

1. Identification of the substance/preparation and company

Trade name:

Zell Shield™

Company: Minerva Biolabs GmbH
Landhausring 7
D-12683

Telephone: +49 – 30 / 2000 4370

Telefax: +49 – 30 / 2000 4379

Poison emergency telephone no.: +49 – 17661751611

2. Composition/information on ingredients

Chemical characterization : (preparation)

aqueous solution

Mixture of substances listed below with nonhazardous additions.

Hazardous components

EC No.	CAS No.	Substance Name
--------	---------	----------------

-	85721-33-1	Ciprofloxacin	< 0.1 %
---	------------	---------------	---------

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)

3. Hazards identification

Not known. For additional information on toxicity, please refer to Section 11.

4. First aid measures

After inhalation

If inhaled, remove to fresh air. If breathing becomes difficult call a physician.

After contact with skin

In case of contact, immediately wash skin with soap and copious amounts of water.

After contact with eyes

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

After ingestion

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

5. Fire-fighting measures

Suitable extinguishing media

The product is not flammable. Use extinguishing measures that are appropriate to the environment.

Extinguishing media that must not be used for safety reasons

None.

Special protective equipment for firefighters

Wear self-contained breathing apparatus for fire fighting, if necessary.

Handle in accordance with good industrial hygiene and safety practice.

Specific Hazard(s): Emits toxic fumes under fire conditions.

6. Accidental release measures

Personal precautions

Exercise appropriate precautions to minimize direct contact with skin or eyes.

Environmental precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system.

Methods for cleaning up/taking up

Sweep up, place in a bag and hold for waste disposal. Wash spill site after material pickup is complete.

7. Handling and storage

7.1 Handling

Advice on safe handling

Avoid contact with skin and eyes. Avoid prolonged or repeated exposure.

Advice on protection against fire and explosion

No special precautions required.

7.2 Storage

Requirements for storage rooms and vessels

Store sealed in the original container.

Advice on storage compatibility

No special precautions required.

8. Exposure controls/personal protection

Occupational exposure controls

Not applicable

Protective and hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

Take off contaminated clothing and shoes immediately. Remove and wash contaminated clothing before re-use.

Keep away from food and drink. Wash thoroughly after handling.

Date: 13.10.2009

Rev.: 1.0

Page 3 of 5

Respiratory protection

Use respiratory equipment when gases, vapours/aerosols form.

Hand protection

Protective gloves.

Eye protection

Safety glasses.

9. Physical and chemical properties**9.1 Appearance**

Form: liquid

Odour: none

9.2 Important health, safety and environmental information**Test method**pH Value 7,4
(at 20 °C)**Changes in the physical state**Melting point: n.d. °C
Boiling point: n.d. °C

Flash point: n.a. °C

Flammabilitysolid: n.a. °C
gas: n.a. °C**Oxidizing properties**

None.

Explosive properties

None.

Explosion limitsLower Explosion limit: n.a.
Upper Explosion limit: n.a.Water solubility: miscible g/l
(at 20 °C)**9.3 Other information****Autoignition temperature**solid: n.a.
gas: n.a.

Date: 13.10.2009

Rev.: 1.0

Page 4 of 5

10. Stability and reactivity

Stability

Stable.

Materials to avoid

Strong oxidizing agents.

11. Toxicological information

Subacute, subchronic and prolonged toxicity

May cause eye or skin irritation with susceptible persons. May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract. Ingestion: May be harmful if swallowed.

Additional information

Handle in accordance with good industrial hygiene and safety practice.

Toxicity Data

Biosurfactant: not available

Ciprofloxacin: oral man 5.714 mg/kg LDLO

oral rat > 2000 mg/kg

subcutaneous rat: > 1 g/kg

12. Ecological information

No data is available on the product itself.

13. Advice on disposal

Dispose

Disposal in accordance with the official regulations.

Contaminated packaging

Offer rinsed packaging material to local recycling facilities.

14. Transport information

US DOT 49 CFR 172.101

Proper Shipping Name: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

Non-Hazardous for Air Transport: This substance is considered to be non-hazardous for air transport.

Other data

Not classified as dangerous in the meaning of transport regulations.

15. Regulatory information

15.1 Labelling

Labelling according to EC-guidelines

The product does not need to be labelled in accordance with EC directives or respective national laws.

S phrases

Keep out of the reach of children.

Keep away from food, drink and animal feeding stuffs.

15.2 National regulations

16. Other information

List of relevant R phrases

-

Other data

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

The product is to be used exclusively for the applications named in the technical leaflet or in the processing instructions.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

n.a. = not applicable

n.d. = not determined
