

# Material Safety Data Sheet according to EC 1907/2006

**Trade name: 1N Hydrochloric acid, 1N HCl**

## 1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY/UNDERTAKING

### 1.1 Identification of the preparation:

**Identification on the label / trade name:** 1N Hydrochloric acid, 1N HCl

**Additional identification:** ca. 3% HCl

### 1.2 Use of the preparation:

The hydrochloric acid is used to acidify the samples.

### 1.3 Company/undertaking identification:

Bender MedSystems GmbH

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**Information contact:** [europa@ebioscience.com](mailto:europa@ebioscience.com)

**National contact:** Customer Service

### 1.4 EMERGENCY TELEPHONE:

phone: +43 1 796 40 40 100 (Austria)

phone: +1 (888) 999 1371 (USA)

These phone numbers are available during office hours.

## 2. HAZARDS IDENTIFICATION

### 2.1 Hazards description:

Causes corrosion/ irritation

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## 2.1.1 Classification:

Regulation (EC) No 1272/2008 [CLP]	
Hazard classes/Hazard categories	Hazard statement
3.1/ category 4	H302, H312
3.2/ Category 2	H315
3.3/ Category 2	H319
4.1/ Category 4	H413

  

67/548/EEC or 1999/45/EC	
Hazards characteristics	R-Phrases
Xi	R36, R38, R53

## 2.1.2 Remark:

Full text of H- and R-phrases: see section 16.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Preparation / mixture related informations

**Description:** Mixture of mentioned below ingredients:

### 3.2 Ingredients:

Chemical name	EC-No	Index-No	CAS-No	Amount (%)	Classification according Regulation (EC) No 1272/2008 [CLP]		Classification according 67/548/EEC
					Hazard class/ Hazard categories	Hazard-statement	
Hydrochloric Acid	231595-7	017-002-01-X	7647-01-0	32	3.2/ Category 1B	H314	C; R34
Water, dest.	231-791-2	-	7732-18-5	-	-	-	-

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## 4. FIRST AID MEASURES

### 4.1 General informations:

Skin- and eyecontact causes irritation  
In case of indisposition contact a doctor, show this datasheet.

### 4.2 In case of skin contact:

Wash affected bodyparts with plenty amount of water.

### 4.3 In case of eye contact:

Wash the affected eye with water for a minimum of 10 minutes.  
In case of indisposition contact an eye-specialist.

### 4.4 In case of ingestion:

Immediately wash your mouth with plenty of water.  
Furthermore swallow water in small amounts (dilution)

## 5. FIRE-FIGHTING MEASURES

### 5.1 Suitable extinguishing media:

water, dry powder extinguisher, carbondioxid

### 5.2 Extinguishing media which must not be used for safety reasons:

Attention with dry powder extinguisher.  
It's not appropriate for in door fire because raised foam causes lack of sight.

### 5.3 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases:

In case of fire, despite flue gas also dangerous, product specific gases might be produced. Because of the very low concentration of this mixture it is very unlikely that oxides will be produced in a hazered amount.  
Further data are not known.

### 5.4 Special protective equipment for fire-fighters:

In case of heavy smoke a respirator shall be used.

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## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions:

In case of spilled mixture safety gloves have to be worn to prevent skin contact.  
In case of big amounts an additional inhalation protection is recommended.

### 6.2 Environmental precautions:

Mixture must not discard in sewage system/ residual waste.  
Dilute residues cautiously with water and clean it up with a paper towel.

### 6.3 Methods for cleaning up:

Spilled mixture can be cleaned up with a paper towel and discarded in an appropriate waste.  
Afterwards clean bench with water.

## 7. HANDLING AND STORAGE

### 7.1 Handling

#### Advices on safe handling:

Protective measures: wear protective clothing

#### Precautions against fire and explosion:

Development of explosive atmosphere is not possible

### 7.2 Storage

#### Technical measures and storage conditions:

Storage in well closed containers

#### Packaging materials:

Acid resistant containers (e.g.: glas, polyethylen) are suitable  
Containers made of metal are not suitable.

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## Requirements for storage rooms and vessels:

Prevent direct sunlight and heat.  
Store in well aired storage rooms.

## Further information on storage conditions:

Storage temperature: 2 – 8 °C  
Storage stability: stabil  
Maximal storage periode: 2 years

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Exposure limit values:

#### 8.1.1 Components with occupational exposure limits requiring monitoring:

#### Hydrochloric Acid:

##### maximum allowable concentration

EU:	short term value:	15 mg/m <sup>3</sup>
	long term (8 hs):	8 mg/m <sup>3</sup>
USA:	short term value	7 mg/m <sup>3</sup>
	long term (8 hs):	no data available

### 8.2 Personal protection equipment:

<u>Respiratory protection:</u>	not necessary
<u>Hand protection:</u>	disposable protective gloves
<u>Eye protection:</u>	not necessary
<u>Body protection:</u>	lab coat, lab shoes

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Appearance

<b>Physical state:</b>	liquid
<b>Colour:</b>	colourless
<b>Odour:</b>	odourless

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## 9.2 Important health, safety and environmental information

### 9.2.1 Safety relevant data

	Value	Remark
pH (20 °C):	pH 2, acid	pH paper
Melting point (°C):	no data	
Boiling point (°C):	no data	
Ignition temperature (°C):	no data	
Vapour pressure (°C):	no data	
Density (g/cm <sup>3</sup> ):	1.0130 g/cm <sup>3</sup>	
Water solubility:	very well soluble	
Viscosity, dynamic (mPa s):	no data	
Explosion limits:	-	mixture is not explosive

## 10. STABILITY AND REACTIVITY

stable under mentioned storage conditions

### 10.1 Conditions to avoid:

Direct sunlight, high temperature

### 10.2 Materials to avoid:

No data available

### 10.3 Hazardous decomposition products:

No data available

Because of the low acid concentration in the mixture, no hazardous gases are expected.

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## 11. TOXICOLOGICAL INFORMATION

### 11.2 Acute effects (toxicity tests)

7647-01-0 HCl	Effect dose	Species
Acute oral toxicity	LD50 = 900 mg/kg	rabbit
Acute dermal toxicity	no data	
Acute inhalative toxicity	LC50 = 3124 mg/l	rat

#### Specific symptoms in animal studies:

No data available

#### Irritant and corrosive effects:

No data available

#### Sensitisation

In case of skin contact: no data

In case of inhalation: no data

#### Repeated dose toxicity (sub-acute, sub-chronic, chronic)

No data available

#### CMR effects

(carcinogenicity, mutagenicity and toxicity for reproduction)

No CMR effects

## 12. Ecological information

### 12.1 Ecotoxicity:

Aquatic toxicity (1N HCl)	Effectdose	Exposure time	Species
Acute fish toxicity	LC50=826 mg/l	96 h	Leuciscus idus
Acute daphnia toxicity	No data		
Acute algae toxicity	No data		

### 12.2 Mobility:

#### Known or predicted distribution to environmental compartments:

In case of shifting the pH value there might be some damaging effects for aquatic organism.

The mixture must not dispose in the sewage system without pretreatment.

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### 13. DISPOSAL CONSIDERATIONS

#### 13.1 Appropriate disposal / Product:

All national and local laws have to be considered. This product is only allowed to be discarded by a licensed waste management company.

#### 13.2 Waste codes / waste designations according to EWC / AVV (Austria):

Medical waste: Waste code: 97101

In other countries different conditions might be valid. All national and local laws have to be considered.

#### 13.3 Appropriate packaging:

Rinse container with water, dispose as the product.

### 14. TRANSPORT INFORMATION

Official transport designation: 1N HCl, 1N Hydrochloric acid  
Because product is no dangerous good, no specific codes or labels are necessary.

### 15. REGULATORY INFORMATION

#### 15.1 EU regulations

##### Labelling (Regulation (EC) No 1272/2008)

Hazard components for labelling: Hydrochloric Acid

Signal words: Attention

Hazard pictograms: GHS07



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Hazard statements: H302, H312, H315, H319, H413

Precautionary statements: P281, P301, P302, P305, P330, P404, P410

## 16. OTHER INFORMATION

### 16.1 Relevant R- and H-phrases:

H302: Harmfull if swallowed

H312: Harmfull in contact with skin

H315: Causes skin irritation

H319: Causes serious eye irritation

H413 May cause long lasting harmful effects to aquatic life

R36: Irritating to eyes

R38: Irritating to skin

R53: May cause long-term adverse effects in the aquatic environment

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P281: Use personal protective equipment as required  
P301: IF SWALLOWED: swallow water in small amounts  
P302: IF ON SKIN: wash with water  
P305: IF IN EYES: wash with water  
P330: Flush mouth  
P404: Store in a closed container  
P410: Protect from sunlight

**16.2 Training instructions:** no data

**16.4 Data sources:**  
BDI Helpdesk Germany), ECHA, GESTIS (IFA)

**16.5 Further information:**  
The above information has been assembled to the best of our knowledge but might not be complete.  
Bender MedSystems GmbH can not be held liable for any damages resulting from handling with the product

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