SAFETY DATA SHEET BETAINE HYDROCHLORIDE

SECTION 1: CHEMICAL AND COMPANY IDENTIFICATION

BioShop Canada Inc. 5480 Mainway Burlington, Ontario L7L 6A4 1-800-234-1179 Emergency Telephone No.: 1-905-466-3832 Chemical Name: Betaine Hydrochloride Catalog Number: BET186

SECTION 2 HAZARDS IDENTIFICATION

WHMIS: not controlled

GHS Classification: Not hazardous according to GHS.

Potential Health Effects The toxicological properties of this substance have not been fully investigated.

Target Organs: None known Eyes: May cause eye irritation. Skin: May cause skin irritation. Inhalation: may cause irritation. The toxicological properties of this substance have not been fully investigated. Ingestion: May be harmful if swallowed. May cause irritation of the digestive tract. CHRONIC HEALTH HAZARDS: Not available

SECTION 3	COMPOSITION/ INGREDIENTS			
	CAS #	%		
Betaine Hydrochloride	590-46-5	98+		

Molecular Formula: C5H11NO2HCl Molecular Weight: 153.6

SECTION 4 FIRST AID MEASURES

Eyes: Flush eyes with plenty of water for at least 15 minutes. GET MEDICAL AID.

Skin: Flush area immediately with plenty of soap and water while removing contaminated clothing and shoes..

Inhalation: Remove victim to fresh air. If not breathing give

artificial respiration. If breathing is difficult give oxygen . GET MEDICAL ATTENTION.

Ingestion: Wash mouth with water. Do not induce vomiting .Get medical aid.

SECTION 5 FIRE FIGHTING MEASURES

General Information: Always wear full protective gear in the event of a fire. Toxic gase and vapors may be generated by decomposition or combustion. Excessive dust in combination with air can create an explosive mixture. Flammable: No Flash Point: N/A Autoignition Temperature: N/A Extinguishing Media: Use water spray, foam, dry chemical or carbon dioxide. Explosion Data: Not available

SECTION 6 ACCIDENTAL RELEASE MEASURES

Ventilate the area. Wear appropriate protective equipment. Sweep and place in a closed container. In the event of a fire always wear self-contained breathing apparatus, NIOSH/MSHA approved or equivalent.

Leak and Spill Procedures: Ventilate the area. Wear appropriate protective equipment. Cover with dry lime or soda. Sweep and place in a closed container. Avoid generating dust.

Handling: Avoid contact. Do not get in eyes, on skin, or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Minimize dust generation.

Storage Conditions: Room temperature.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: none listed by OSHA Use adequate ventilation. AVOID DUST GENERATION. Wear appropriate protective equipment to prevent eye and skin exposure. Wear appropriate respirator to prevent lung irritation. **Personal Protection**: Lab coat, safety goggles, rubber gloves. **Ventilation**: Local exhaust systems. Use fume hood **Respiratory protection**: use OSHA/MSHA approved respirator.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid Appearance and Odor: white powder Freezing/: N/A Melting Point: N/A Boiling Point: N/A Specific Gravity: N/A Vapor Density: N/A Solubility: soluble, pH: N/A

SECTION 10 STABILITY AND REACTIVITY:

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Stability:Stable under normal temperatures and pressureConditions to avoid:dust generation.Excess heatIncompatibility:Strong oxidizing agentsHazardous Decomposition Products:carbon monoxide,carbon dioxide, nitrogen oxides.Hazardous Polymerization:Will not occur

SECTION 11 TOXICOLOGICAL PROPERTIES

Exposure Limits: LD50 / LC50:

Not available

Epidemiology: No data available Teratogenicity; No data available Reproductive Effects: No data available Neurotoxicity: No data available Mutagenicity: No data available Carcinogenicity: Not listed by ACGIH, IARC, NTP, or OSHA

SECTION 12 ECOLOGICAL INFORMATION

No information found.

SECTION 13 DISPOSAL CONSIDERATION

Waste Disposal: Burn in chemical incinerator. Observe all Federal, provincial and local regulations.

SECTION 14 TRANSPORT INFORMATION

Shipping Information: US: Not regulated Canada: Not regulated European Union: Not regulated

SECTION 15 REGULATORY INFORMATION

US: TSCA: listed European/International: Do not breathe dust.. Avoid contact with skin and dust. Canada: WHMIS: not controlled

SECTION 16 ADDITIONAL INFORMATION

Hazard Rating System (estimated)

NFPA	Health	Fire	Reactivity
	1	0	0

Prepared By: M.Kierdelewicz (President) Date Prepared: Aug 22/2019 Phone: (800) 234-1179

The information provided on this Material Safety Data Sheet is furnished in good faith and without warranty of any kind. The above information is believed to be correct and should be used only as a guide. BioShop Canada Inc. shall not be held liable for any damage resulting from the handling or from the contact with the above product.

Observe all federal, provincial and state laws concerning health, safety and pollution.