SAFETY DATA SHEET

HEPES

[4-(2-Hydroxyethyl)piperazine-1-ethanesulfonic acid]

SECTION 1: CHEMICAL AND COMPANY IDENTIFICATION

BioShop Canada Inc. 5480 Mainway Burlington, Ontario L7L 6A4 1-800-234-1179 Emergency Telephone No.: 905-466-3832 Chemical Name: HEPES Synonym: [4-(2-Hydroxyethyl)piperazine-1-ethanesulfonic acid] Catalog Number: HEP001/HEP005

SECTION 2 HAZARDS IDENTIFICATION

GHS Classification:

Not hazardous according to GHS

Potential Health Effects:

Eyes: may cause eye irritation Skin: may cause skin irritation Inhalation: may be harmful if inhaled Ingestion: may be harmful if ingested

SECTION 3	COMPOSITION/ INGREDIENTS		
	CAS #	EC-No.	%
HEPES	7365-45-6	230-907-9	99

Molecular Formula: C8H18N2O4S Molecular Weight: 238.20

SECTION 4 FIRST AID MEASURES

Eyes: Flush eyes with water . Consult a physician.

Skin: In case of contact, flush area immediately with water. Get medical aid if irritation persists.

Inhalation: Remove victim to fresh air. Get medical aid if irritation persists. Ingestion: Wash mouth with water. Get medical aid if any symptoms appear.

SECTION 5 FIRE FIGHTING MEASURES

Flammability: not flammable Flash Point: not determined Autoignition Temperature: not determined Extinguishing Media: Use water spray, foam, dry chemical or carbon dioxide. Explosion Data: Not available

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions:

Ventilate the area. Wear appropriate protective equipment. Avoid contact with skin, eyes and clothing.

Methods for containment and clean up:

Contain further leakage. Sweep and place in a closed container.. Dispose according to local regulations

SECTION 7 HANDLING AND STORAGE

Handling: Do not get in eyes, on skin, or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Storage Conditions: Room temperature. Keep cool and dry.

SECTION 8	EXPOSURE CONTROLS/PERSONAL
	PROTECTION

Exposure limits:

ACGIH, NIOSH, OSHA, none listed Use adequate ventilation. Avoid dust generation.. **Personal protective Equipment:** Wear appropriate safety glasses and protective gloves/clothing **Engineering Measures:** eye wash stations, ventilation systems, showers Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice. wash hands before and after handling product.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: white crystalline solid Odor: no information found Odor Threshold: : no information found Melting Point: 234C Boiling Point: no information found Specific Gravity: no information found Vapor Density: no information found Vapor pressure: no information found Water Solubility: 238g/L pH: 5.0-6.5 Flammability: not flammable Flash point: no information found Ignition temperature: no information found Autoignition temperature: no information found Lower explosion limit: no information found Upper explosion limit: no information found

SECTION 10 STABILITY AND REACTIVITY:

Stability: Stable at normal room temperature and pressure
Conditions to avoid: dust generation
Incompatibility strong oxidizing agents.
Hazardous Decomposition Products: carbon dioxide, carbon monoxide and nitrogen oxides, sulfur oxides
Hazardous Polymerization: Has not been reported

SECTION 11 TOXICOLOGICAL PROPERTIES

Exposure Limits: Oral, rat LD50=no data available

Epidemiology: No data available Teratogenicity; No data available Reproductive Effects: No data available Neurotoxicity: No data available

SAFETY DATA SHEET

HEPES

[4-(2-Hydroxyethyl)piperazine-1-ethanesulfonic acid]

Mutagenicity: No data available Carcinogencity: not listed by ACGIH, IARC, NTP, or CA

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:

DOT (US): not regulated **IMDG:** not regulated **IATA:** not regulated

SECTION 15 REGULATORY INFORMATION

US Federal regulations:

No listed on TSCA

Canada: WHMIS: not WHMIS controlled

SECTION 16 ADDITIONAL INFORMATION

Prepared By: M.Kierdelewicz Date Prepared: Oct 6/2022 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.