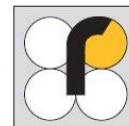


# SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006  
Version 01 Revision date: 05-01-2021  
Print date: 18-1-2021

r-biopharm®



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

### 1.1. Product identifier

Product name Extraction solution II  
Product code 5000CII

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

Identified uses Laboratory use

### 1.3. Details of the supplier of the safety data sheet

Company R-Biopharm Nederland B.V.  
Beijerinckweg 18  
6827 BN Arnhem  
Netherlands  
Telephone +31 (0)26-363-0364  
Fax +31 (0)26-364-5111  
E-mail address info@r-biopharm.nl

### 1.4. Emergency telephone number

Emergency phone # Please look for the emergency telephone number in your country before using this substance or mixture.

## 2. Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification (Regulation (EC) No 1272/2008)

Serious eye damage (Category 1), H318

Short-term (acute) aquatic hazard (Category 1), H400

Long-term (chronic) aquatic hazard (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2. Label elements

#### Labelling (Regulation (EC) No 1272/2008)

Pictogram



GHS05



GHS09

Signal word Danger

Hazard statement(s)

H318 Causes serious eye damage.

H400 Very toxic to aquatic life

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.

P280 Wear protective gloves/ eye protection/ face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P501 Dispose of contents/ container to an approved waste disposal plant.

Supplemental Hazard Statements None

### 2.3. Other hazards

None

## 3. Composition/information on ingredients

### 3.1. Dangerous ingredients

Chemical name	EC-No	CAS-No	Weight (%)	Classification (1272/2008/EC)	REACH Registration Number
Zinc(II) sulfate heptahydrate	231-793-3	7446-20-0	30%	Eye Dam. 1; Aquatic Acute 1; Aquatic Chronic 1; H302, H318, H400, H410 M-Factor - Aquatic Acute:1 M-Factor – Aquatic Chronic: 1	No data available

For the full text of the H-Statements mentioned in this Section, see Section 16.

For the full text of the R-phrases mentioned in this Section, see Section 16.

## 4. First aid measures

### 4.1. Description of first aid measures

<b>General advice</b>	First aider needs to protect himself. Consult a physician. Show this safety data sheet to the doctor in attendance.
<b>Eye contact</b>	Rinse out with plenty of water. Get medical attention immediately if symptoms occur.
<b>Skin contact</b>	Wash off with plenty of water. Remove contaminated clothing. Consult a physician.
<b>Ingestion</b>	Rinse mouth with water. Do NOT induce vomiting. If conscious, give 2 glasses of water. Get immediate medical attention (mention methanol ingestion).
<b>Inhalation</b>	Move person into fresh air. If not breathing, give artificial respiration. Immediately call in a physician.

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

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

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

<b>Notes to physician</b>	Treat symptomatically.
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## 5. Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

Use water, CO<sub>2</sub>, dry chemical or foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### Extinguishing media which must not be used for safety reasons

None known based on information supplied.

### 5.2. Special hazards arising from the substance or mixture

Development of hazardous combustion gases or vapours possible in the event of fire.

Fire may cause evolution of:

Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas, Sulphur oxides, Mercury vapors.

### **5.3. Advise for firefighters**

Wear self-contained breathing apparatus and protective suit

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## **6. Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

Advice for non-emergency personnel: Avoid substance contact. Use personal protective equipment. Avoid breathing vapors, mist or gas. Keep away from heat and sources of ignition. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

### **6.2. Environmental precautions**

Should not be released into the environment. Do not let product enter drains.

### **6.3. Methods and materials for containment and cleaning up**

Cover drains. Collect, bind and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

### **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.

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## **7. Handling and storage**

### **7.1. Precautions for safe handling**

Work under hood. Do not inhale substance/mixture. Handle in accordance with good industrial hygiene and safety practice. Observe label precautions. Keep away from open flames, hot surfaces and sources of ignition.

Avoid formation of aerosols. Avoid exposure - obtain special instructions before use.

For precautions see section 2.2.

### **7.2. Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.

Store at +2°C to +8°C (36°F to 46°F).

### **7.3. Specific end uses**

No data available.

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## **8. Exposure controls/personal protection**

### **8.1. Control parameters**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

### **8.2. Exposure controls**

#### **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### **Personal protective equipment**

##### **Eye/face protection**

Tightly fitting safety glasses

##### **Skin/body protection**

Protective/ impervious long sleeved clothing

### Hand protection

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the related standard EN374.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the substance/ the preparation/ the chemical mixture.

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

Material:

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. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has to be checked prior to the application.

Penetration time:

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

### Respiratory protection

Required when vapors/aerosols are generated.

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

### Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands after working with substance. Do not inhale substance.

### Environmental Exposure controls

Should not be released into the environment. Do not let product enter drains.

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## 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Appearance	Form: liquid
Color	Colorless
Odor	Characteristic
Odor threshold	no data available
pH	4,0 - 5,0 at 20°C
Melting point/ freezing point	no data available
Initial boiling point/ boiling range	no data available
Flash point	no data available
Evaporation rate	no data available
Flammability (solid, gas)	not applicable
Flammability limits in air	no data available
Vapor pressure	no data available
Relative density	no data available
Water solubility	Fully miscible

Partition coefficient: n-octanol/water	no data available
Autoignition temperature	no data available
Decomposition temperature	no data available
Viscosity	no data available
Explosive properties	no data available
Oxidizing properties	no data available

## 9.2. Other safety information

No data available.

## 10. Stability and reactivity

### 10.1. Reactivity

No data available.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No data available.

### 10.4. Conditions to avoid

Heat, flames and sparks.

### 10.5. Incompatible materials

Oxidizing agents, zinc alloys, acids.

### 10.6. Hazardous decomposition products

In the event of fire: See chapter 5.

## 11. Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity

Chemical name	LD50 Oral	LD50 Dermal
Zinc(II) sulfate heptahydrate (CAS 7446-20-0)	926 mg/kg (Mouse)*	Ca. >2000 mg/kg (Rat)*

\*(External MSDS)

#### Skin corrosion/irritation

No data available.

#### Serious eye damage/irritation

No data available.

#### Respiratory or skin sensitization

No data available.

#### Germ cell mutagenicity

No data available.

#### Carcinogenity

No data available.

#### Reproductive toxicity

No data available..

**Specific target organ toxicity – single exposure**

No data available.

**Specific target organ toxicity – repeated exposure**

No data available.

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**12. Ecological information****12.1. Toxicity**

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to bacteria	Toxicity to daphnia and other aquatic invertebrates
Zinc(II) sulfate heptahydrate (CAS 7446-20-0)	72h EC50 - Chlorella vulgaris (Fresh water algae) - 64,8 mg/l*	96h LC50 - Pimephales promelas (fathead minnow) - 0,330 mg/l *	3h EC50 - activated sludge - 5,2 mg/l*	48h EC50 - Daphnia magna (Water flea) - 1,4 mg/l *

\*(External MSDS)

**12.2. Persistence and degradability**

The methods for determining the biological degradability are not applicable to inorganic substances.

**12.3. Bioaccumulative potential**

No data available

**12.4. Mobility in soil**

No data available.

**12.5. Results of PBT and vPvB assessment**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**12.6. Other adverse effects**

No data available.

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**13. Disposal considerations****13.1. Waste treatment methods****Waste from residues / unused products**

Dispose of as hazardous waste in compliance with local and national regulations.

**Contaminated packaging**

Empty containers should be taken to an approved waste handling site for recycling or disposal.

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**14. Transport information****14.1. UN/ID No**

ADR/RID: -

IMDG: -

IATA: -

**14.2. UN proper shipping name**

ADR/RID: -

IMDG: -

IATA: -

**14.3. Transport hazard class**

ADR/RID: -

IMDG: -

IATA: -

**14.4. Packaging group**

ADR/RID: -

IMDG: -

IATA: -

**14.5. Environmental hazards**

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

**14.1. Special precautions for user**

No data available.

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**15. Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

No information available.

**15.2. Chemical safety assessment**

No information available.

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**16. Other information****Full text of H-statements referred to under Sections 2 and 3**

H318 Causes serious eye damage.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Revision note: x

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

**Disclaimer**

The information provided in this safety data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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