

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 26.03.2014

Version number 1

Revision: 11.03.2014

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: **Ciprofloxacin impurity standard**

Reference number: Cat 930

CAS Number:

86393-32-0

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

No further relevant information available.

Application of the substance / the mixture Reference material for laboratory use only

Manufacturer/Supplier:

British Pharmacopoeia Commission

MHRA

151 Buckingham Palace Road

London SW1W 9SZ

United Kingdom

Tel : +44 (0)20 3080 6561

eMail: bpcrs@mhra.gsi.gov.uk

Further information obtainable from: eMail: bpcrs@mhra.gsi.gov.uk

1.4 Emergency telephone number: +44 (0) 20 3080 6561 (Monday - Friday: 8am - 5pm)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Xi; Irritant

R36: Irritating to eyes.



N; Dangerous for the environment

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Information concerning particular hazards for human and environment: Not applicable.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS07 GHS09

Signal word Warning

Hazard statements

H319 Causes serious eye irritation.

(Contd. on page 2)

Safety data sheet

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Trade name: Ciprofloxacin impurity standard

(Contd. from page 1)

*H410 Very toxic to aquatic life with long lasting effects.***· Precautionary statements**

- P280 Wear protective gloves/protective clothing/eye protection/face protection.
P273 Avoid release to the environment.
P264 Wash thoroughly after handling.
P305+P351+P338 **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· 2.3 Other hazards**· Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· 3.1 Chemical characterization: Substances**· CAS No. Description**

86393-32-0 Ciprofloxacin hydrochloride

· Identification number(s) -**· Additional information:** For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

· 4.1 Description of first aid measures

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Rinse mouth. Do not induce vomiting.
- **4.2 Most important symptoms and effects, both acute and delayed** 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:**CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.**· 5.2 Special hazards arising from the substance or mixture**

Formation of toxic gases is possible during heating or in case of fire.

· 5.3 Advice for firefighters**· Protective equipment:** Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:** Pick up mechanically.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

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Version number 1

Revision: 11.03.2014

Trade name: Ciprofloxacin impurity standard

(Contd. from page 2)

· 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.***SECTION 7: Handling and storage****· 7.1 Precautions for safe handling** *Store in cool, dry place in tightly closed receptacles.***· Information about fire - and explosion protection:** *No special measures required.***· 7.2 Conditions for safe storage, including any incompatibilities****· Storage:****· Requirements to be met by storerooms and receptacles:***Store in a cool location.**Please refer to the manufacturer's certificate for specific storage and transport temperature conditions.**Store only in the original receptacle.**Keep container in a well-ventilated place. Keep away from sources of ignition and heat.***· Information about storage in one common storage facility:** *Store away from foodstuffs.***· Further information about storage conditions:** *Keep container tightly sealed.***· 7.3 Specific end use(s)** *No further relevant information available.***SECTION 8: Exposure controls/personal protection****· Additional information about design of technical facilities:** *No further data; see item 7.***· 8.1 Control parameters****· Ingredients with limit values that require monitoring at the workplace:** *Not required.***· Additional information:** *Lists used were valid at the time of SDS preparation.***· 8.2 Exposure controls****· Personal protective equipment:****· General protective and hygienic measures:***Keep away from foodstuffs, beverages and feed.**Immediately remove all soiled and contaminated clothing**Wash hands before breaks and at the end of work.**Avoid contact with the eyes.**Avoid contact with the eyes and skin.***· Respiratory protection:** *Not required.***· Protection of hands:***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 preparation/ the chemical mixture.**Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation***· Material of gloves***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.***· Penetration time of glove material***The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.*

(Contd. on page 4)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 26.03.2014

Version number 1

Revision: 11.03.2014

Trade name: Ciprofloxacin impurity standard

(Contd. from page 3)

· **Eye protection:**



Tightly sealed goggles

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Solid
Colour:	Off white
Odour:	Odourless
Odour threshold:	Not determined.

· **pH-value:** Not applicable.

· **Change in condition**

Melting point/Melting range:	307 °C
Boiling point/Boiling range:	Not determined.

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not determined.

· **Ignition temperature:**

Decomposition temperature: Not determined.

· **Self-igniting:** Not determined.

· **Danger of explosion:** Not determined.

· **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.

· **Vapour pressure:** Not applicable.

· **Density:** Not determined.

· **Relative density** Not determined.

· **Vapour density** Not applicable.

· **Evaporation rate** Not applicable.

· **Solubility in / Miscibility with water:** Not determined.

· **Partition coefficient (n-octanol/water):** Not determined.

· **Viscosity:**

Dynamic: Not applicable.

Kinematic: Not applicable.

· **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

· **10.1 Reactivity** Stable under normal conditions.

· **10.2 Chemical stability** Stable under normal conditions.

(Contd. on page 5)

Safety data sheet

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Printing date 26.03.2014

Version number 1

Revision: 11.03.2014

Trade name: Ciprofloxacin impurity standard

(Contd. from page 4)

- **Thermal decomposition / conditions to be avoided:**
Formation of toxic gases is possible during heating or in case of fire.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** Heat.
- **10.5 Incompatible materials:** Strong oxidizing agents.
- **10.6 Hazardous decomposition products:**
Formation of toxic gases is possible during heating or in case of fire.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritating effect.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:**

IC50/72 h	0.005 mg/l (Algae)
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- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Very toxic for aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **European waste catalogue**
Waste disposal key numbers from EWC have to be assigned depending on origin and processing.
- **Uncleaned packaging:**
- **Recommendation:** Dispose of in accordance with national regulations.

GB

(Contd. on page 6)

Safety data sheet

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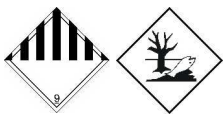
Version number 1

Revision: 11.03.2014

Trade name: Ciprofloxacin impurity standard

(Contd. from page 5)

SECTION 14: Transport information

<ul style="list-style-type: none"> · 14.1 UN-Number · ADR, IMDG, IATA · ADR · IMDG · IATA 	UN3077 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Ciprofloxacin hydrochloride) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Ciprofloxacin hydrochloride), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Ciprofloxacin hydrochloride)
<ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · ADR, IMDG, IATA  <ul style="list-style-type: none"> · Class · Label 	9 Miscellaneous dangerous substances and articles. 9
<ul style="list-style-type: none"> · 14.4 Packing group · ADR, IMDG, IATA 	III
<ul style="list-style-type: none"> · 14.5 Environmental hazards: · Marine pollutant: · Special marking (ADR): · Special marking (IATA): 	Yes (P) Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree)
<ul style="list-style-type: none"> · 14.6 Special precautions for user · Danger code (Kemler): · EMS Number: 	Warning: Miscellaneous dangerous substances and articles. 90 F-A,S-F
<ul style="list-style-type: none"> · 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code 	Not applicable.
<ul style="list-style-type: none"> · Transport/Additional information: 	
<ul style="list-style-type: none"> · ADR · Excepted quantities (EQ): · Limited quantities (LQ) · Transport category · Tunnel restriction code 	E1 5 kg 3 E
<ul style="list-style-type: none"> · UN "Model Regulation": 	UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Ciprofloxacin hydrochloride), 9, III

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Philippines Inventory of Chemicals and Chemical Substances** Substance is not listed.
- **Australian Inventory of Chemical Substances** Substance is not listed.
- **Standard for the Uniform Scheduling of Drugs and Poisons** Substance is not listed.

(Contd. on page 7)

Safety data sheet
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(Contd. from page 6)

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

The information in this safety data sheet (SDS) has been prepared with due care and is true and accurate to the best of our knowledge. The user must determine the suitability of the information for its particular purpose, ensure compliance with existing laws and regulations, and be aware that other or additional safety or performance considerations may arise when using, handling and/ or storing the material. The information in this SDS does not purport to be all inclusive or a guarantee as to the properties of the material supplied, and should be used only as a guide. British Pharmacopoeia Commission Office makes no warranties or representations as to the accuracy and completeness of the information contained herein, shall not be held responsible for the suitability of this information for the user's intended purposes or the consequences of such use, and shall not be liable for any damage or loss, howsoever arising, direct or otherwise.

· **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

P: Marine Pollutant

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

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

· **Sources**

Tables 3.1 and 3.2 from Annex 6 of EC 1272/2008, EC 1907/2006, EH40/2005 as amended 2011, Registry of Toxic Effects of Chemical Substances (RTECS), The Dictionary of Substances and their Effects, 1st Edition, IUCLID.