Chryzotop Green 0.25%

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Revision date: 10/4/2022 Supersedes version of: 10/11/2018 Version: 4.31

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

1.1. Product identifier

Product form : Mixture
Product name : Chryzotop Green 0.25%
UFI : YJ0C-23QA-387Q-SKJD
Product group : Trade product
Other means of identification : Authorisation No. 17567

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

1.2.1. Relevant identified uses

Main use category : Professional use
Use of the substance/mixture : Plant growth regulator that promotes root formation.

Title	Life cycle stage	Use descriptors
Chryzotop Green 0.25%	Professional	PC27

Full text of use descriptors: see section 16

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Rhizopon B.V.
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The Netherlands
T + 31(0) 71 3415146 - F + 31(0) 71 3415829
info@rhizopon.com - www.rhizopon.com

1.4. Emergency telephone number

Country	Official advisory body	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

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

EUH-statements : EUH210 - Safety data sheet available on request.
EUH401 - To avoid risks to human health and the environment, comply with the instructions for use.
Extra phrases : SP1 Do not contaminate water with the product or its container.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Comments : Mentioned percentages are in (w/w %)

Product name	Product identifier	% w/w (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Talc (Mg3H2(SiO3)4)	CAS-No.: 14807-96-6 EC-No.: 238-877-9 REACH-no: 01-2120140278-58	> 50	Not classified
Chromium (III) oxide	CAS-No.: 1308-38-9 EC-No.: 215-160-9 REACH-no: 01-2119433951-39	< 1,0	Not classified
4-(indol-3-yl)butyric acid	CAS-No.: 133-32-4 EC-No.: 205-101-5 REACH-no: -	0.1 – 1	Acute Tox. 4 (Oral), H302 Repr. 2, H361fd

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : In all cases of doubt, or when symptoms persist, seek medical attention.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. In all cases of doubt, or when symptoms persist, seek medical attention.

First-aid measures after skin contact : Wash skin with plenty of water and soap. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Immediately rinse with water for a prolonged period while holding the eyelids wide open. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Rinse mouth out with water. Do NOT induce vomiting. Call a poison center or a doctor if you feel unwell.

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

No additional information available

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide (CO2).

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. For a large spillage, contain the spillage by bunding.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Ventilate area. Dust deposited may be vacuum cleaned. Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. Knock down dust with water spray jet. After cleaning, flush traces away with water.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Use only outdoors or in a well-ventilated area.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store under dry conditions. Keep away from food, drink and animal feedingstuffs. Original packaging.

Storage temperature : 10 – 20 °C

Packaging materials : Polypropylene. Polyethylene.

7.3. Specific end use(s)

No supplementary information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Talc (Mg3H2(SiO3)4) (14807-96-6)	
United Kingdom - Occupational Exposure Limits	
Local name	Talc
WEL TWA (OEL TWA) [1]	1 mg/m³ respirable dust
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Talc (Mg3H2(SiO3)4) (14807-96-6)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	2.16 mg/m³
Acute - local effects, inhalation	3.6 mg/m³
Long-term - systemic effects, dermal	43.2 mg/kg bodyweight/day
Long-term - local effects, dermal	4.54 mg/m³
Long-term - systemic effects, inhalation	2.16 mg/m³
Long-term - local effects, inhalation	3.6 mg/m³
DNEL/DMEL (General population)	
Acute - systemic effects, inhalation	1.08 mg/m³
Acute - systemic effects, oral	160 mg/kg bodyweight
Acute - local effects, inhalation	1.8 mg/m³
Long-term - systemic effects,oral	160 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	1.08 mg/m³
Long-term - systemic effects, dermal	21.6 mg/kg bodyweight/day
Long-term - local effects, dermal	2.27 mg/cm²
Long-term - local effects, inhalation	1.8 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	597.97 mg/l
PNEC aqua (marine water)	141.26 mg/l
PNEC aqua (intermittent, freshwater)	597.97 mg/l
PNEC aqua (intermittent, marine water)	141.26 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	31.33 mg/kg dwt
PNEC sediment (marine water)	3.13 mg/kg dwt

Chromium (III) oxide (1308-38-9)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	2 mg/m³
Long-term - local effects, inhalation	500 µg/m³
DNEL/DMEL (General population)	
Long-term - local effects, inhalation	500 µg/m³
PNEC (Water)	
PNEC aqua (freshwater)	4.7 µg/l
PNEC aqua (marine water)	4.7 µg/l
PNEC aqua (intermittent, freshwater)	4.7 µg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	18.2 mg/kg dwt
PNEC sediment (marine water)	1.31 mg/kg dwt
PNEC (Soil)	
PNEC soil	3.2 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:
Gloves. Safety glasses. Protective clothing.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:
Use eye protection according to EN 166, designed to protect powders and dusts

8.2.2.2. Skin protection

Skin and body protection:
Wear suitable protective clothing. Overall. Apron.

Hand protection:
In case of repeated or prolonged contact wear gloves. Recommendation: Wear suitable gloves tested to EN374. Suitable material: Nitrile rubber (NBR), Neoprene. Layer thickness : No data available. Breakthrough time : refer to the recommendations of the supplier. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

8.2.2.3. Respiratory protection

Respiratory protection:
In case of inadequate ventilation wear respiratory protection.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Other information:
Do not eat, drink or smoke when using this product. Always wash your hands immediately after handling this product, and once again before leaving the workplace.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Colour	:	Green.
Appearance	:	Powder.
Odour	:	odourless.
Odour threshold	:	Not available
Melting point	:	124 °C (4-(indol-3-yl)butyric acid) (OECD 102 method)
Freezing point	:	Not applicable
Boiling point	:	> 250 °C (4-(indol-3-yl)butyric acid) (OECD 102 method)
Flammability	:	Non flammable.
Explosive properties	:	Product is not explosive.
Oxidising properties	:	Not oxidizing.
Explosive limits	:	Not applicable
Lower explosion limit	:	Not applicable
Upper explosion limit	:	Not applicable
Flash point	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	> 250 °C (4-(indol-3-yl)butyric acid) (OECD 102 method)
pH	:	9 (10% solution in water) (20.5°C)
pH solution	:	Not available
Viscosity, kinematic	:	Not applicable
Viscosity, dynamic	:	Not applicable
Solubility	:	Water: insoluble in water (14,7 g/l @ pH7 20°C (4-(indol-3yl)butyric acid))
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	1.1 Pa @20°C (4-(indol-3-yl)butyric acid) (EEC A.4/OECD 104)
Vapour pressure at 50°C	:	Not available
Density	:	0.46 g/ml (EEC A.3, CIPAC MT 159)
Relative density	:	Not applicable
Relative vapour density at 20°C	:	Not applicable
Particle size	:	Not available
Particle size distribution	:	Not available
Particle shape	:	Not available
Particle aspect ratio	:	Not available
Particle aggregation state	:	Not available
Particle agglomeration state	:	Not available
Particle specific surface area	:	Not available
Particle dustiness	:	Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Avoid creating or spreading dust.

10.5. Incompatible materials

Oxidizing agent. Strong acids.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Chryzotop Green 0.25%	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat	> 2.4 mg/l

Talc (Mg3H2(SiO3)4) (14807-96-6)	
LD50 oral rat	3870 – 5000 mg/kg
LD50 dermal rat	2000 mg/kg
LC50 Inhalation - Rat	2.1 mg/l/4h

Chromium (III) oxide (1308-38-9)	
LD50 oral rat	5000 – 15000 mg/kg
LC50 Inhalation - Rat	5.41 mg/l/4h

4-(indol-3-yl)butyric acid (133-32-4)	
LD50 oral	1925 g/kg mouse
LD50 dermal rat	> 750 mg/kg

Skin corrosion/irritation : Not classified
pH: 9 (10% solution in water) (20.5°C)
Serious eye damage/irritation : Not classified
pH: 9 (10% solution in water) (20.5°C)
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Chromium (III) oxide (1308-38-9)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

Talc (Mg3H2(SiO3)4) (14807-96-6)	
NOAEL (oral, rat, 90 days)	100 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 452 (Chronic Toxicity Studies)

Aspiration hazard : Not classified

Chryzotop Green 0.25%	
Viscosity, kinematic	Not applicable

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short–term (acute) : Not classified
Hazardous to the aquatic environment, long–term (chronic) : Not classified

Talc (Mg3H2(SiO3)4) (14807-96-6)	
LC50 - Fish [1]	89.581 – 110 g/l
LC50 - Fish [2]	110000 mg/l Test organisms (species): other:
EC50 - Crustacea [1]	36.812 g/l
EC50 72h - Algae [1]	7.203 g/l
EC50 96h - Algae [1]	7202.7 mg/l Test organisms (species): other:
NOEC (chronic)	1459798 mg/l Test organisms (species): other: Duration: '30 d'

Chromium (III) oxide (1308-38-9)	
LC50 - Fish [1]	1 – 10000000 µg/l 4 days.
EC50 72h - Algae [1]	148.1 µg/L

4-(indol-3-yl)butyric acid (133-32-4)	
LC50 - Fish [1]	250 mg/l 96 h, Oncorhynchus mykiss (Rainbow trout)
LC50 - Fish [2]	210 mg/l 96 h, Leuciscus idus (golden orfe)
EC50 - Crustacea [1]	112 mg/l 48 h - Daphnia magna
EC50 72h - Algae [1]	101 mg/l EyC50
EC50 72h - Algae [2]	118 mg/l EbC50, 48 h - P.subcapitata

12.2. Persistence and degradability

Chryzotop Green 0.25%	
Persistence and degradability	Potentially biodegradable.

4-(indol-3-yl)butyric acid (133-32-4)	
Persistence and degradability	Readily biodegradable (Modified Sturm test; OECD 301B).

12.3. Bioaccumulative potential

Chryzotop Green 0.25%	
Bioaccumulative potential	Bioaccumulation unlikely.

Talc (Mg3H2(SiO3)4) (14807-96-6)	
Partition coefficient n-octanol/water (Log Pow)	-9.4 @ 25 °C / pH 7

4-(indol-3-yl)butyric acid (133-32-4)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

Chryzotop Green 0.25%	
Ecology - soil	No supplementary information available.

12.5. Results of PBT and vPvB assessment

Chryzotop Green 0.25%
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID

ADR	IMDG	IATA	RID
14.1. UN number or ID number			
Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name			
Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable

ADR	IMDG	IATA	RID
14.5. Environmental hazards			
Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available			

14.6. Special precautions for user

Overland transport
Not applicable

Transport by sea
Not applicable

Air transport
Not applicable

Rail transport
Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

For the following substances of this mixture a chemical safety assessment has been carried out:
4-(indol-3-yl)butyric acid

SECTION 16: Other information

Indication of changes:
according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878.

Indication of changes			
Section	**Changed item**	**Change**	**Comments**
	Revision date	Modified	
	Supersedes	Modified	
	Version	Modified	
	Regulatory reference	Modified	
1.1	UFI	Modified	

Abbreviations and acronyms:	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	Sewage treatment plant
vPvB	Very Persistent and Very Bioaccumulative

Data sources : ECHA (European Chemicals Agency). zRMS Nederland (REGULATION (EC) No 1107/2009).

Other information : DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
EUH210	Safety data sheet available on request.
EUH401	To avoid risks to human health and the environment, comply with the instructions for use.

Full text of H- and EUH-statements:	
H302	Harmful if swallowed.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
Repr. 2	Reproductive toxicity, Category 2

Full text of use descriptors	
PC27	Plant protection products

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.