

Revision Date 22-Jul-2014

Version 1

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product identifier**

**Product Name** Ciprofloxacin Hydrochloride  
**Product Code** 61-277 -RF, 61-277-RG

**Other means of identification**

**Chemical Name** Ciprofloxacin Hydrochloride  
**CAS No** 86393-32-0  
**Formula** C<sub>17</sub>H<sub>18</sub>FN<sub>3</sub>O<sub>3</sub> • HCl • H<sub>2</sub>O  
**Pure substance/mixture** Substance

**Recommended use of the chemical and restrictions on use**

**Recommended Use** For Research Use Only. Not Intended for Diagnostic or Therapeutic Use.

**Details of the supplier of the safety data sheet**

**Company Name** Mediatech Inc., A Corning Subsidiary  
 9345 Discovery Blvd.  
 Manassas, VA 20109  
 USA  
 +1.703.471.5955

**Contact Point**

**Emergency Telephone** MTtechserv@Corning.com, 1.800.CELLGRO  
 Chemtrec: +1-800-424-9300 (USA), +1-703-527-3887 (International; Call collect), (REF: CCN 56 88)

**2. HAZARDS IDENTIFICATION****Classification**

Serious eye damage/eye irritation	Category 2
Chronic aquatic toxicity	Category 3

**Label elements****Emergency Overview****Warning****Hazard statements**

H319 - Causes serious eye irritation  
 H412 - Harmful to aquatic life with long lasting effects



**Appearance** crystalline

**Physical state** Solid

**Odor** No information available

**Precautionary statements**

P280 - Wear protective gloves and eye/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  
 P337 + P313 - If eye irritation persists: Get medical advice/attention  
 P273 - Avoid release to the environment

**Hazards not otherwise classified (HNOC)**

None known.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Common name** Ciprofloxacin hydrochloride  
**Molecular weight** 385.82 g/mol  
**CAS No** 86393-32-0  
**Formula** C<sub>17</sub>H<sub>18</sub>FN<sub>3</sub>O<sub>3</sub> • HCl • H<sub>2</sub>O

Chemical Name	CAS No	Weight-%	Trade Secret
Ciprofloxacin hydrochloride monohydrate	86393-32-0	100%	-

**4. FIRST AID MEASURES****First aid measures**

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Call a physician.

**Skin Contact** Wash off immediately with soap and plenty of water. Remove contaminated clothing and shoes. Call a physician.

**Eye contact** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Ingestion** If swallowed, rinse mouth with water (only if the person is conscious). Never give anything by mouth to an unconscious person. Call a physician.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** See Section 11: TOXICOLOGICAL INFORMATION.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** No information available.

**Hazardous combustion products**

Carbon oxides. Nitrogen oxides (NO<sub>x</sub>). Hydrogen chloride. Hydrogen fluoride.

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment as required. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Avoid breathing dust/fume/gas/mist/vapors/spray.

#### Environmental precautions

Collect spillage. Prevent product from entering drains.

#### Methods and material for containment and cleaning up

<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Avoid creating dust. Cover powder spill with plastic sheet or tarp to minimize spreading. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Prevent product from entering drains.

## 7. HANDLING AND STORAGE

#### Precautions for safe handling

<b>Advice on safe handling</b>	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapors/spray. Ensure adequate ventilation, especially in confined areas.
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#### Conditions for safe storage, including any incompatibilities

<b>Storage Conditions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place.
<b>Incompatible materials</b>	None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

<b>Exposure Guidelines</b>	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
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#### Appropriate engineering controls

<b>Engineering Controls</b>	Ensure adequate ventilation, especially in confined areas.
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#### Individual protection measures, such as personal protective equipment

<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Hand Protection</b>	Wear protective nitrile rubber gloves.
<b>Skin and body protection</b>	Suitable protective clothing.
<b>Respiratory protection</b>	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
<b>Recommended Filter type:</b>	P95 (US); P1 (EU EN 143).
<b>General Hygiene Considerations</b>	Handle in accordance with good industrial hygiene and safety practice. Wash hands thoroughly after handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

<b>Physical state</b>	Solid	<b>Odor</b>	No information available
<b>Appearance</b>	crystalline	<b>Odor threshold</b>	No information available
<b>Color</b>	light yellow		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
<b>pH</b>	3.0 - 4.5	aqueous solution	

<b>Melting point/freezing point</b>	No information available
<b>Boiling point / boiling range</b>	No information available
<b>Flash point</b>	No information available
<b>Evaporation rate</b>	No information available
<b>Flammability (solid, gas)</b>	No information available
<b>Flammability Limit in Air</b>	
<b>Upper flammability limit:</b>	No information available
<b>Lower flammability limit</b>	No information available
<b>Vapor pressure</b>	No information available
<b>Vapor density</b>	No information available
<b>Specific Gravity</b>	No information available
<b>Water solubility</b>	Soluble in water
<b>Solubility in other solvents</b>	No information available
<b>Partition coefficient</b>	No information available
<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Kinematic viscosity</b>	No information available
<b>Dynamic viscosity</b>	No information available
<b>Oxidizing properties</b>	No information available
<b>Explosive properties</b>	No information available
<b>Molecular weight</b>	385.82 g/mol

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available

### Chemical stability

Stable under normal conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Conditions to avoid

None known.

### Incompatible materials

Strong oxidizing agents.

### Hazardous Decomposition Products

None under normal use conditions

May emit toxic fumes under fire conditions

Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride, Hydrogen fluoride.

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

<b>Oral LD50</b>	> 2000 mg/kg (rat)
<b>Dermal LD50</b>	No data available
<b>Inhalation LC50</b>	No data available

### Information on toxicological effects

**Symptoms** No information available.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Serious eye damage/eye irritation</b>	Causes eye irritation.
<b>Sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available

<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.

**Potential health effects****Inhalation**

May be harmful if inhaled. May cause irritation of respiratory tract.

**Ingestion**

May be harmful if swallowed.

**Skin**

May cause irritation. May be harmful in contact with skin.

**Eyes**

Causes eye irritation.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

Harmful to aquatic life with long lasting effects

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Mobility in soil**

No information available.

**Other adverse effects**

No information available.

## 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods****Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

## 14. TRANSPORT INFORMATION

**DOT** Not regulated**TDG** Not regulated**IATA** Not regulated**IMDG** Not regulated**RID** Not regulated**ADR** Not regulated**ADN** Not regulated**MEX** Not regulated

## 15. REGULATORY INFORMATION

### International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Ciprofloxacin hydrochloride monohydrate	-	-	-	-	-	-	X	-	-	-

*Legend* X = Listed, - = Not Listed

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

### US Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

#### **SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	Yes
<b>Chronic Health Hazard</b>	No
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	No

#### **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

#### **U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not Applicable

### US State Regulations

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals

## 16. OTHER INFORMATION

**Version 1**

**Revision Date**

22-Jul-2014

**Revision Note**

Not Applicable

**Disclaimer**

To the best of our knowledge, the information contained herein is accurate. However, neither Corning Incorporated nor any of its subsidiaries assumes any liabilities whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

**End of Safety Data Sheet**