(changed by regulation (EU) no. 453/2010)

Created: 23<sup>rd</sup> November 2010 Revised: 26<sup>th</sup> September 2018

Valid starting from: 26<sup>th</sup> September 2018

Version: 1.3 Replacing Version: 1.2

#### 1. Designation of substance or rather of mixture and of company

#### 1.1. Product identification

Substance name/ Trade name: ChiProPlant, water soluble

Chitosan EC-No.: 200-638-1

CAS-No.: 9012-76-4

REACH registration No.: 17-2119456686-25-0000 **Different Designation:** Poly-D-Glucosamin

#### 1.2. Relevant identified uses of substance or mixture and uses that are not recommended

--

# **1.2.** Detail on supplier that provides safety data sheet Producer / Supplier

ChiPro GmbH

#### **Street**

Anne-Conway-Str. 1

#### Postal Code/City

28359 Bremen

#### **Contact department for technical information**

Dr. Siegfried Bank

#### Telephone / Telefax / E-Mail

+49 421 3651 7073 / +49 421 27656920 / sbank@chipro.de

#### 1.1. Emergency number

Poison information centre north +49 551 19240

#### 2. Possible Dangers

#### 2.1. Classification of substance or mixture

Classification in accordance to regulation (EC) no. (EC) No 1107/2009: Basic Substance Chitosan hydrochloride SANCO/12388/2013— rev. 2 20 March 2014:

According (EG) Nr. 1272/2008, Anhang VII (substances):

This substance is not classified as hazardous/poisonous.

(changed by regulation (EU) no. 453/2010)

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#### 2.2. Elements of characterization

Elements of characterization in accordance to regulation (EC) no. 1272/2008 (substances)/directive 1999/45/EC (mixtures)

Icon / Hazard symbol

--

Signal word / hazard term: Attention

#### Hazard indications / R-sentences

H319 irritation of the eye

H335 Specific target toxicity organ irritation of respiratory tracts

#### **Security indications / S-sentences**

P402 Store in dry place

P232 Protect from moisture

P233 Keep container firmly closed

P235 Keep cooled

P262 Do not let touch eyes, skin or clothing

P305+P351+P338+P313 IN CASE OF CONTACT WITH EYES: Rinse carefully several minutes with water.

Continue rinsing. Consult/contact medical help.

P302+P352 IN CASE OF CONTACT WITH SKIN: Wash with a lot of water and soap.

P342+P311 in case of symptoms of respiratory tracts: Call doctor.

P301+P101 IN CASE OF SWALLOWING: If medical consultation necessary, keep packaging or label

#### **Further elements of characterization**

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#### 2.3. Additional hazards

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#### 3. Composition / Particulars on components

#### 3.1. Substances

This substance is no mixture.

(changed by regulation (EU) no. 453/2010)

Created: 23<sup>rd</sup> November 2010 Revised: 26<sup>th</sup> September 2018

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#### 3.2. Mixtures

Name of substance: Poly-D-Glucosamine

EC-no.: 200-638-1 CAS-no.: 9012-76-4 Index-no.: -- REACH-pre-registration no.: 17-

2119456686-25-0000

#### 4. First aid measures

#### 4.1. Description of first aid measures

#### After inhaling

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#### After skin contact

Rinse with a lot of water

#### After eye contact

Rinse carefully for several minutes with water. Remove contact lenses if possible. Continue rinsing. Consult doctor / get medical help.

#### After swallowing

If medical help is necessary, have packaging or label ready.

#### 4.2. Most important acute and delayed symptoms and effects

Irritation/ reddening of eyes/skin/mucous membrane. Nausea after swallowing.

#### 4.3. Advice on immediate medical help or special treatment

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#### 5. Measures of fire fighting

#### 5.1. Means of extinguishing fire

Suitable: Extinguishing powder, foam, water spraying jet

Unsuitable: Full water jet

#### 5.2. Particular hazards of substance or mixture

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#### 5.3. Advice on fire fighting

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#### 6. Measures in case of unintentional release

# **6.1.** Personal precautionary measure, protective equipment and measures in case of emergency

Avoid contact with eyes or mucous membrane.

(changed by regulation (EU) no. 453/2010)

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#### 6.2. Environmental conservation measure

Do not let reach water.

#### 6.3. Methods and material for holding and cleansing

Clear away mechanically or dilute strongly with water.

#### 6.4. Reference to other sections

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#### 7. Application and storage

#### 7.1. Protective measures for safe application

Avoid contact with eyes and mucous membrane.

#### Protective measures from fire and explosion

The mixture is not an explosive hazard.

#### Measures to avoid dust dispersion and aerosols

Avoid strong drafts when containers are open

#### Measures of environmental protection

Do not release into water.

#### **General hygiene measures**

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#### 7.2. Conditions for safe storage with consideration for incompatibility

#### Information on storage conditions

Store in dry place Protect from moisture Keep container closed firmly Keep cooled

#### Requirements for storage room and containers

Storage category: --

#### 7.3. Specific final applications

Industry and sector specific guidelines: --

#### 8. Restriction and monitoring of exposition / Personal safety equipment

#### 8.1. Parameter to monitor

(changed by regulation (EU) no. 453/2010)

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8.1.1. Limiting values of exposition at workspace and/or biological limiting values Workspace limiting values (AGW) Germany

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8.1.2. DNEL- and PNEC- values

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8.1.3. Control-Banding (f.ex. ILO, EMKG)

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8.2. Restriction and monitoring of exposition

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8.2.1. Suitable technical controlling equipment

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8.2.2. Individual safety measure – personal safety equipment

Eye / Face protection

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**Skin protection** 

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**Additional skin protection** 

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**Breath protection** 

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**Heat / Cold protection** 

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8.2.3. Restriction and monitoring of environmental exposition

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- 9. Physical and chemical characteristics
- 9.1. Details on fundamental physical and chemical characteristics

Appearance State : Solid

Color: White – light yellow Smell: Slightly sour

(changed by regulation (EU) no. 453/2010)

Created: 23<sup>rd</sup> November 2010 Revised: 26<sup>th</sup> September 2018

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Smell threshold: --

pH-value: 4-5 in 1% solution
Melting point/freezing point: -Boiling begin and boiling range: --

Flashpoint: --

Vaporization speed : -- Inflammability : --

Upper/lower inflammability and explosive range: --

Steam pressure : -Steam density : -Relative density : -Solubility : Water
Distribution coefficient : -n-octanol/water : --

self-inflammability temperature : --

Corrosion temperature: --

Viscosity: 7 -7 cps in 1% solution Explosive characteristics: --Oxidizing characteristics: --

#### 9.2. Additional details

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#### 10. Stability and reactivity

#### 10.1. Reactivity

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#### 10.2. Chemical stability

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#### 10.3. Possibly hazardous reactions

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#### 10.4. Conditions to avoid

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#### 10.5. Incompatible materials

Do not mix with alkaline herbicides, pesticides, fungicides, fertilizer.

#### 10.6. Hazardous products of decomposition

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#### 11. Toxicological data

(changed by regulation (EU) no. 453/2010)

Created: 23<sup>rd</sup> November 2010 Revised: 26<sup>th</sup> September 2018

Valid starting from: 26th September 2018

Version: 1.3 Replacing Version: 1.2

#### 11.1. Data on toxicological effects

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#### Hazard categorization of substances

```
acute toxicity --
etching/ irritating effect on skin --
serious eye damage/irritation --
sensitization of respiratory tracts/skin --
germ cell mutagenicity --
carcinogenicity --
reproductive toxicity --
specific target organ toxicity on singular exposition --
specific target organ toxicity on repeated exposition --
aspiration hazards --
```

#### Following effects for mixtures

```
acute toxicity --
irritation Irritation of eye and mucous membrane
etching effect --
sensitization --
toxicity in case of repeated administering --
carcinogenicity --
mutagenicity --
reproductive toxicity --
```

Symptoms and effects (delayed and chronic) with declaration of ways of exposition

also: Information on toxicokinetic, metabolism and distribution

#### 12. Environmental data

#### 12.1. Toxicity

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#### 12.2. Persistence and degradability

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#### 12.3. Bioaccumulation potential

# Safety Data Sheet according to regulation (EC) no. 1907/2006 (changed by regulation (EU) no. 453/2010)

		November 2010	
Revised:	26 <sup>th</sup>	September 2018	

Valid starting from: 26<sup>th</sup> September 2018

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12.4. Mobility in soil

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12.5. Result of PBT- and vPvB-assessment

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12.6. Other harmful effects

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#### 13. Indications on disposal

13.1. Process of waste treatment

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**Treatment of contaminated packaging** 

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**Garbage key in accordance with Garbage Disposal Decree (AVV)** 

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**Special precautionary measures** 

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**Respective EU or other regulations** 

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#### 14. Indications on transportation

14.1. UN number

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**14.2.** UN dispatch marking in accordance with regulation ADR/RID

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IMDG-Code / ICAO-TI / IATA-DGR

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14.3. Transportation hazard classification

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# **Safety Data Sheet** according to regulation (EC) no. 1907/2006 (changed by regulation (EU) no. 453/2010)

Created: 23 <sup>rd</sup> November 2010 Revised: 26 <sup>th</sup> September 2018 Valid starting from: 26 <sup>th</sup> September 2018		
Version	: 1.3 Replacing Version: 1.2	
14.4.	Packaging class	
14.5.	Environmental hazards  Marking environmentally hazardous substances  ADR/RID / IMDG-Code / ICAO-TI / IATA-DGR: ☐ yes / ☒ no  Marine Pollutant: ☐ yes / ☒ no	
14.6.	Special precautionary indications for applier	
14.7.	Mass transportation in accordance with appendix II of MARPOL-settlement 73/78 and in accordance with IBC-Code Soiling category (X,Y or Z): Ship type (1,2 or 3):	
	gal provisions  Regulations on safety, health and environmental protection/ specific legal provisions for substance or mixture	
	EU regulations e.g.  Regulation (EC) no. 2037/2000 (substances that lead to deterioration of the ozone layer):	
	Regulation (EC) no. 850/2004 (persistent organic pollutant):	
	Regulation (EC) no. 689/2008 (export and import of hazardous chemicals):	
	Restrictions in accordance to heading VIII of regulation (EC) 1907/2006:	
	National regulations e.g.	
	No clash 	
	Other relevant regulations	
15.2.	Substance safety assessment	

(changed by regulation (EU) no. 453/2010)

Created: 23<sup>rd</sup> November 2010 Revised: 26<sup>th</sup> September 2018

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Version: 1.3 Replacing Version: 1.2

#### 16. Other data

#### Changes in relation to last version

**REACH** conformity

#### **Abbreviations**

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#### **Bibliographical reference and data source**

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Methods used in accordance with article 9 of regulation (EC) no. 1272/2008 for the evaluation of information for the purpose of classification

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# Wording of R-sentences, hazard indications, safety advice and/or safety indications which are referenced in sections 2 to 15

H319 eye irritation

H335 specific target organ toxicity respiratory tract irritation

#### **Training for employees**

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# CLP-labeling of mixtures (until 2015 as voluntary information in addition to label in accordance with RL 1999/45/EC)

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#### **Further information**

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