

## SAFETY DATA SHEET

conform 1907/2006/EC – 453/2010/EC

Commercial product name: CHRYZOPLUS GREY 0.8%  
Date of issue: 1 April 2015, version 1.1  
Page: 1 of 12

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

Product identifier

Trade name: **CHRYZOPLUS GREY 0.8%**

Synonym(s): -

Relevant identified uses of the substance or mixture and uses advised against:

Plant protection product.  
Plant growth regulator that promotes root formation.

Product category: Product Category 27 (PC27 Plant protection products),  
Sector of Use 3 (SU3 Industrial uses).

Uses advised against: Other non-specified industry.

Reason: Due to the lack of related experience or information, the supplier cannot approve this use.

Details of the supplier of the safety data sheet

Manufacturer/supplier: Rhizopon B.V.  
Rijndijk 263a  
2394 CE Hazerswoude-Rijndijk  
The Netherlands  
Postbus 336  
2400 AH Alphen aan den Rijn  
The Netherlands  
Telephone + 31(0) 71 3415146  
Telefax + 31(0) 71 3415829  
E - mail: [info@rhizopon.com](mailto:info@rhizopon.com)  
URL: [www.rhizopon.com](http://www.rhizopon.com)

Further information obtainable from:

Contact person: Dhr. G. Schouten  
Tel.: + 31(0) 71 3415146  
Email: [info@rhizopon.com](mailto:info@rhizopon.com)  
Working hours (business days): 09:00-17:00.

Emergency telephone number:

The Netherlands:	National Poison Information Centre:	+31 (0) 30 247 88 88
Belgium:	Belgian Poison Centre:	+32 (0) 70 245 245
United Kingdom:	UWIC:	+44 (0) 29 204 16388

### SECTION 2: Hazards identification.

Classification of the substance or mixture

Classification in accordance with Regulation (EC) no. 1272/2008

Void.

Label elements and precautionary statement

Hazard pictograms: -  
Signal word: -  
Hazard statements: -  
Precautions: -

Classification in accordance with Directive 67/548/EEC or Directive 1999/45/EC

## SAFETY DATA SHEET

conform 1907/2006/EC – 453/2010/EC

Commercial product name: CHRYZOPLUS GREY 0.8%  
Date of issue: 1 April 2015, version 1.1  
Page: 2 of 12

Void.

Label elements

Hazard symbols: -  
Classification of the labelling: -  
Risk phrase(s): -  
Safety advice: -

Hazard-determining components for labelling: -

Other hazards: Void.

Results of PBT and vPvB assessment

PBT: No.  
vPvB: No.

### SECTION 3: Composition/information on ingredients.

Chemical characterization: Mixture.  
Description: Contains talc, chromium (III) oxide and 4-(indol-3-yl)butyric acid.

Hazardous ingredients.

Talc

CAS#: 14807-96-6  
EC#: 238-877-9  
Index#: -  
REACH reg.#: -  
Content (W/W): > 50 %  
Danger:  
1999/45/EC: -  
1272/2008/EC: -

Triiron tetraoxide

CAS#: 1317-61-9  
EC#: 215-277-5  
Index#: -  
REACH reg.#: 01-2119457646-28-0000  
Content (W/W): < 1.0 %  
Danger:  
1999/45/EC: -  
1272/2008/EC: -

4-(Indol-3-yl)butyric acid

CAS#: 133-32-4  
EC#: 205-101-5  
Index#: -  
REACH reg.#: -  
Content (W/W): 0.8 %  
Danger:  
1999/45/EC: Xn; R22 - Repr. Cat. 3; R62, R63.

## SAFETY DATA SHEET

conform 1907/2006/EC – 453/2010/EC

Commercial product name: CHRYZOPLUS GREY 0.8%  
Date of issue: 1 April 2015, version 1.1  
Page: 3 of 12

1272/2008/EC: Acute Tox. 4; H302 - Repr. 2; H361fd.

Full text of each relevant R-, H- and EUH- phrase(s) can be found in section 16.

### SECTION 4: First aid measures.

#### Description of first aid measures.

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

Eye contact: Remove possible contact lenses. Contamination of the eyes must be treated by thorough irrigation with water for 10 minutes, with the eyelids held open.

Skin contact: Wash off with plenty of soap and water. If symptoms develop, obtain medical attention.

Swallowing: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

If aerosol or dust is inhaled in high concentrations: If breathed in, move person into fresh air. If not breathing, give artificial respiration. If the person feels unwell consult a physician or take victim to hospital (show packaging, label or SDS to physician). Place unconscious person on the side in the recovery position. Loosen tight clothing such as a shirt collar, tie, belt or waistband. Keep at rest.

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

Eye contact: May cause serious eye irritation. Particle matter may cause physical injury to the eye. Redness and pain.

Skin contact: May cause skin irritation. Contain components that may be harmful if absorbed through skin.

Inhalation: May cause respiratory tract irritation. Contains talc dust which can lead to cough and shortness of breath. Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly when dispersed. The substance may have effects on the lungs, resulting in talc pneumoconiosis.

Ingestion: May be harmful if swallowed.

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

Further medical treatment: Symptomatic treatment and supportive therapy as indicated.

### SECTION 5: Firefighting measures.

#### Extinguishing media.

Suitable extinguishing media: CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water spray.  
Foam.  
Sand.  
Adapt extinguishing measures to suit the environment.

Unsuitable extinguishing media: -

#### Special hazards arising from the substance

or mixture: During heating or in case of fire, poisonous gases may be produced.  
May be released in event of fire:  
Magnesium oxide.

## SAFETY DATA SHEET

conform 1907/2006/EC – 453/2010/EC

Commercial product name: CHRYZOPLUS GREY 0.8%  
Date of issue: 1 April 2015, version 1.1  
Page: 4 of 12

	Silicon oxides. Chromium oxides. Carbon oxides.
Advice for firefighters.	
Special protective clothing:	Wear self-contained breathing apparatus.
Other information:	No specific requirements.

### SECTION 6: Accidental release measures.

Personal precautions, protective equipment and emergency procedures:	Use personal protective equipment. Avoid dust formation. Prevent the formation of clouds of dust (cover the spilled material or make it wet) and the inhalation of it. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust. In case of possible exposure: Dust filter (P2).
Environmental precautions:	Notify competent authorities in case of release of large quantities into the environment. Inform the authorities if a continuous spill cannot be stopped.
Methods and material for containment and cleaning up:	Keep upwind avoiding inhalation of dust. Collect spill with broom or vacuum cleaner (with filter) and collect in containers; when necessary, first make it wet to prevent dust forming. Wash spilled area with plenty of water (wash water for in the garden) and the remaining with water and soap (wash water for in the sewer).
Reference to other sections:	Information regarding safe handling – see section 7. Information regarding personal protective equipment – see section 8. Information regarding disposal – see section 13.

### SECTION 7: Handling and storage.

Handling.	
Precautions for safe handling:	Open and handle package with care. Open the container outdoors, out of the wind and in dry conditions. Wash hands after use. Do not smoke, eat or drink during use.
Information about fire - and explosion protection:	No specific requirements.
Conditions for safe storage, including any incompatibilities.	
Storage:	Close containers after each use. Keep out of reach of children. Keep away from food, drink and animal feeding stuffs.
Requirements to be met by storerooms and receptacles:	Preferably keep in the original packaging. Store in a frost-free environment. Prevent dust generation.

## SAFETY DATA SHEET

conform 1907/2006/EC – 453/2010/EC

Commercial product name: CHRYZOPLUS GREY 0.8%  
Date of issue: 1 April 2015, version 1.1  
Page: 5 of 12

Suitable packaging material: Keep container tightly closed in a dry and well-ventilated place.  
Store in the original container and preferable do not re-use these.  
Suitable material for tanks and pipelines: Stainless steel, PVC, polyethylene.  
Information about storage in one common storage facility: Install partitions in the drip tray to prevent acidic and alkaline substances from coming into contact with one another.  
Further information about storage conditions: Recommended storage temperature  $20 \pm 10$  °C.  
Storage stability: Stable for 6 months under recommended use and storage conditions.  
See the use-by date mentioned on the packaging.  
Specific end use(s): No further relevant information available.

### SECTION 8: Exposure controls/personal protection.

Control parameters.

Ingredients with limit values that require monitoring at the workplace:

Product information: 14807-96-6	Talc
TWA 8 h	mg/m <sup>3</sup> (ppm)
	1 (-) England (EH40/2005). Respirable talk dust, free of asbestoses fibres. Risk group for pregnancy, class C (2001). Class C: no risk for damage to the unborn child below the occupational limits. 0.25 (-) Netherlands 0.3 (-) Denmark 0.5 (-) Finland (for talc with asbestos) 6 (-) Norwegian (total dust) 2 (-) Norwegian (reparable dust)

Hazardous ingredients with DN(M)EL:

Product information: 1308-38-9 Chromium (III) oxide	Exposure	Value	Unit	Population / Effects
DN(M)EL	Short-term dermal	-	mg/kg bw/day	Workers Local
DN(M)EL	Short-term inhalation	10	mg/m <sup>3</sup>	Workers Local
DN(M)EL	Long-term dermal	-	mg/kg bw/day	Workers Systemic
DN(M)EL	Long-term inhalation	-	mg/m <sup>3</sup>	Workers Systemic
DN(M)EL	Long-term dermal	-	mg/kg bw/day	Workers Local
DN(M)EL	Long-term inhalation	3	mg/m <sup>3</sup>	Workers Local
DN(M)EL	Short-term dermal	-	mg/kg bw/day	General population Local
DN(M)EL	Short-term inhalation	-	mg/m <sup>3</sup>	General population Local
DN(M)EL	Long-term dermal	-	mg/kg bw/day	General population Systemic

## SAFETY DATA SHEET

conform 1907/2006/EC – 453/2010/EC

Commercial product name: CHRYZOPLUS GREY 0.8%  
Date of issue: 1 April 2015, version 1.1  
Page: 6 of 12

DN(M)EL	Long-term inhalation	-	mg/m <sup>3</sup>	General population Systemic
DN(M)EL	Long-term oral	-	mg/kg bw/day	General population Systemic
DN(M)EL	Long-term dermal	-	mg/kg bw/day	General population Local
DN(M)EL	Long-term inhalation	3	mg/m <sup>3</sup>	General population Local

### Hazardous ingredients with PNEC:

Product information: 1308-38-9 Chromium (III) oxide	Value	Unit	Compartment
PNEC	-	mg/l	Fresh water
PNEC	-	mg/l	Marine water
PNEC	-	mg/l	Intermittent releases
PNEC	-	mg/l	STP (sewage treatment plant)
PNEC	-	mg/kg dwt	Sediment fresh water
PNEC	-	mg/kg dwt	Sediment marine water
PNEC	-	mg/kg ww	Soil
PNEC	-	mg/l	Oral

Exposure controls.  
Personal protective equipment:

Technical safeguards:

Respiratory protection:

Skin and body:



Hands:



Eyes:

Take care of sufficient ventilation. Do not smoke, eat or drink whilst working. Wear suitable protective clothing. Eating, drinking and smoking should be prohibited in areas where this material is handled and stored. Review your applications in order to identify potential sources of dust exposure. Local exhaust ventilation, which collects dust at source, can be used. For example down draft tables, emission controlling tools and materials handling equipment. Keep the workplace clean. Use a vacuum cleaner fitted with a High Efficiency Particle Air (HEPA) filter, avoid brushing and compressed air.

Suitable respiratory equipment or local ventilation should be used in cases of insufficient ventilation or where dust formation is possible. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as CEN (EU).

Wear suitable protective clothing (preferably heavy cotton), (overall, preferably heavy cotton or protecting clothing for once-only use). Soiled clothes should be cleaned to remove material dust before being taken off (e.g. use vacuum cleaning, not compressed air). Keep working clothes separate.

Wash hands before breaks and at the end of work. Protective gloves should be worn when handling with the product. For prolonged or repeated handling, use gloves: nitrile (EN 374, e.g. nitrile, minimum layer thickness: 0.4 mm, breakthrough time > 480 minutes, level 6).

Appropriate eye protection (safety eyewear with side shields, dust protective goggles) should be worn (EN 166). Eye - wash. If possible,

## SAFETY DATA SHEET

conform 1907/2006/EC – 453/2010/EC

Commercial product name: CHRYZOPLUS GREY 0.8%  
Date of issue: 1 April 2015, version 1.1  
Page: 7 of 12



do not wear contact lenses when working with this substance.

Measuring procedures: In order to establish compliance with an exposure limit and to establish that exposure is properly controlled, it may be necessary to determine the concentration of the substances in the inhalation zone or in the general workspace.

Environmental protection: Avoid (unintended or unwanted) release to the environment.

### SECTION 9: Physical and chemical properties.

Information on basic physical and chemical properties.

General information.

Form: Solid (powder).  
Colour: Grey  
Odour: Almost no odour.  
Odour threshold: Not available.  
pH: 9 - < 11.5.  
Boiling point: Melts from 121 °C. Contains 4-(indol-3-yl)butyric acid, which melts from 121 °C.  
Flash point: > 93 °C.  
Explosive properties: -  
Vapour pressure: 0.01 mPa (at 20 °C). 0.01 mPa (at 20° C) for 4-(indol-3-yl)butyric acid.  
Specific gravity: Ca. 0.72 (water = 1).  
Solubility in water: Nearly insoluble. Not soluble in water; 14.7 g/l (at pH7 and 20°C) for 4-(indol-3-yl)butyric acid.  
Viscosity: -  
Vapour density: -  
Evaporation rate: -

Other information: No further relevant information available.

### SECTION 10: Stability and reactivity.

Reactivity: Not reactive at intended use.  
Chemical stability: The product is stable if stored and handled as prescribed.  
Possibility of hazardous reactions: No data.  
Conditions to avoid: Avoid dust formation. Avoid moisture.  
Incompatible materials: Incompatible with strong oxidizing agents, strong acids and metals.  
Hazardous decomposition products: No hazardous decomposition products are formed if stored under normal conditions. In case of heating or combustion, irritating or poisonous vapours may be released such as nitrogen oxides and carbon oxides.



**SAFETY DATA SHEET**

conform 1907/2006/EC – 453/2010/EC

Commercial product name: CHRYZOPLUS GREY 0.8%  
Date of issue: 1 April 2015, version 1.1  
Page: 8 of 12

**SECTION 11: Toxicological information.**

## Toxicology information

## Acute toxicity:

## LD/LC50 values relevant for classification:

Product information: 14807-96-6	Talc	
Oral	LD50	-
Inhalation	LC50	-
Dermal	LD50	-

## LD/LC50 values relevant for classification:

Product information: 1317-61-9	Triiron tetraoxide	
Oral	LD50	> 5000 mg/kg (Rat)
Inhalation	LC50	-
Dermal	LD50	-

## LD/LC50 values relevant for classification:

Product information: 133-32-4	4-(Indol-3-yl)butyric acid	
Oral	LD50	> 100 mg/kg (oral mouse, 1 h).
Inhalation	LC50	-
Dermal	LD50	-

The following health risk assessment is based on an assessment of the various ingredients in the product.

## Primary irritant effect:

on the skin: -  
to the eye: -

Germ cell mutagenicity: Not classified.

## Reproductive and developmental

toxicity: Not classified. Contains 4-(indol-3-yl)butyric acid, possible risk of impaired fertility and of harm to unborn child.

Sensitisation: Not classified.

## CMR effects (carcinogenicity, mutagenicity and toxicity for

reproduction): Not classified. Contains talc that contains small quantities of quartz. Quartz is classified IARC: 1 - Group 1: Carcinogenic to humans (Quartz). Tumorigenic: Carcinogenic by RTECS criteria. Lungs, Thorax, or Respiration: Bronchiogenic carcinoma. Endocrine: Tumors. Contains chromium (III) oxide, this is classified by IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Chromium (III) oxide).

Other information: No further relevant information available.

**SECTION 12: Ecological information.**

## Toxicology information

## Ecotoxicity from the components:

## LD/LC50 values relevant for classification:

Product information: 14807-96-6	Talc	
Fish	LC50	-
Water flea	EC50	-
Algae	EC50	-
Bacteria	EC50	-



**SAFETY DATA SHEET**

conform 1907/2006/EC – 453/2010/EC

Commercial product name: CHRYZOPLUS GREY 0.8%  
Date of issue: 1 April 2015, version 1.1  
Page: 9 of 12

LD/LC50 values relevant for classification:		
Product information: 1308-38-9	Chromium (III) oxide	
Fish	LC50	> 10000 mg/l h, danio rerio
Water flea	EC50	-
Algae	EC50	> 10000 mg/l
Bacteria	NOEC	-

  

LD/LC50 values relevant for classification:		
Product information: 133-32-4	4-(Indol-3-yl)butyric acid	
Fish	LC50	> 90.5 mg/l (96 h, oncorhynchus mykiss).
	LC50	186 mg/l (96 h, carp).
Water flea	EC50	57 mg/l (48 h, daphnia magna).
Algae	EC50	-
Bacteria	EC50	-

The following ecological risk assessment is based on an assessment of the various ingredients in the product.

Persistence and degradability: Partially inorganic and presumed to be partially biodegradable over the long-term.

Behaviour in environmental compartments

Bioaccumulative potential: Bioaccumulation in organisms is not expected.

Mobility in soil: No further relevant information available.

Further ecological information.

General information: NWG (Wassergefährdungsklasse or water pollution class, German Water Resources Act., not water pollutant).

Results of PBT and vPvB

Assessment: The mixture does not meet all of the assessment criteria for persistence, bioaccumulation and toxicity and hence is not considered to be PBT or vPvB.

Other adverse effects: No further relevant information available.

**SECTION 13: Disposal considerations**

Product waste:	Incinerate in a waste incinerator suitable for disposal according to the local relevant regulations. The generation of waste should be avoided or minimised where ever possible. Waste, even small quantities, should never be poured down drains, sewers or watercourses.
EC Regulation for Disposal of Waste (EWC):	06 10 01 WASTES FROM INORGANIC CHEMICAL PROCESSES, waste from nitrogen chemical processes and fertilizer manufacture.
Waste disposal:	Dispose in a suitable waste treatment facility in compliance with all federal, provincial and local regulations.
Empty containers:	Containers of this material may be hazardous when empty since they retain product residues (dust, solids). Comply with local regulations with regard to the recovery or disposal of waste.

## SAFETY DATA SHEET

conform 1907/2006/EC – 453/2010/EC

Commercial product name: CHRYZOPLUS GREY 0.8%  
Date of issue: 1 April 2015, version 1.1  
Page: 10 of 12

### SECTION 14: Transport information.

Land transport ADR/RID (cross-border)

ADR/GGVSEB class: Not a dangerous good according to the transport regulations.

Hazard identification number: -

UN number: -

Packing group: -

Label: -

Special marking: -

UN proper shipping name: -

Tunnel restriction code: -

Inland shipping ADN/ADR

ADN/R-class: -

UN number: -

Subsidiary risk

Environmental hazards: -

CMR properties: -

Buoyancy: -

Maritime transport IMDG

IMDG-class: -

UN number: -

Label: -

Packing group: -

EMS number: -

Marine pollutant: -

Proper shipping name: -

Air transport ICAO-TI and IATA-DGR

ICAO/IATA-class: -

UN number: -

Label: -

Packing group: -

Proper shipping name: -

Environmental hazards: No.

Special precautions for user: None.

Transport in bulk according to Annex II of MARPOL 73/78 and the  
IBC Code: No further relevant information available.

### SECTION 15: Regulatory information.

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

National regulations: -



Waste symbol:

## SAFETY DATA SHEET

conform 1907/2006/EC – 453/2010/EC

Commercial product name: CHRYZOPLUS GREY 0.8%  
Date of issue: 1 April 2015, version 1.1  
Page: 11 of 12

EU regulations and directives which affect this mixture (not yet directly or indirectly mentioned):

Directive 89/686/EEC	Personal protective equipment.
Directive 91/414/EEG	Plant protection products.
Directive 98/24/EC	Risks related to chemical agents at work.

Chemical safety assessment: A chemical safety assessment has not been carried out.

### SECTION 16: Other information.

List of relevant R-, H- and EUH-phrases from sections 2 and 3:

R22 -	Harmful if swallowed.
R62 -	Possible risk of impaired fertility.
R63 -	Possible risk of harm to the unborn child.
Xn -	Harmful.
Repr. Cat. -	Reproductive toxicity category.
H302 -	Harmful if swallowed.
H361fd -	Suspected of damaging fertility. Suspected of damaging the unborn child.
Acute Tox. -	Acute toxicity.
Repr. -	Reproductive toxicity.

History:	Date of printing:	1 April 2015
	Date of previous version:	2 February 2014.
	Version:	1.1.
	Changes:	Update of hand protection specifications and regulations.

Reference: EFSA Journal 2010;8(9):1720 (for indolylbutyric acid).

Abbreviations and acronyms:

ADR:	Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID:	Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG:	International Maritime Code for Dangerous Goods
IATA:	International Air Transport Association
IATA-DGR:	Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO:	International Civil Aviation Organization
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO)
P:	Marine pollutant:
GHS:	Globally Harmonized System of Classification and Labelling of Chemicals
CAS:	Chemical Abstracts Service (division of the American Chemical Society)
EC50:	Half maximal effective concentration
LC50:	Lethal concentration, 50 percent
LD50:	Lethal dose, 50 percent
OEL:	Occupational Exposure Limit
NOEC:	No Observed Effect Concentration
vPvB:	Very Persistent and Very Bioaccumulative
PBT:	Persistent, Bioaccumulative and Toxic substance
EWC:	European Waste Catalogue
TWA:	Time-Weighted Average
DNEL:	Derived No-Effect Level



Rhizopon B.V.  
Rijndijk 263a  
2394 CE Hazerswoude-Rijndijk  
The Netherlands

## SAFETY DATA SHEET

conform 1907/2006/EC – 453/2010/EC

Commercial product name: CHRYZOPLUS GREY 0.8%  
Date of issue: 1 April 2015, version 1.1  
Page: 12 of 12

DMEL: Derived Minimal Effect Level  
PNEC: Predicted No-Effect Concentration

Rhizopon® is a trademark of Rhizopon B.V.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the product's properties. In all cases, it is the responsibility of the user to determine the applicability of such information and recommendations and the suitability of any products for its own particular purpose.