

**Reagent Data Sheet**

MV30F02

Versie nummer: 1

Versie datum: 18-04-2023

r-biopharm®



**Reagent Data Sheet**  
**Ochratoxin A in Roasted Coffee FTD**  
**5127OTACR**

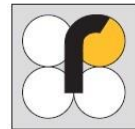
<b>Component ID</b>	<b>Description</b>	<b>SDS</b>
5127OTADV	Membrane Devices 2x 5 devices	-
5127OTACRE	Extraction solution Ready to use	X
5127OTACRP	Purification buffer Ready to use	X
5127OTACO	Reaction vials Lyophilized	X
5127RB	Wash buffer Ready to use	X
5127TMB	Substrate Ready to use	X
5000SYR	Syringes 10x	-
5000FIL	Filters 10x	-
5000PAS30	Pasteur pipettes 30x	-

X SDS attached to this sheet

# SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006  
Version 01 Revision date: 18-04-2023  
Print date: 20-4-2023

r-biopharm®



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

### 1.1. Product identifier

Product name Ochratoxin A Roasted Coffee Extraction Solution  
Product code 5127OTACRE

### 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)

Flammable liquids (Category 2), H225  
Acute toxicity, Oral (Category 3), H301  
Acute toxicity, Inhalation (Category 3), H331  
Acute toxicity, Dermal (Category 3), H311  
Specific target organ toxicity - single exposure (Category 1), Eyes, Central nervous system, H370

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



GHS02



GHS06



GHS08

Signal Word Danger

Hazard statement(s)

H225 Highly flammable liquid and vapor.  
H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled.  
H370 Causes damage to organs (Eyes, Central nervous system).

Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233 Keep container tightly closed.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.  
P304 + P340 + P311 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor.  
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or a doctor.  
P311 Call a POISON CENTER or a doctor.

Supplemental Hazard Statements None

**Reduced Labeling (<= 125 ml)**  
Pictogram



GHS06

GHS08

Signal word Danger

Hazard statement(s)

H370 Causes damage to organs.  
H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled.

Precautionary statement(s)

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
P304 + P340 + P311 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor.

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
Methanol	200-659-6	67-56-1	100%	Flam. Liq. 2 H225 Acute Tox. 3 H301 Acute Tox. 3 H331 Acute Tox. 3 H311 STOT SE 1 H370	No data available

For the full text of the H-Statements 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.
---------------------------	------------------------

---

### 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 (NO<sub>x</sub>), Hydrogen chloride gas, Sulphur oxides, Mercury vapors.

#### 5.3. Advise for firefighters

Wear self-contained breathing apparatus and protective suit

---

### 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.

## 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.

## 8. Exposure controls/personal protection

### 8.1. Control parameters

Application Area	Routes of exposure	Health effect	Value
Workers	Skin contact	Long-term systemic effects	40mg/kg BW/d
Consumers	Skin contact	Long-term systemic effects	8mg/kg BW/d
Consumers	Ingestion	Long-term systemic effects	8mg/kg BW/d
Workers	Skin contact	Acute systemic effects	40mg/kg BW/d
Consumers	Skin contact	Acute systemic effects	8mg/kg BW/d
Consumers	Ingestion	Acute systemic effects	8mg/kg BW/d
Workers	Inhalation	Acute systemic effects	260 mg/m <sup>3</sup>
Workers	Inhalation	Acute local effects	260 mg/m <sup>3</sup>
Workers	Inhalation	Long-term systemic effects	260 mg/m <sup>3</sup>
Workers	Inhalation	Long-term local effects	260 mg/m <sup>3</sup>
Consumers	Inhalation	Acute systemic effects	50 mg/m <sup>3</sup>
Consumers	Inhalation	Acute local effects	50 mg/m <sup>3</sup>
Consumers	Inhalation	Long-term systemic effects	50 mg/m <sup>3</sup>
Consumers	Inhalation	Long-term local effects	50 mg/m <sup>3</sup>

\*(External MSDS)

### 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.

---

## **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	no data available
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

LD50 Oral	LD50 Dermal	LC50 Inhalation
Acute toxicity estimate Oral - 100,1 mg/kg (Expert judgment) Symptoms: Nausea, Vomiting	Acute toxicity estimate Dermal - 300,1 mg/kg (Expert judgment)	Acute toxicity estimate Inhalation - 4 h - 3,1 mg/l - vapor (Expert judgment) Symptoms: Irritation symptoms in the respiratory tract.

\*(External MSDS)

#### Skin corrosion/irritation

No data available.

#### Serious eye damage/irritation

Irritations of mucous membranes.

#### Respiratory or skin sensitization

Sensitization test: guinea pig (External MSDS; methanol)

Result: negative (IUCLID) (External MSDS; methanol)

#### Germ cell mutagenicity

Regarding the available data the classification criteria are not fulfilled.

#### Carcinogenicity

No data available.

#### Reproductive toxicity

Regarding the available data the classification criteria are not fulfilled.

**Specific target organ toxicity – single exposure**

Target organs: Eyes (methanol)

Causes damage to organs. (methanol)

**Specific target organ toxicity – repeated exposure**

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

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

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
Methanol (CAS 67-56-1)	96h EC50 Pseudokirchneriella subcapitata (green algae): ca. 22000 mg/l*  8d IC5 Scenedesmus quadricauda (green algae): 8000 mg/l*	200h NOEC Oryzias latipes (orange-red killifish): 7900 mg/l*  96h LC50 Lepomis macrochirus (Bluegill sunfish): 15400 mg/l*	16h EC5 Pseudomonas fluorescens: 6600 mg/l*	semi-static test EC50 - Daphnia magna (Water flea) - 18.260 mg/l - 96 h (OECD Test Guideline 202)

\*(External MSDS)

**12.2. Persistence and degradability***(Methanol)**Biodegradability*

99%; 30d

OECD Test Guideline 301D

Readily biodegradable.

*Biochemical Oxygen Demand (BOD)*

600 – 1120 mg/g (5d) (IUCLID)

*Chemical Oxygen Demand (COD)*

1420 mg/g (IUCLID)

*Theoretical Oxygen Demand (ThOD)*

1500 mg/g (Lit.)

*Ratio BOD/ThBOD)*

BOD5 76%

Closed bottle test

**12.3. Bioaccumulative potential**

Cyprinus carpio (Carp) - 72 d at 20 °C - 5 mg/l(Methanol)

Bioconcentration factor (BCF): 1,0

\*(External MSDS)

**12.4. Mobility in soil**

No data available.

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

No data available.

**12.6. Other adverse effects**

No data available.



### 13. Disposal considerations

#### 13.1. Waste treatment methods

<b>Waste from residues / unused products</b>	Dispose of as hazardous waste in compliance with local and national regulations.
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal.

---

### 14. Transport information

#### 14.1. UN/ID No

ADR/RID: 1992                      IMDG: 1992                      IATA: 1992

#### 14.2. UN proper shipping name

ADR/RID:      FLAMMABLE LIQUIDS, N.O.S. (Methanol)  
IMDG:            FLAMMABLE LIQUIDS, N.O.S. (Methanol)  
IATA:            FLAMMABLE LIQUIDS, N.O.S. (Methanol)

#### 14.3. Transport hazard class

ADR/RID: 3 (6.1)                      IMDG: 3 (6.1)                      IATA: 3 (6.1)

#### 14.4. Packaging group

ADR/RID: II                              IMDG: II                              IATA: II

#### 14.5. Environmental hazards

ADR/RID: no                              IMDG Marine pollutant: no                              IATA: no

#### 14.1. Special precautions for user

No data available.

---

### 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.

---

### 16. Other information

#### Full text of H-statements referred to under Sections 2 and 3

H225 – Highly flammable liquid and vapor.

H301 – Toxic if swallowed.

H311 – Toxic in contact with skin.

H331 – Toxic if inhaled.

H370 – Causes damage to organs.

**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**

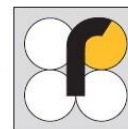
---

**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.**

# SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006  
Version 01 Revision date: 18-04-2023  
Print date: 20-4-2023

r-biopharm®



---

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

### 1.1. Product identifier

Product name	Ochratoxin A Roasted Coffee Purification buffer
Product code	5127OTACRP

### 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)

Not classified.

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

### 2.2. Label elements

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

Not applicable.

### 2.3. Other hazards

Not applicable.

---

## 3. Composition/information on ingredients

### 3.1. Dangerous ingredients

Mixture of substances with none hazardous additions.

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

For more detailed information on health effects and symptoms, see Section 11.

---

## 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.
<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.
---------------------------	------------------------

---

**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**

None known.

**5.3. Advise for firefighters**

Wear self-contained breathing apparatus and protective suit.

---

**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. 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**

Soak up with inert absorbent material (e.g. sand, silica, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

**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.

---

**7. Handling and storage**

**7.1. Precautions for safe handling**

Handle in accordance with good industrial hygiene and safety practice. 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.

Store at 2°C to 8°C (36°F to 46°F).

### 7.3. Specific end uses

No data available.

---

## 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

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (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 NIOSH (US) or CEN (EU).

##### 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.

---

## 9. Physical and chemical properties

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

Appearance

Form: suspension

Color	Light green
Odor	no data available
Odor threshold	no data available
pH	no data available
Melting point/ freezing point	no data available
Initial boiling point/ boiling range	no data available
Flash point	not applicable
Evaporation rate	no data available
Flammability (solid, gas)	not applicable
Flammability limits in air	no data available
Vapor pressure	23 hPa
Relative density	no data available
Water solubility	no data available
Partition coefficient: n-octanol/water	no data available
Autoignition temperature	Product is not self igniting
Decomposition temperature	no data available
Viscosity	no data available
Explosive properties	Product does not contain an explosion hazard
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

Hazardous polymerization does not occur.

### 10.4. Conditions to avoid

No data available.

### 10.5. Incompatible materials

No further relevant information available.

### 10.6. Hazardous decomposition products

In the event of fire: See chapter 5.

---

## 11. Toxicological information

### 11.1. Information on toxicological effects

**Acute toxicity**

No data available.

**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.

**Carcinogenicity**

Contains no ingredient listed as a carcinogen

**Reproductive toxicity**

No data available.

**Specific target organ toxicity – single exposure**

No data available.

**Specific target organ toxicity – repeated exposure**

No data available.

**Aspiration hazard**

No data available.

---

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

No data available.

**12.2. Persistence and degradability**

No data available.

**12.3. Bioaccumulative potential**

No data available.

**12.4. Mobility in soil**

No data available.

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

No data available.

**12.6. Other adverse effects**

No data available.

---

**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.

---

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

ADR/RID: -

IMDG: -

IATA: -

**14.2. UN proper shipping name**

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

**14.3. Transport hazard class**

ADR/RID: -

IMDG: -

IATA: -

**14.4. Packaging group**

ADR/RID: -

IMDG: -

IATA: -

**14.5. Environmental hazards**

ADR/RID: -

IMDG Marine pollutant: -

IATA: -

**14.6. Special precautions for user**

Not applicable.

---

**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.

---

**16. Other information**

**Full text of H-statements referred to under Sections 2 and 3**

Not applicable

**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.**

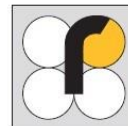
---



# SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006  
Version 01 Revision date: 20-04-2023  
Print date: 20-4-2023

r-biopharm®



---

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

### 1.1. Product identifier

Product name	Reaction vial
Product code	5127OTACO

### 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)

Not classified.

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

### 2.2. Label elements

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

Not applicable.

### 2.3. Other hazards

Not applicable.

---

## 3. Composition/information on ingredients

### 3.1. Dangerous ingredients

Mixture of substances with none hazardous additions.

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

For more detailed information on health effects and symptoms, see Section 11.

---

## 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.
<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.
---------------------------	------------------------

---

**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**

None known.

**5.3. Advise for firefighters**

Wear self-contained breathing apparatus and protective suit.

---

**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. 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**

Soak up with inert absorbent material (e.g. sand, silica, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

**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.

---

**7. Handling and storage**

**7.1. Precautions for safe handling**

Handle in accordance with good industrial hygiene and safety practice. 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.

Store at 2°C to 8°C (36°F to 46°F).

### 7.3. Specific end uses

No data available.

---

## 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

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (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 NIOSH (US) or CEN (EU).

##### 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.

---

## 9. Physical and chemical properties

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

Appearance

Form: powder

Color	Off-white
Odor	no data available
Odor threshold	no data available
pH	no data available
Melting point/ freezing point	not applicable
Initial boiling point/ boiling range	not applicable
Flash point	not applicable
Evaporation rate	no data available
Flammability (solid, gas)	no data available
Flammability limits in air	no data available
Vapor pressure	no data available
Relative density	no data available
Water solubility	Fully soluble in water
Partition coefficient: n-octanol/water	no data available
Autoignition temperature	Product is not self igniting
Decomposition temperature	no data available
Viscosity	no data available
Explosive properties	Product does not contain an explosion hazard
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

Hazardous polymerization does not occur.

### 10.4. Conditions to avoid

No data available.

### 10.5. Incompatible materials

No further relevant information available.

### 10.6. Hazardous decomposition products

In the event of fire: See chapter 5.

---

## 11. Toxicological information

### 11.1. Information on toxicological effects

**Acute toxicity**

No data available.

**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.

**Carcinogenicity**

Contains no ingredient listed as a carcinogen

**Reproductive toxicity**

No data available.

**Specific target organ toxicity – single exposure**

No data available.

**Specific target organ toxicity – repeated exposure**

No data available.

**Aspiration hazard**

No data available.

---

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

No data available.

**12.2. Persistence and degradability**

No data available.

**12.3. Bioaccumulative potential**

No data available.

**12.4. Mobility in soil**

No data available.

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

No data available.

**12.6. Other adverse effects**

No data available.

---

**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.

---

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

ADR/RID: -

IMDG: -

IATA: -

**14.2. UN proper shipping name**

ADR/RID: Not dangerous goods  
IMDG: Not dangerous goods  
IATA: Not dangerous goods

**14.3. Transport hazard class**

ADR/RID: - IMDG: - IATA: -

**14.4. Packaging group**

ADR/RID: - IMDG: - IATA: -

**14.5. Environmental hazards**

ADR/RID: - IMDG Marine pollutant: - IATA: -

**14.6. Special precautions for user**

Not applicable.

---

**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.

---

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

Not applicable

**Revision note:** x.

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

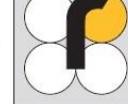
**Disclaimer**

**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.**

---

# SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006  
Version 01 Revision date: 20-04-2023  
Print date: 20-4-2023



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

### 1.1. Product identifier

Product name	Wash buffer
Product code	5127RB

### 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)

Not classified.

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

### 2.2. Label elements

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

Not applicable.

#### Additional information:

EUH208 Contains 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7]; and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) May cause an allergic reaction

### 2.3. Other hazards

Not applicable.

## 3. Composition/information on ingredients

### 3.1. Dangerous ingredients

Mixture of substances with none hazardous additions.

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

For more detailed information on health effects and symptoms, see Section 11.

## 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.
<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.
---------------------------	------------------------

---

**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**

None known.

**5.3. Advise for firefighters**

Wear self-contained breathing apparatus and protective suit.

---

**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. 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**

Soak up with inert absorbent material (e.g. sand, silica, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

**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.

---

**7. Handling and storage**

**7.1. Precautions for safe handling**

Handle in accordance with good industrial hygiene and safety practice. 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.



Store at 2°C to 8°C (36°F to 46°F).

### 7.3. Specific end uses

No data available.

---

## 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

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (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 NIOSH (US) or CEN (EU).

##### 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.

---

## 9. Physical and chemical properties

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

Appearance	Form: liquid
Color	Colorless
Odor	no data available
Odor threshold	no data available
pH	no data available
Melting point/ freezing point	0°C (32°F)
Initial boiling point/ boiling range	100°C (212°F)
Flash point	not applicable
Evaporation rate	no data available
Flammability (solid, gas)	not applicable
Flammability limits in air	no data available
Vapor pressure	23 hPa
Relative density	no data available
Water solubility	Fully miscible
Partition coefficient: n-octanol/water	no data available
Autoignition temperature	Product is not self igniting
Decomposition temperature	no data available
Viscosity	no data available
Explosive properties	Product does not contain an explosion hazard
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

Hazardous polymerization does not occur.

### 10.4. Conditions to avoid

No data available.

### 10.5. Incompatible materials

No further relevant information available.

### 10.6. Hazardous decomposition products

In the event of fire: See chapter 5.

---

## 11. Toxicological information

### 11.1. Information on toxicological effects

**Acute toxicity**

No data available.

**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.

**Carcinogenicity**

Contains no ingredient listed as a carcinogen

**Reproductive toxicity**

No data available.

**Specific target organ toxicity – single exposure**

No data available.

**Specific target organ toxicity – repeated exposure**

No data available.

**Aspiration hazard**

No data available.

---

## 12. Ecological information

### 12.1. Toxicity

No data available.

### 12.2. Persistence and degradability

No data available.

### 12.3. Bioaccumulative potential

No data available.

### 12.4. Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

No data available.

### 12.6. Other adverse effects

No data available.

---

## 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.

---

#### 14. Transport information

##### 14.1. UN/ID No

ADR/RID: -

IMDG: -

IATA: -

##### 14.2. UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

##### 14.3. Transport hazard class

ADR/RID: -

IMDG: -

IATA: -

##### 14.4. Packaging group

ADR/RID: -

IMDG: -

IATA: -

##### 14.5. Environmental hazards

ADR/RID: -

IMDG Marine pollutant: -

IATA: -

##### 14.6. Special precautions for user

Not applicable.

---

#### 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.

---

#### 16. Other information

##### Full text of H-statements referred to under Sections 2 and 3

Not applicable

##### Revision note: x

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

##### Disclaimer

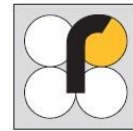
The information provided in this safety data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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.

---

# SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006  
Version 01 Revision date: 18-04-2023  
Print date: 20-4-2023

r-biopharm®



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

### 1.1. Product identifier

Product name Substrate  
Product code 5127TMB

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

Identified uses Laboratory use. This product is a colorimetric solution for use in immunological in-vitro tests, based on the marker enzyme HRP.

### 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)

Not classified.

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

### 2.2. Label elements

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

Not applicable.

### 2.3. Other hazards

Contains oxidizing substance(s) < 0.05% Contains material(s) which may be harmful if swallowed.

## 3. Composition/information on ingredients

### 3.1. Dangerous ingredients

Chemical name	EC-No	CAS-No	Weight (%)	Classification (1272/2008/EC)
Citric acid	201-069-1	5949-29-1	1-10 %	Eye Irrit. 2 H319
Urea hydrogen peroxide	204-701-4	124-43-6	0 – 0.5 %	Ox. Sol 3: H272; Skin Corr. 1B: H314; Eye Dam. 1:H318

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

For more detailed information on health effects and symptoms, see Section 11.

## 4. First aid measures

### 4.1. Description of first aid measures

#### General advice

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. Remember to remove contact lenses. 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.
<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.
---------------------------	------------------------

---

### **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**

None known.

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

Wear self-contained breathing apparatus and protective suit.

---

### **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. 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**

Soak up with inert absorbent material (e.g. sand, silica, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

#### **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.

---

### **7. Handling and storage**

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

Handle in accordance with good industrial hygiene and safety practice.

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.

Store at 2°C to 8°C (36°F to 46°F).

## 7.3. Specific end uses

No data available.

---

## 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

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (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 NIOSH (US) or CEN (EU).

##### 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.

---

## 9. Physical and chemical properties

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

Appearance	Form: liquid
Color	Clear/Light yellow
Odor	no data available
Odor threshold	no data available
pH	3.6 – 3.9
Melting point/ freezing point	no data available
Initial boiling point/ boiling range	no data available
Flash point	81.1°C
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	Product is not self igniting
Decomposition temperature	no data available
Viscosity	no data available
Explosive properties	Product does not contain an explosion hazard
Oxidizing properties	Contains <0.05% oxidizing materials

### 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

Hazardous polymerization does not occur.

### 10.4. Conditions to avoid

No data available.

### 10.5. Incompatible materials

No further relevant information available.



## 10.6. Hazardous decomposition products

In the event of fire: See chapter 5.

---

## 11. Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity

No data available.

#### Skin corrosion/irritation

May cause irritation to skin

#### Serious eye damage/irritation

May cause irritation to eyes

#### Respiratory or skin sensitization

May cause allergic reactions in susceptible people

#### Germ cell mutagenicity

No data available.

#### Carcinogenity

Contains no ingredient listed as a carcinogen

#### Reproductive toxicity

No data available.

#### Specific target organ toxicity – single exposure

No data available.

#### Specific target organ toxicity – repeated exposure

No data available.

#### Aspiration hazard

No data available.

---

## 12. Ecological information

### 12.1. Toxicity

No data available.

### 12.2. Persistence and degradability

No data available.

### 12.3. Bioaccumulative potential

No data available.

### 12.4. Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

No data available.

### 12.6. Other adverse effects

No data available.

---

## 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.

