

According to Regulation (EC) No. 1907/2006 (REACH)

Version 2, Revision Date: 10-JUL-2023

Print Date: 10-JUL-2023

SECTION 1 Identification of the Substance/Mixture and of the Company/Undertaking

1.1. Product identifier

Product Names: Penicillin-Streptomycin-Amphotericin Solution 100X

Product Options: contains 10,000 units/ml of penicillin, 10,000 µg/ml streptomycin

and 25 μg/ml Amphotericin B in 0.85 % saline. Sterile filtered.

Product Code: RAL-008-100ML

REACH No. This product is a mixture. REACH Registration Number see section 3.

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

Identified uses: Laboratory chemicals, Manufacture of substances

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

1.3. Details of the supplier of the safety data sheet

Company: Serana Europe GmbH

Dorfstrasse 17A 14641 Pessin Germany

Phone: +49 (0)332 3785 9253 E-Mail: info@serana-europe.com

1.4. Emergency telephone number

Emergency Phone: Regular Office Hours +49 (0)332 3785 9253

SECTION 2 Hazards Identification

2.1. Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008

Respiratory sensitization	Category 1
Skin sensitization	Category 1
Specific target organ toxicity (STOT) – single exposure	Category 2
Reproductive Toxicity	Category 1A

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According to Regulation (EC) No. 1907/2006 (REACH)

Version 2, Revision Date: 10-JUL-2023

Print Date: 10-JUL-2023

2.2. Label elements

CLP Regulation (EC) No 1272/2008:

Pictogram

Signal word

Danger

Hazard statement(s)

H360 - May damage fertility or the unborn child

H317 - May cause an allergic skin reaction

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H371 - May cause damage to organs

H402 - Harmful to aquatic life.

Precautionary Statements

Prevention

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P201 - Obtain special instructions before use

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P273 - Avoid release to the environment

P280 - Wear protective gloves/protective clothing/eye protection/face protection

Response

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P308 + P311 - IF exposed or concerned: Call a POISON CENTER or doctor

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

Storage

Not Applicable

Disposal

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

2.3. Other hazards

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.



According to Regulation (EC) No. 1907/2006 (REACH)

Version 2, Revision Date: 10-JUL-2023

Print Date: 10-JUL-2023

Caution: Physiologically highly active substance. The substance must be handled with the care required for hazardous materials.

SECTION 3 Composition/Information on Ingredients

3.1. Substances

Non-applicable

3.2. Mixtures

Chemical characterization: water-based mixture of antibiotic compounds.

Chemical name	Identification	Classification	Concentration
Streptomycin	CAS: 3810-74-0	Acute Tox. 4. Repr. 2;	10,000 μg/ml
sulphate	EC: 223-286-0	H302, H361fd	
Penicillin G sodium	CAS: 69-57-8	Skin Sens. 1; H317	10,000 units/ml
salt	EC: 200-710-2		
Amphotericin B	CAS: 1397-89-3	STOT RE 1; H315, H319,	25 mg/l
	EC: 215-742-2	H335	25 mg/L

We recommend handling all chemicals with caution.

SECTION 4 First Aid Measures

4.1. Description of first aid measures

In either case, seek medical attention if the symptoms get worse or persist. showing the SDS of this product.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Take off immediately all contaminated clothing. Wash off with soap and plenty of water for at least 15 minutes.

In case of eye contact

Flush eyes with water as a precaution for at least 15 minutes. Call in ophthalmologist. Remove contact lenses.

Tel.: +49 (0)332 3785 9253



According to Regulation (EC) No. 1907/2006 (REACH)

Version 2, Revision Date: 10-JUL-2023

Print Date: 10-JUL-2023

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. (two glasses at most). Consult a physician.

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

Acute and delayed effects are listed in section 2 and 11.

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

No data available.

SECTION 5 Firefighting Measures

5.1. Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment (e.g. ABC powder).

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2. Special hazards arising from the substance or mixture

Not combustible.

Fire may cause evolution of:, nitrogen oxides

Sulfur oxides

Ambient fire may liberate hazardous vapours.

5.3. Advice for firefighters

Wear self-contained breathing apparatus for fire-fighting if necessary. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4. Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Tel.: +49 (0)332 3785 9253

SECTION 6 Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures



According to Regulation (EC) No. 1907/2006 (REACH)

Version 2, Revision Date: 10-JUL-2023

Print Date: 10-JUL-2023

Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

6.2. Environmental precautions

Do not let the 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. Dispose of properly. Clean up affected area.

6.4. Reference to other sections

For disposal see section 13

SECTION 7 Handling and Storage

7.1. Precautions for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Hygiene measures

Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance. For precautions see section 2.2.

For precautions see section 2.

7.2. Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Recommended storage temperature: -5 to -20 $^{\circ}$ C

7.3. Specific end uses

Apart from the uses mentioned in section 1.2. no other specific uses are stipulated.

Tel.: +49 (0)332 3785 9253

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SECTION 8 Exposure Controls/Personal Protection

8.1. Control parameters



According to Regulation (EC) No. 1907/2006 (REACH)

Version 2, Revision Date: 10-JUL-2023

Print Date: 10-JUL-2023

Ingredients with workplace control parameters

8.2. Exposure controls

8.2.1. Appropriate engineering controls

General industrial hygiene practice. Ensure adequate ventilation, especially in confined areas. Handle in accordance with good industrial hygiene and safety practice.

8.2.2. Individual protection measures

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves.

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: > 480 min

Body protection

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Required when vapours/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type ABEK The entrepeneur has to ensure that maintenance, cleaning and

Tel.: +49 (0)332 3785 9253



According to Regulation (EC) No. 1907/2006 (REACH)

Version 2, Revision Date: 10-JUL-2023

Print Date: 10-JUL-2023

testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

8.2.3. Environmental expose controls

Do not let product enter drains. Prevent further leakage or spillage.

SECTION 9 Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance: Form: liquid

Odor: No data available.

pH: 6.0 -7.5 Water solubility: Soluble

9.2. Other safety information

No data available

SECTION 10 Stability and Reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

Avoid strong bases and strong acids. Incompatible with oxidising agents and heavy metal salts

10.6. Hazardous decomposition products

Other decomposition products: No data available.

SECTION 11 Toxicological Information

11.1. Information on toxicological effects



According to Regulation (EC) No. 1907/2006 (REACH)

Version 2, Revision Date: 10-JUL-2023

Print Date: 10-JUL-2023

Mixture

Acute toxicity

Acute toxicity estimate Oral - > 2.000 mg/kg (Calculation method)

Inhalation No data available Dermal No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

Mixture may produce an allergic reaction.

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

Mixture may cause damage to organs through prolonged or repeated exposure.

Tel.: +49 (0)332 3785 9253

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Aspiration hazard

No data available

Components

Streptomycin sulphate

Acute toxicity

LD50 Oral - Rat - 430 mg/kg

Remarks: (RTECS)

Inhalation: No data available
Dermal: No data available
Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available



According to Regulation (EC) No. 1907/2006 (REACH)

Version 2, Revision Date: 10-JUL-2023

Print Date: 10-JUL-2023

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

Suspected of damaging the unborn child. Suspected of damaging fertility.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Penicillin G sodium salt

Acute toxicity

LD50 Oral - Rat - 6916 mg/kg

Remarks: (RTECS)

Inhalation: No data available Dermal: No data available Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

May cause sensitization by skin contact.

Germ cell mutagenicity

Test Type: Ames test Test

System: Salmonella typhimurium

Result: negative Remarks: (RTECS) Carcinogenicity No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

www.serana-europe.com

PAGE 9 of 13



According to Regulation (EC) No. 1907/2006 (REACH)

Version 2, Revision Date: 10-JUL-2023

Print Date: 10-JUL-2023

No data available

Aspiration hazard

No data available

amphotericin B

Acute toxicity

LD50 Oral - Rat - > 5.000 mg/Kg

Remarks: (RTECS)

Inhalation: No data available Dermal: No data available **Skin corrosion/irritation**

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Germ cell mutagenicity

No data available

Carcinogenicity

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

Aspiration hazard

No data available

11.2 Additional Information

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

Tel.: +49 (0)332 3785 9253

SECTION 12 Ecological Information

The environmental impact of this product has not been fully investigated



According to Regulation (EC) No. 1907/2006 (REACH)

Version 2, Revision Date: 10-JUL-2023

Print Date: 10-JUL-2023

12.1. Toxicity

Mixture

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

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.

Components

Streptomycin sulphate

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - > 180 mg/l - 96 h

Remarks: (Lit.)

Toxicity to daphnia and

other aquatic invertebrates EC50 - Ceriodaphnia (water flea) - 487 mg/l - 48 h

Remarks: (Lit.)

Sodium penicillin G

Toxicity to daphnia and

other aquatic invertebrates EC50 - Daphnia magna (Water flea) - > 1.000 mg/l - 48 h

Remarks: (ECOTOX Database)

Amphotericin B

No data available

SECTION 13 Disposal Considerations

13.1. Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Tel.: +49 (0)332 3785 9253



According to Regulation (EC) No. 1907/2006 (REACH)

Version 2, Revision Date: 10-JUL-2023

Print Date: 10-JUL-2023

Dispose as used product.

SECTION 14 Transport Information

14.1. UN-number

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(es)

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

14.6. Special precautions for user

No data available.

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

No data available.

SECTION 15 Regulatory Information

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

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

Tel.: +49 (0)332 3785 9253

Other regulations

Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable. Take note of Dir 94/33/EC on the protection of young people at work.

15.2. Chemical safety assessment

For this product a chemical safety assessment was not carried out.



According to Regulation (EC) No. 1907/2006 (REACH)

Version 2, Revision Date: 10-JUL-2023

Print Date: 10-JUL-2023

SECTION 16 Other Information

Full text of H-Statements referred to under section 3

H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.

Further Information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Serana Europe GmbH shall not be held liable for any damage resulting from handling or from contact with the above product.

a) Revised Version:

First Version, date of issue: 28-JUN-2022

b) List of Abbreviations:

ADR: European agreement concerning the international carriage of dangerous goods by

road

IMDG: International maritime dangerous goods code

IATA: International air transport association

IBC: International Code for the Construction and Equipment of Ships carrying Dangerous

Chemicals in Bulk

vPvB: very persistent and very bioaccumulative

LD50: Lethal Dose 50

LC50: Lethal Concentration 50

c) References:

http://echa.europa.eu http://eur-lex.europa.eu



According to Regulation (EC) No. 1907/2006 (REACH)

Version 2, Revision Date: 10-JUL-2023

Print Date: 10-JUL-2023

d) Methods for evaluation of mixtures according to Article 9 of Regulation (EC) No 1272/2008:

No data available.

e) List of hazard and precautionary statements:

If applicable, please see section 2.

f) Training advice:

General laboratory instructions are required. No special training advised.

- END OF SAFETY DATA SHEET -

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