

# SAFETY DATA SHEET



Revision date 22-Sep-2022

Revision Number 1

## 1. Identification

### Product identifier

Product Name B/OX 327

### Other means of identification

Product Code(s) EPI-0277

UN number or ID number UN1789

Synonyms None

### Details of the supplier of the safety data sheet

#### Manufacturer Address

Electrochemical Products Inc.  
17000 West Lincoln Ave  
New Berlin, WI 53151  
Phone: 262-786-9330  
E-mail: us-sales@epi.com  
www.epi.com  
Fax: 262-786-9403

### Emergency telephone number

Emergency Telephone NCEC (#EPI-29003) +1 202 464 2554, +44 1865 407333

## 2. Hazard(s) identification

### Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Carcinogenicity	Category 1A
Reproductive toxicity	Category 1B
Effects on or via lactation	Yes

### Hazards not otherwise classified (HNOC)

Not applicable

### Label elements

**Danger**

#### Hazard statements

Causes skin irritation  
Causes serious eye irritation  
May cause cancer  
May damage fertility or the unborn child

May cause harm to breast-fed children



**Appearance** Clear to light yellow solution.

**Physical state** Liquid

**Odor** Mildly acidic odor

#### Precautionary Statements - Prevention

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Do not breathe dusts or mists  
 Avoid contact during pregnancy/while nursing  
 Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product

#### Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 If eye irritation persists: Get medical advice/attention  
 IF ON SKIN: Wash with plenty of water and soap  
 If skin irritation occurs: Get medical advice/attention  
 Take off contaminated clothing and wash it before reuse  
 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Call a POISON CENTER or doctor if you feel unwell  
 Rinse mouth  
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
 Do NOT induce vomiting

#### Precautionary Statements - Storage

Store locked up

#### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

#### Other information

No information available.

### 3. Composition/information on ingredients

#### Substance

Not applicable.

#### Mixture

Chemical name	CAS No	Weight-%	Trade secret
Water	7732-18-5	90-98	*
Hydrogen chloride	7647-01-0	1-4	*
Trade secret	Trade secret	0.01-0.5	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

## 4. First-aid measures

### Description of first aid measures

<b>General advice</b>	IF exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance.
<b>Inhalation</b>	Remove to fresh air. Get medical attention immediately if symptoms occur.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get medical attention if symptoms occur.
<b>Self-protection of the first aider</b>	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

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

<b>Symptoms</b>	May cause redness and tearing of the eyes. Burning sensation.
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### Indication of any immediate medical attention and special treatment needed

<b>Note to physicians</b>	Treat symptomatically.
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## 5. Fire-fighting measures

<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Large Fire</b>	CAUTION: Use of water spray when fighting fire may be inefficient.
<b>Unsuitable extinguishing media</b>	Do not scatter spilled material with high pressure water streams.
<b>Specific hazards arising from the chemical</b>	No information available.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	None.
<b>Sensitivity to static discharge</b>	None.
<b>Special protective equipment for fire-fighters</b>	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

<b>Personal precautions</b>	Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required.
<b>Other information</b>	Refer to protective measures listed in Sections 7 and 8.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.  
**Methods for cleaning up** Pick up and transfer to properly labeled containers.

**7. Handling and storage**

**Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes. Take off contaminated clothing and wash before reuse.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**8. Exposure controls/personal protection**

**Control parameters**

**Exposure Limits**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Hydrogen chloride 7647-01-0	Ceiling: 2 ppm	Ceiling: 5 ppm Ceiling: 7 mg/m <sup>3</sup>	IDLH: 50 ppm Ceiling: 5 ppm Ceiling: 7 mg/m <sup>3</sup>

**Biological occupational exposure limits**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

**Appropriate engineering controls**

**Engineering controls** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** If splashes are likely to occur, wear safety glasses with side-shields.

**Hand protection** Wear suitable gloves. Impervious gloves.

**Skin and body protection** Wear suitable protective clothing. Long sleeved clothing.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**General hygiene considerations** Do not eat, drink or smoke when using this product. Wash hands before breaks and

immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Clear to light yellow solution.
Color	Colorless to light yellow
Odor	Mildly acidic odor

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	0 - 1	None known
Melting point / freezing point	0 °C / 32 °F	None known
Boiling point / boiling range	100 °C / 212 °F	None known
Flash point	No data available	None known
Relative density	1.005 - 1.025	None known
Water solubility	Completely	None known

### Other information

VOC Content (%)	0
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## 10. Stability and reactivity

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	None known based on information supplied.
Incompatible materials	Strong acids. Strong bases. Strong oxidizing agents.
Hazardous decomposition products	None known based on information supplied.

## 11. Toxicological information

### Information on likely routes of exposure

#### Product Information

Inhalation	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.
Eye contact	Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
Skin contact	Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).
Ingestion	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

### Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Redness. May cause redness and tearing of the eyes.
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**Acute toxicity****Numerical measures of toxicity**

No information available

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	10,347.80 mg/kg
ATEmix (inhalation-gas)	24,491.40 ppm
ATEmix (inhalation-dust/mist)	21.80 mg/l

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	> 90 mL/kg ( Rat )	-	-
Hydrogen chloride 7647-01-0	238 - 277 mg/kg ( Rat )	> 5010 mg/kg ( Rabbit )	= 1.68 mg/L ( Rat ) 1 h
Trade secret	> 5 g/kg ( Rat )	-	-

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

**Skin corrosion/irritation** Classification based on data available for ingredients. Irritating to skin.

**Serious eye damage/eye irritation** Classification based on data available for ingredients. Causes serious eye irritation.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** Contains a known or suspected carcinogen. Classification based on data available for ingredients. May cause cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Hydrogen chloride 7647-01-0	-	Group 3	-	X

**Legend****IARC (International Agency for Research on Cancer)**

Group 3 - Not Classifiable as to Carcinogenicity in Humans

**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**

X - Present

**Reproductive toxicity** Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. May damage fertility or the unborn child. May cause harm to breast-fed children.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

<b>Target organ effects</b>	Respiratory system, Eyes, Skin.
<b>Aspiration hazard</b>	No information available.
<b>Other adverse effects</b>	No information available.
<b>Interactive effects</b>	No information available.

## 12. Ecological information

### Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Trade secret	-	LC50: >100mg/L (96h, Oncorhynchus mykiss)	-	-

**Persistence and degradability** No information available.

**Bioaccumulation** There is no data for this product.

**Other adverse effects** No information available.

## 13. Disposal considerations

### Waste treatment methods

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

## 14. Transport information

### DOT

<b>UN number or ID number</b>	UN1789
<b>Proper shipping name</b>	Hydrochloric acid
<b>Transport hazard class(es)</b>	8
<b>Packing group</b>	II
<b>Special Provisions</b>	386, A3, B3, B15, B133, IB2, N41, T8, TP2
<b>DOT Marine Pollutant</b>	NP
<b>Description</b>	UN1789, Hydrochloric acid, 8, II
<b>Emergency Response Guide Number</b>	157

### TDG

<b>UN number or ID number</b>	UN1789
<b>UN proper shipping name</b>	Hydrochloric acid
<b>Transport hazard class(es)</b>	8
<b>Packing group</b>	II

<b>Description</b>	UN1789, Hydrochloric acid, 8, II
<b><u>MEX</u></b>	
<b>UN number or ID number</b>	UN1789
<b>UN proper shipping name</b>	Hydrochloric acid
<b>Transport hazard class(es)</b>	8
<b>Packing group</b>	II
<b>Description</b>	UN1789, Hydrochloric acid, 8, II
<b><u>ICAO (air)</u></b>	
<b>UN number or ID number</b>	UN1789
<b>UN proper shipping name</b>	Hydrochloric acid
<b>Transport hazard class(es)</b>	8
<b>Packing group</b>	II
<b>Description</b>	UN1789, Hydrochloric acid, 8, II
<b>Special Provisions</b>	A3
<b><u>IATA</u></b>	
<b>UN number or ID number</b>	UN1789
<b>UN proper shipping name</b>	Hydrochloric acid
<b>Transport hazard class(es)</b>	8
<b>Packing group</b>	II
<b>Description</b>	UN1789, Hydrochloric acid, 8, II
<b>Special Provisions</b>	A3, A803
<b>ERG Code</b>	8L
<b><u>IMDG</u></b>	
<b>UN number or ID number</b>	UN1789
<b>UN proper shipping name</b>	Hydrochloric acid
<b>Transport hazard class(es)</b>	8
<b>Packing group</b>	II
<b>EmS-No</b>	F-A, S-B
<b>Marine pollutant</b>	NP
<b>Description</b>	UN1789, Hydrochloric acid, 8, II
<b><u>RID</u></b>	
<b>UN number or ID number</b>	UN1789
<b>UN proper shipping name</b>	Hydrochloric acid
<b>Transport hazard class(es)</b>	8
<b>Packing group</b>	II
<b>Classification code</b>	C1
<b>Special Provisions</b>	520
<b>Description</b>	UN1789, Hydrochloric acid, 8, II
<b><u>ADR</u></b>	
<b>UN number or ID number</b>	UN1789
<b>UN proper shipping name</b>	Hydrochloric acid
<b>Transport hazard class(es)</b>	8
<b>Packing group</b>	II
<b>Classification code</b>	C1
<b>Tunnel restriction code</b>	(E)
<b>Special Provisions</b>	520
<b>Description</b>	UN1789, Hydrochloric acid, 8, II, (E)
<b><u>ADN</u></b>	
<b>UN number or ID number</b>	UN1789
<b>UN proper shipping name</b>	Hydrochloric acid
<b>Transport hazard class(es)</b>	8
<b>Packing group</b>	II
<b>Classification code</b>	C1



<b>Special Provisions</b>	520
<b>Description</b>	UN1789, Hydrochloric acid, 8, II
<b>Equipment Requirements</b>	PP, EP

## 15. Regulatory information

### International Inventories

**TSCA** Complies

Chemical name	CAS No	US TSCA Inventory listing	US TSCA inactive/active designation
Water	7732-18-5	Present	Active
Hydrogen chloride	7647-01-0	Present	Active
Trade secret	-	Present	Active
Surfactant	78330-21-9	Present	Active

<b>DSL/NDL</b>	Complies
<b>EINECS/ELINCS</b>	Does not comply
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

#### **Legend:**

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

**DSL/NDL** - 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**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

#### **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, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	Reportable Quantity (RQ)
Hydrogen chloride	5000 lb	5000 lb	RQ 5000 lb final RQ

7647-01-0			RQ 2270 kg final RQ
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**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
Water 7732-18-5	-	-	X
Hydrogen chloride 7647-01-0	X	-	X

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**16. Other information**

<b>NFPA</b>	<b>Health hazards</b> 2	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Special hazards</b> -
<b>HMIS</b>	<b>Health hazards</b> 2 *	<b>Flammability</b> 0	<b>Physical hazards</b> 0	<b>Personal protection</b> X
<i>Chronic Hazard Star Legend</i>	<i>* = Chronic Health Hazard</i>			

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend Section 8: Exposure controls/personal protection**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AEGl(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 Japan GHS Classification  
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
 Organization for Economic Co-operation and Development Screening Information Data Set  
 World Health Organization

**Revision date** 22-Sep-2022

**Revision Note** No information available.

**Disclaimer**

**The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information**

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relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**