

**Safety data sheet
according to 1907/2006/EC, Article 31**

Printing date 12.03.2018

Version number 1

Revision: 12.03.2018

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Trade name:** Blocking Solution Concentrate**Article number:** 71-00-10, 5560-0006**Registration number**

This product is a mixture (see chapter 3). Registration number(s) is/are not available for this substance/these substances as the substance(s) or its/their use are exempted from registration according to Article 2 REACH Regulation (EC) No. 1907/2006, the annual tonnage does not require registration or the registration is envisaged for a later registration deadline.

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

Relevant identified uses:

RUO (Research Use Only).

Uses advised against:

For in vitro diagnosis.

Sector of Use SU24 Scientific research and development**Product category** PC21 Laboratory chemicals**Process category** PROC15 Use as laboratory reagent**Application of the substance / the mixture** Immunochemical reagent for detection / auxiliary reagent**1.3 Details of the supplier of the safety data sheet****Manufacturer/Distributor:**

Manufacturer:

SeraCare Life Sciences (KPL)

910 Clopper Road

Gaithersburgh, Maryland 20878, USA

Distributor:

medac GmbH

Theaterstrasse 6

22880 Wedel, Germany

phone: +49 4103 8006-0

Informing department:

Product Safety

productsafety@medac.de

1.4 Emergency telephone number:

Gif tinformati onszentrum-Nord, Phone: ++49 551 19 240 (service in German and English, 24 hours permanently accessible).

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

The product is classified according to CLP regulation.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Dam. 1 H318 Causes serious eye damage.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008**

The product is labelled according to Regulation (EC) No. 1272/2008 (GHS/CLP).

Hazard pictograms

GHS05

Signal word Danger**Hazard-determining components of labelling:**

orthoperiodic acid

(Contd. on page 2)

GB

**Safety data sheet
according to 1907/2006/EC, Article 31**

Printing date 12.03.2018

Version number 1

Revision: 12.03.2018

Trade name: Blocking Solution Concentrate

(Contd. of page 1)

Hazard statements

H315 Causes skin irritation.
H318 Causes serious eye damage.

Precautionary statements

P280 Wear protective gloves / protective clothing / eye 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.
P310 Immediately call a doctor.

Labelling of packages where the contents do not exceed 125 ml

Hazard pictograms



GHS05

Signal word Danger

Hazard-determining components of labelling:

orthoperiodic acid

Hazard statements

H318 Causes serious eye damage.

Precautionary statements

P280 Wear 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.
P310 Immediately call a doctor.

2.3 Other hazards Void.

Results of PBT and vPvB assessment

PBT: Substance(s) does/do not meet the criteria for PBT according to Regulation (EC) No 1907/2006, Annex XIII.

vPvB: Substance(s) does/do not meet the criteria for vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

SECTION 3: Composition/information on ingredients

3.1. Chemical characterisation: substances Not applicable. Product is a mixture.

3.2 Chemical characterisation: Mixtures

Description: Water based solution

Dangerous components:

CAS: 10450-60-9	orthoperiodic acid	Ox. Sol. 2, H272	3 - <4%
EINECS: 233-937-0		Skin Corr. 1B, H314	

SVHC Not applicable.

Additional information For the wording of the listed H-phrases please refer to Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information First aider: Take care of self-protection.

After inhalation

Supply fresh air.
In case of symptoms call a physician.

After skin contact

Remove contaminated clothes.
Wash with copious amounts of water.
In case of symptoms call a physician.

After eye contact

Rinse eyes cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 12.03.2018

Version number 1

Revision: 12.03.2018

Trade name: Blocking Solution Concentrate

(Contd. of page 2)

Instantly consult ophthalmologist.

After swallowing

Let rinse out mouth and then drink plenty of water.

In case of symptoms call a physician.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available for this mixture.

Information for doctor

Show Safety Data Sheet.

Treatment according to symptoms.

Danger No further relevant information available.**4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing agents** Use fire fighting measures that suit the environment.**For safety reasons unsuitable extinguishing agents**

For this substance no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

For these concentrations no further relevant information available.

5.3 Advice for firefighters**Protective equipment:**

In case of burning of a larger amount:

Stay in the danger area only with self-contained breathing apparatus.

Prevent skin and eye contact by keeping a safe distance or by wearing suitable protective clothing.

Additional information

Collect contaminated fire fighting water separately. It must not enter drains.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Advice for non-emergency personnel:

Avoid reagent contact with eyes and skin.

Provide sufficient ventilation.

Advice for emergency responders: Protective equipment: see Section 8.

6.2 Environmental precautions: Do not empty into drains.**6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Afterwards clean with water and cleansing agent.

Dispose of the material collected according to respective national regulations.

Ensure adequate ventilation.

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 information on disposal.

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Open and handle container with care.

Prevent contact with skin and eyes.

(Contd. on page 4)

-GB-

**Safety data sheet
according to 1907/2006/EC, Article 31**

Printing date 12.03.2018

Version number 1

Revision: 12.03.2018

Trade name: Blocking Solution Concentrate

(Contd. of page 3)

Information about protection against explosions and fires:

Keep away from open flames, hot surfaces and sources of ignition.

7.2 Conditions for safe storage, including any incompatibilities**Storage****Requirements to be met by storerooms and containers:**

Store container tightly closed.

Store at +2 °C to +8 °C.

Information about storage in one common storage facility: Because of the small quantities not required.**Further information about storage conditions:** The indications are valid for the whole package.**Storage class** 10-13 (VC).**7.3 Specific end use(s)** Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.**SECTION 8: Exposure controls/personal protection****Additional information about design of technical systems:** No further data; see Section 7.**8.1 Control parameters****Components with critical values that require monitoring at the workplace:****DNELs** No further relevant information available.**PNECs** No further relevant information available.**Additional information:** The official lists that were valid during the compilation were used as basis.**8.2 Exposure controls**

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See Section 7.

Personal protective equipment**General protective and hygienic measures**

The usual precautionary measures should be adhered to in handling the chemicals.

Avoid contact with the eyes and skin.

Remove contaminated clothing immediately.

Do not eat or drink while working.

Keep away from food and beverages.

Wash hands during breaks and at the end of the work.

Breathing equipment: No special precautions are necessary if handled correctly.**Protection of hands:**

Disposable medical gloves (AQL 1.5).

The breakthrough times stated below base on laboratory test methods which cannot fully simulate working conditions. It is the responsibility of the enduser to choose the appropriate gloves for his application. If working with substances or mixtures harmful in contact with skin, check the gloves beforehand for holes and fissures.

Material of gloves

Natural rubber, NR

Nitrile rubber, NBR

Thickness 0.11 mm.

The product quality has to comply with DIN EN 455.

Penetration time of glove material Penetration time > 120 min.**For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:**

Product has not been designed for permanent contact.

For the permanent contact gloves made of the following materials are suitable:

Product has not been designed for permanent contact.

For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:

Product has not been designed for permanent contact.

As protection from splashes gloves made of the following materials are suitable:

Natural rubber, NR

Nitrile rubber, NBR

Thickness: 0.11 mm.

Eye protection: Safety glasses (standard EN 166).**Body protection:** Protective work clothing.

(Contd. on page 5)

GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 12.03.2018

Version number 1

Revision: 12.03.2018

Trade name: **Blocking Solution Concentrate**

Limitation and supervision of exposure into the environment Do not empty into drains.
Risk management measures Void.

(Contd. of page 4)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:	liquid
Colour:	Clear
Smell:	No information available.
Odour threshold:	No information available.

pH-value: < 2.0

Change in condition

Melting point/freezing point:	Ca. 0°C
Initial boiling point and boiling range:	Ca. 100 °C

Flash point:	No information available.
Inflammability (solid, gaseous)	Not applicable.
Ignition temperature:	Not available.
Decomposition temperature:	No information available.
Self-inflammability:	Not self-inflammable.
Explosive properties:	Not explosive.
Critical values for explosion:	
Lower:	Not applicable.
Upper:	Not applicable.
Oxidising properties	oxidising agent
Steam pressure at 20 °C:	23 hPa
Density at 20 °C	1.01156 g/cm ³
Relative density	No information available.
Vapour density	No information available.
Evaporation rate	No information available.
Solubility in / Miscibility with	
Water:	Fully miscible.
Partition coefficient: n-octanol/water:	No information available.
Viscosity:	
dynamic at 20 °C:	0.952 mPas
kinematic:	No information available.
Solvent content:	
Organic solvents:	0 %
Water:	ca. 96 %
Solids content:	< 4 %

9.2 Other information No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity For this mixture no relevant information available.

10.2 Chemical stability The product is chemically stable under the indicated storage conditions.

Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions No dangerous reactions known.

10.4 Conditions to avoid: No further relevant information available.

10.5 Incompatible materials: For these concentrations no further relevant information available.

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 12.03.2018

Version number 1

Revision: 12.03.2018

Trade name: **Blocking Solution Concentrate**

(Contd. of page 5)

10.6 Hazardous decomposition products: In case of burning of larger amounts: See Section 5.
Additional information: No further relevant information available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity Based on available data, the classification criteria are not met.

LD/LC50 values that are relevant for classification: Quantitative data about toxicity of this product are not available.

Specific symptoms in biological assay: No further relevant information available.

Primary irritant effect:

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye damage.

after swallowing: Slight mucosal irritations in mouth, pharynx and oesophagus possible.

after inhalation: Slight irritations possible.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

Other information (about experimental toxicology): No further relevant information available.

Subacute to chronic toxicity: No further relevant information available.

Additional toxicological information: No further relevant information available.

Toxicokinetics, metabolism and distribution No relevant information available.

Acute effects (acute toxicity, irritation and corrosivity) No acute toxicity information available for this product.

Sensitisation No sensitising effect known.

Repeated dose toxicity No further relevant information available.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT-single exposure Based on available data, the classification criteria are not met.

STOT-repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: No further relevant information available.

12.2 Persistence and degradability No further relevant information available.

Other information: No further relevant information available.

Behaviour in environmental systems:

Components: No relevant information available.

12.3 Bioaccumulative potential No relevant information available.

12.4 Mobility in soil No relevant information available.

Ecotoxicological effects:

Remark: No further relevant information available.

Additional ecological information:

General notes:

Void.

Do not let enter drains.

12.5 Results of PBT and vPvB assessment

PBT: PBT assessment not available as chemical safety assessment not required/not conducted.

vPvB: vPvB assessment not available as chemical safety assessment not required/not conducted.

(Contd. on page 7)

GB

**Safety data sheet
according to 1907/2006/EC, Article 31**

Printing date 12.03.2018

Version number 1

Revision: 12.03.2018

Trade name: Blocking Solution Concentrate

(Contd. of page 6)

12.6 Other adverse effects No relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product residues have to be disposed of according to the Waste Framework Directive as well as national and regional regulations in each of the latest versions.

Uncleaned packagings:
Recommendation: Uncleaned packagings have to be disposed of in the same manner as the product residues.

SECTION 14: Transport information

14.1 UN-Number

ADR, ADN, IMDG, IATA -

14.2 UN proper shipping name

ADR, ADN, IMDG, IATA -

14.3 Transport hazard class(es)

 ADR, ADN, IMDG, IATA
Class -

14.4 Packing group

ADR, IMDG, IATA -

14.5 Environmental hazards:

Not applicable.

14.6 Special precautions for user

Not applicable.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

Transport/Additional information:

Not classified as dangerous in the meaning of transport regulations as issued in the latest version. The transport regulations are cited according to international regulations and in the form applicable in Germany (GGVSE). Possible national deviations in other countries are not considered.

UN "Model Regulation":

-

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Labelling according to Regulation (EC) No 1272/2008 See Section 2.

Directive 2012/18/EU
Named dangerous substances - ANNEX I Contains none of the listed substances.

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

National regulations
Information about limitation of use:

Take note of the directive on the protection of young people at work in the latest version.

Take note of the directive on the safety and health at work for pregnant and breast feeding mothers and workers of childbearing age in the latest version.

Water hazard class: Void.

(Contd. on page 8)

**Safety data sheet
according to 1907/2006/EC, Article 31**

Printing date 12.03.2018

Version number 1

Revision: 12.03.2018

Trade name: Blocking Solution Concentrate

(Contd. of page 7)

15.2 Chemical safety assessment: A chemical safety assessment has not been carried out.**SECTION 16: Other information**

All information and recommendations are believed to be correct as of the date of this Safety Data Sheet but shall not be taken to be all inclusive and shall be used only as a guide. All chemicals and preparations may present unknown hazards and should be used with caution. medac shall not be held liable for any damage resulting from handling or from contact with the above product.

Relevant phrases

H272 May intensify fire; oxidiser.

H314 Causes severe skin burns and eye damage.

Department issuing data specification sheet: Product Safety**Contact:** productsafety@medac.de**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)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Ox. Sol. 2: Oxidizing solids – Category 2

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

GB