with limit values that require monitoring at the workplace:****CAS: 9004-34-6 Cellulose**

LEP (Spain)	Long-term value: 10 mg/m <sup>3</sup>
VLEP (France)	Long-term value: 10 mg/m <sup>3</sup>
WEL (Great Britain)	Short-term value: 20* mg/m <sup>3</sup> Long-term value: 10* 4** mg/m <sup>3</sup> *inhalable dust **respirable
TWA (Italy)	Long-term value: 10 mg/m <sup>3</sup>

**CAS: 25608-12-2 Potassium polyacrylate, crosslinked**

MAK (Germany)	0.05 A mg/m <sup>3</sup>
Peak limit.	I(1) KanzK. 4; SchGr: C

**Regulatory information**

LEP (Spain): Límites de exposición profesional para agentes químicos

VLEP (France): ED 1487 05.2021

WEL (Great Britain): EH40/2020

TWA (Italy): Valori Limite di Soglia

MAK (Germany): MAK- und BAT-Liste

**DNELs** No data available.**PNECs** No data available.

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**Regulatory information****Additional Occupational Exposure Limit Values for possible hazards during processing:**

The national dust limits must be observed in the event of dust generation.

**Additional information:** The lists valid during the making were used as basis.

**8.2 Exposure controls****Appropriate engineering controls**

No further data; see section 7.

Technical measures and the use of suitable working methods take priority over the use of personal protective equipment.

**Individual protection measures, such as personal protective equipment****General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Do not eat or drink while working.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Prevent formation of dust.

Avoid breathing dust.

Ensure adequate ventilation.

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

**Respiratory protection:** Wear respiratory protection during dust formation.

**Hand protection**

In case of prolonged or repeated contact, protective gloves are recommended to avoid mechanical impact on the skin.

EN 374

The glove material has to be impermeable and resistant to the product/ the substance/ the mixture.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

**Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

**Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye/face protection**

Wear tight-fitting safety goggles in case of dust formation.

EN 166

**Body protection:** Protective work clothing

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**Environmental exposure controls** Do not allow to enter sewers/ surface or ground water.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### General Information

Physical state	Solid
Colour:	White
Odour:	Odourless
Odour threshold:	No information available.
Melting point/freezing point:	No information available.
Boiling point or initial boiling point and boiling range	No information available.
Flammability	combustible
Lower and upper explosion limit	
Lower:	No information available.
Upper:	No information available.
Flash point:	Not applicable.
Decomposition temperature:	No information available.
pH	Not applicable.
Viscosity:	
Kinematic viscosity	Not applicable.
Dynamic:	Not applicable.
Solubility	
water:	Insoluble.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure:	Not applicable.
Density and/or relative density	
Density at 20 °C:	~ 0.77 g/cm <sup>3</sup>
Relative density	Not determined.
Vapour density	Not applicable.
Particle characteristics	Particle size: 0.2 mm - 4 mm

### 9.2 Other information

#### Appearance:

Form: Powder - Granules

#### Important information on protection of health and environment, and on safety.

Ignition temperature: No information available.

Explosive properties: Product does not present an explosion hazard.  
Dust can combine with air to form an explosive mixture.

#### Change in condition

Softening point/range

Oxidising properties

No information available.

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Evaporation rate Not applicable.

## Information with regard to physical hazard classes

Explosives	void
Flammable gases	void
Aerosols	void
Oxidising gases	void
Gases under pressure	void
Flammable liquids	void
Flammable solids	void
Self-reactive substances and mixtures	void
Pyrophoric liquids	void
Pyrophoric solids	void
Self-heating substances and mixtures	void
Substances and mixtures, which emit flammable gases in contact with water	void
Oxidising liquids	void
Oxidising solids	void
Organic peroxides	void
Corrosive to metals	void
Desensitised explosives	void

## SECTION 10: Stability and reactivity

**10.1 Reactivity** No further relevant information available.**10.2 Chemical stability** No decomposition if used and stored according to specifications.**10.3 Possibility of hazardous reactions** Dust can combine with air to form an explosive mixture.**10.4 Conditions to avoid**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Avoid formation of dust.

**10.5 Incompatible materials:** No further relevant information available.**10.6 Hazardous decomposition products:**

No decomposition if used and stored according to specifications.

## SECTION 11: Toxicological information

**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity** Based on available data, the classification criteria are not met.**LD/LC50 values relevant for classification:****CAS: 25608-12-2 Kaliumpolyacrylat, quervernetzt**

Oral LD50 &gt; 5,000 mg/kg (rat) (OECD 401)

Dermal LD50 &gt; 2,000 mg/kg (rat) (OECD 402)

**Skin corrosion/irritation** Based on available data, the classification criteria are not met.**Serious eye damage/irritation** Based on available data, the classification criteria are not met.

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**Respiratory or skin sensitisation** 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.**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.**11.2 Information on other hazards****Endocrine disrupting properties**

None of the ingredients is listed.

**SECTION 12: Ecological information****12.1 Toxicity****Aquatic toxicity:****CAS: 25608-12-2 Potassium polyacrylate, crosslinked**LC50 (96 h) > 5,500 mg/l (fish) (*Leuciscus idus*)  
OECD TG 203EC50 (24 h) > 6,000 mg/l (microorganisms) (*Pseudomonas putida*)  
DEV L 8**12.2 Persistence and degradability** No further relevant information available.**12.3 Bioaccumulative potential** No further relevant information available.**12.4 Mobility in soil** No further relevant information available.**12.5 Results of PBT and vPvB assessment****PBT:** The mixture does not contain PBT substances  $\geq 0,1$  %.**vPvB:** The mixture does not contain vPvB substances  $\geq 0,1$  %.**12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

**12.7 Other adverse effects****Additional ecological information:****General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow product to reach ground water, water course or sewage system.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Recommendation**

Smaller quantities can be disposed of with household waste.

Only dispose of product residues via authorised companies according to local legislation.

**European waste catalogue**

Notes: The European Waste Catalogue (EWC) classifies waste materials and categorises them according to what they are and how they were produced. This may cause other classifications. The final decision belongs to the last user.

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02 01 09	agrochemical waste other than those mentioned in 02 01 08
20 03 99	municipal wastes not otherwise specified

**Uncleaned packaging:****Recommendation:**

Dispose of packaging according to regulations on the disposal of packagings.

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

**SECTION 14: Transport information****14.1 UN number or ID number**

ADR/RID/ADN, IMDG, IATA not regulated

**14.2 UN proper shipping name**

ADR/RID/ADN, IMDG, IATA not regulated

**14.3 Transport hazard class(es)**

ADR/RID/ADN, ADN, IMDG, IATA

Class not regulated

**14.4 Packing group**

ADR/RID/ADN, IMDG, IATA not regulated

**14.5 Environmental hazards:**

Not applicable.

**14.6 Special precautions for user**

Not applicable.

**14.7 Maritime transport in bulk according to IMO**

instruments Not applicable.

UN "Model Regulation": not regulated

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****Directive 2012/18/EU**

**Named dangerous substances - ANNEX I** None of the ingredients is listed.

**DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

**REGULATION (EU) 2019/1148****Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

**Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

CAS: 7757-79-1 | potassium nitrate

**Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.

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**Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.

**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Department issuing SDS:**

UmEnA GmbH

<http://umena.at>Email: [office@umena.at](mailto:office@umena.at)**Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (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 Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative