



Boston BioProducts, Inc.
 159 Chestnut Street
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P303 + P361 + P353	IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician
P305 + P351 + P338 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.
P405	Store locked up.
P406	Store in corrosive resistant stainless steel container with a resistant inner Liner.
P501	Dispose of contents/ container to an approved waste disposal plant.

SECTION 3- COMPOSITION/INFORMATION ON INGREDIENTS

Composition: Hydrochloric Acid-filtered solution (1N in low endotoxin water) prepared in low endotoxin water and filtered through 0.22 micron filter.

Component	CAS Number	%
Hydrochloric Acid	7647-01-0	~<4.0
Low endotoxin Water	7732-18-5	Rest (>96)

SECTION 4 - FIRST-AID MEASURES

4.1 Description of first aid measures

General advice: Consult a doctor and show this safety data sheet.

- i. **If inhaled:** Move to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Consult a doctor.
- ii. **In case of skin contact:** Immediately wash skin with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing and shoes and wash before reuse. Consult a doctor.
- iii. **In case of eye contact:** Rinse immediately with copious amounts of water for at least 15 minutes. Consult a doctor.
- iv. **If swallowed:** Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Consult a doctor.

4.2 Most important symptoms and effects, both acute and delayed: To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

4.3 Indication of immediate medical attention and special treatment needed: Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

5.2 Special hazards arising from the substance or mixture: Sodium oxides.



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5.3 Precautions for fire-fighters: Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus.

5.4 Further information: no data available

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures: Do not take action without suitable protective clothing - see section 8 of SDS. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing vapors, mist, dust or gas.

6.2 Environmental precautions: Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up: Cover spillage with suitable absorbent material. Using non-spark tools, sweep up material and place in an appropriate container. Decontaminate spill site with 10% caustic solution and ventilate area until after disposal is complete. Hold all material for appropriate disposal as described under section 13 of SDS.

6.4 Reference to other sections: For required PPE see section 8. For disposal see section 13.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for safe handling:

Use in a chemical fume hood, with air supplied by an independent system. Avoid inhalation, contact with eyes, skin and clothing. Avoid the formation of dust and aerosols. Use in a well-ventilated area. Keep away from sources of ignition. Avoid prolonged or repeated exposure.

7.2 Conditions for safe storage, including any incompatibilities: Store in cool, well-ventilated area. Keep away from direct sunlight. Keep container tightly sealed until ready for use.

7.3 Specific end use(s): Use in a laboratory fume hood where possible.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Component	HCl	HCl	HCl	HCl	HCl
CAS-No	7647-01-0	7647-01-0	7647-01-0	7647-01-0	7647-01-0
Value	TWA Celling: 5ppm	Limit Values (TLV) Celling: 2 ppm	USA. ACGIH Threshold Celling: 2 ppm	USA. NIOSH Recommended Celling: 5ppm IDLH: 50 ppm	OSHA- Table Z-1 Limits for Air Contaminants

- ❖ **ACGIH:** American Conference of Governmental Industrial Hygienists.
- ❖ **OSHA:** Occupational Safety and Health Administration.
- ❖ **NIOSH IDLH:** The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health.

8.2 Exposure Controls



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- i. **Appropriate engineering controls:** Use in a fume hood where applicable. Ensure all engineering measures described under section 7 of SDS are in place. Ensure laboratory is equipped with a safety shower and eye wash station.

8.3 Personal protective equipment

- i. **Eye/face protection:** Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
- ii. **Skin protection:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166
- iii. **Body Protection:** Wear appropriate protective clothing. Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- iv. **Respiratory Protection:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
- v. **Control of environmental exposure:** Do not let product enter drains

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	Vapor Pressure	No Data Available
Appearance	Clear	Vapor Density	No Data Available
Odor Threshold	No Data Available	Relative Density	No Data Available
pH	0.1 (1N)	Water Solubility	Soluble
Melting / Freezing Point	No Data Available	Partition Coefficient	No Data Available
Initial Boiling Point Range	No Data Available	Auto-Ignition Temperature	No Data Available
Flash Point	No Data Available	Decomposition Temperature	No Data Available
Evaporation Rate	No Data Available	Viscosity	No Data Available

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable under recommended transport or storage conditions.

Conditions to Avoid: Excess heat

Incompatible Materials: Strong oxidizing agents, Metals

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity

LD50 Oral	LD50 Dermal	LD50 Inhalation
LD50 238-277 mg/kg (Rat)	LD50 >238-277 mg/kg (Rabbit)	LD50 =1.68 mg/L (Rat) 1hr

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity

Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
LC50= 282 mg/L (96 hr)	No information available



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Gambusia affinis (Mosquito fish) - and 282 mg/l - 48 hr Leuciscus idus	Immobilization EC50 - Daphnia (water flea) - 56 mg/L EC 50 72 hr
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Persistence and degradability/ Bioaccumulative potential: No data available

Mobility in soil: No data available

Results of PBT and vPvB assessment: No data available

Other adverse effects: No data available

Chronic Toxicity: There are no known carcinogenic chemicals in this product

SECTION 13 - DISPOSAL CONSIDERATIONS

Chemical Waste generators must determine whether a discard chemical is classified as a hazardous waste. Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14 - TRANSPORT INFORMATION

	UN#	Proper Shipping Name	Hazard Class	Packaging Group
DOT	1789	Hydrochloric Acid	8	III
TDG	1789	Hydrochloric Acid	8	III
IATA	1789	Hydrochloric Acid	8	III
IMDG/IMO	1789	Hydrochloric Acid	8	III

SECTION 15 - REGULATORY INFORMATION

INTERNATIONAL INVENTORIES

TSCA	DSL	NDSL	ELINCS	NLP	PICCS	ENCS	AICS	CHINA	KECL
Listed	Listed	-	231-791-2	-	Listed	Listed	Listed	Listed	Listed

USA FEDERAL REGULATION

TSCA 12(b): Not Applicable

SARA 313: Not Applicable

SARA 311/312 HAZARDOUS CATEGORIZATION: Not Applicable

OSHA: Not Applicable

California Proposition 65: This product does not contain any Proposition 65 chemicals.

Clean Water Act/ Clean Air Act

CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Listed		-	-

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).



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Component	Hazardous Substances RQs	CERCLA EHS RQs
Hydrochloric Acid		-

HMIS Rating

Health hazard	Chronic Health Hazard	Flammability	Physical Hazard
2		0	0

NFPA Rating

Health Hazard	Fire Hazard	Reactivity Hazard
2	0	0

STATE RIGHT TO KNOW

Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Listed	Listed	Listed	-	Listed

US DEPARTMENT OF TRANSPORTATION

REPORTABLE QUANTITY (RQ)	DOT MARINE POLLUTANT	DOT SEVER MARINE POLLUTANT
Yes	No	No

U.S. DEPARTMENT OF HOMELAND SECURITY: This product does not contain any DHS chemicals.

Canada: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

This SDS complies with the requirements of Regulation (EC).

SECTION 16 - OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Boston BioProducts, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. This product is sold for laboratory research and development purposes use only.

Revised: 2018