



Safety Data Sheet

Material Name: B/OX 327

SDS ID: EPI-0277

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name

B/OX 327

Product Use

Antiquing Solution.

Details of the supplier of the safety data sheet

Electrochemical Products Inc.

17000 West Lincoln Ave

New Berlin, WI 53151

Phone: 262-786-9330

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

E-mail: us-sales@epi.com

www.epi.com

Fax: 262-786-9403

Section 2 - HAZARDS IDENTIFICATION

Classification in accordance with paragraph (d) of 29 CFR 1910.1200.

Skin Corrosion/Irritation - Category 1

Serious Eye Damage/Eye Irritation - Category 1

GHS Label Elements

Symbol(s)



Signal Word

Danger

Hazard Statement(s)

Causes severe skin burns and eye damage.

Precautionary Statement(s)

Prevention



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Wear protective gloves/protective clothing/eye protection/face protection.
Wash thoroughly after handling.
Do not breathe dusts or mists.

Response

IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
Wash contaminated clothing before reuse.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
Immediately call a POISON CENTER or doctor.
Specific treatment (see label).

Storage

Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
7732-18-5	Water	90-98
7647-01-0	Hydrogen chloride	1-4
7446-07-3	Tellurium dioxide	0.01-0.5
Not Available	Surfactant	0.005-0.01

Section 4 - FIRST AID MEASURES

Inhalation

If inhaled, immediately remove the affected person to fresh air. If not breathing, give artificial respiration and call a physician immediately.

Skin

Immediately flush skin with lots of running water for 30 minutes. Remove contaminated clothing and shoes. Wash before reuse. Get immediate medical attention.

Eyes



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Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Seek medical attention at once.

Ingestion

Do NOT induce vomiting. If swallowed, dilute by giving a glass of water. See a physician. Do not give anything by mouth to an unconscious person.

Most Important Symptoms/Effects

Acute

CORROSIVE. May cause irritation to the eyes, skin, gastrointestinal tract, and respiratory system.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Dry chemical, foam, carbon dioxide, water fog.

Unsuitable Extinguishing Media

None known.

Hazardous Combustion Products

These products are carbon oxides (CO, CO₂). May produce irritants and toxic gases.

Fire Fighting Measures

Firefighters should wear full-face, self-contained breathing apparatus and impervious protective clothing. Firefighters should avoid inhaling any combustion products.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Isolate area. Keep unnecessary personnel away. Wear appropriate protective equipment during cleanup.

Methods and Materials for Containment and Cleaning Up

Contain the discharged material. Stop source of leak if possible. Block any potential routes to water systems. Ventilate the contaminated area. Absorb spilled product with a commercial oil absorbent, such as sand or earth. Shovel absorbed material into appropriate container for disposal. Wear appropriate protective equipment and clothing during clean-up. Avoid skin contact and inhalation of vapors during disposal of spills. Isolate area. Keep unnecessary personnel away. Follow all Local, State, Federal and Provincial regulations for disposal. Surfaces may become slippery after spillage.

Environmental Precautions

Do not discharge into sewers or waterways. Incinerate spent absorbent material in an approved incinerator.



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Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling

Wash thoroughly after handling. Wash contaminated clothing before reuse.

Conditions for Safe Storage, Including any Incompatibilities

Store locked up.

Keep container tightly closed and in a well ventilated place.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

Hydrogen chloride	7647-01-0
ACGIH:	2 ppm Ceiling
NIOSH:	5 ppm Ceiling ; 7 mg/m ³ Ceiling
	50 ppm IDLH
Europe:	5 ppm TWA ; 8 mg/m ³ TWA
	10 ppm STEL ; 15 mg/m ³ STEL
OSHA (US):	5 ppm Ceiling ; 7 mg/m ³ Ceiling
Mexico:	5 ppm Ceiling ; 7 mg/m ³ Ceiling

EU - Occupational Exposure (98/24/EC) - Binding Biological Limit Values and Health Surveillance Measures

There are no biological limit values for any of this product's components.

ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)

There are no biological limit values for any of this product's components.

Engineering Controls

Use general ventilation and use local exhaust, where possible, in confined or enclosed spaces.

Individual Protection Measures, such as Personal Protective Equipment

Eye/face protection

Wear safety glasses with side shields or chemical goggles.

Skin Protection

Use of protective coveralls and long sleeves is recommended to prevent skin contact.

Respiratory Protection

If ventilation is not sufficient to effectively prevent buildup of vapor/mist/fume/dust, appropriate NIOSH/MSHA respiratory protection must be provided.



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Glove Recommendations

Use chemical resistant impervious gloves.

Protective Materials

Eye wash fountain and emergency showers are recommended. Use good industrial hygiene practices in handling this material.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear to light yellow solution.	Physical State	Liquid
Odor	Mildly acidic odor	Color	Not available
Odor Threshold	Not available	pH	0 - 1
Melting Point	Not available	Boiling Point	212 °F
Freezing point	32 °F (0 °C)	Evaporation Rate	(Approx. equal to Water)
Boiling Point Range	Not available	Flammability (solid, gas)	Not available
Autoignition	Not available	Flash Point	Not available
Lower Explosive Limit	Not available	Decomposition temperature	Not available
Upper Explosive Limit	Not available	Vapor Pressure	Not available
Vapor Density (air=1)	(Approx. equal to water)	Specific Gravity (water=1)	1.005 - 1.025
Water Solubility	Completely	Partition coefficient: n-octanol/water	Not available
Viscosity	Not available	Solubility (Other)	Not available
Density	Not available	VOC	0
Molecular Weight	Not available		

Section 10 - STABILITY AND REACTIVITY



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Reactivity

Product may release hydrogen gas. Increased storage temperatures will accelerate this process.

Chemical Stability

Stable under normal conditions.

Possibility of Hazardous Reactions

Will not occur under normal conditions.

Conditions to Avoid

Avoid contact with extreme heat.

Incompatible Materials

Corrosive to metals. Metals (Solid). Strong bases. This product may react with strong reducing agents.

Hazardous decomposition products

Hydrogen Chloride and Hydrogen gas.

Section 11 - TOXICOLOGICAL INFORMATION

Acute and Chronic Toxicity

Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Water (7732-18-5)

Oral LD50 Rat >90 mL/kg

Hydrogen chloride (7647-01-0)

Oral LD50 Rat 238 - 277 mg/kg

Dermal LD50 Rabbit >5010 mg/kg

Inhalation LC50 Rat 1.68 mg/L 1 h

Tellurium dioxide (7446-07-3)

Oral LD50 Rat >5 g/kg [OECD Guideline 423] (no deaths occurred)

Immediate Effects

No information on significant adverse effects.

Delayed Effects

No information on significant adverse effects.

Irritation/Corrosivity Data

No data available.

Respiratory Sensitization

No data available.

Dermal Sensitization

No data available.

Component Carcinogenicity



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Hydrogen chloride	7647-01-0
ACGIH:	A4 - Not Classifiable as a Human Carcinogen
IARC:	Monograph 54 [1992] (Group 3 (not classifiable))

Germ Cell Mutagenicity

No data available.

Tumorigenic Data

No data available

Reproductive Toxicity

No data available.

Specific Target Organ Toxicity - Single Exposure

No data available.

Specific Target Organ Toxicity - Repeated Exposure

No data available.

Aspiration hazard

No data available.

Medical Conditions Aggravated by Exposure

No data available.

Section 12 - ECOLOGICAL INFORMATION

Component Analysis - Aquatic Toxicity

No LOLI ecotoxicity data are available for this product's components

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods

Avoid disposal. Completely utilize product, if possible. Dispose of unused product in accordance with applicable Federal, State, Provincial, or Local regulations.

Section 14 - TRANSPORT INFORMATION

US DOT Information:

Shipping Name: Hydrochloric Acid Solution

Hazard Class: 8

UN/NA #: UN1789



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Packing Group: II
Required Label(s): Corrosive

TDG Information:
Shipping Name: Hydrochloric Acid Solution
Hazard Class: 8
UN#: UN1789
Packing Group: II
Required Label(s): Corrosive

Section 15 - REGULATORY INFORMATION

U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Hydrogen chloride	7647-01-0
SARA 302:	500 lb TPQ gas only)
SARA 313:	1 % de minimis concentration (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)
CERCLA:	5000 lb final RQ ; 2270 kg final RQ
OSHA (safety):	5000 lb TQ; 5000 lb TQ anhydrous)
SARA 304:	5000 lb EPCRA RQ gas only)

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Hydrogen chloride	7647-01-0	Yes	Yes	Yes	Yes	Yes

Not listed under California Proposition 65

Canada Regulations

This material is a controlled product under Canadian WHMIS regulations.

Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in



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products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

Hydrogen chloride	7647-01-0
	1 %
Tellurium dioxide	7446-07-3
	1 %

Component Analysis - Inventory

Water (7732-18-5)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

Hydrogen chloride (7647-01-0)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Tellurium dioxide (7446-07-3)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	No

Surfactant (Not Available)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	No	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

Section 16 - OTHER INFORMATION

HMIS Rating

Health: 2 Fire: 0 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

NFPA Ratings



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Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS - Japan Existing and New Chemical Substance Inventory; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; ISHL - Japan Industrial Safety and Health Law; JP - Japan; Kow - Octanol/water partition coefficient; KECI - Korea Existing Chemicals Inventory; KECL - Korea Existing Chemicals List; KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; MX - Mexico; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH - Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TCCA - Korea Toxic Chemicals Control Act; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TW - Taiwan; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

Other Information

Disclaimer:

Reasonable care has been taken in the preparation of this information; however, the manufacturer makes no warranty whatsoever including the warranty of merchantability, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental, consequential, or other such damages resulting from its use or misuse..