SAFETY DATA SHEET

1 – PRODUCT AND COMPANY IDENTIFICATION

Product Name: **TOLAZOLINE HYDROCHLORIDE**

Product Code: T-4880Z

Product use: For laboratory or industrial use only

Supplier: Cochimbec Inc.
8561 chemin Dalton
Town of Mount-Royal, Quebec
H4T 1V5 CANADA

Telephone: 514-990-1935
Emergency Telephone: (CANUTEC): 613-996-6666

2 – HAZARDS IDENTIFICATION

GHS Classification: Acute oral toxicity (Category 4)
Skin irritation (Category 2)
Eye irritation (Category 2A)
Specific target organ toxicity – single exposure (Category 3) Respiratory system

Signal word:		**Warning**
Hazard statement:	H302	Harmful if swallowed.
	H315	Causes skin irritation.
	H319	Causes serious eye irritation.
	H335	May cause respiratory irritation.
Precautionary statement:	P261	Avoid breathing dust / fume / gas / mist / vapours / spray.
	P264	Wash skin thoroughly after handling.
	P270	Do not eat, drink or smoke when using this product.
	P271	Use only outdoors or in a well-ventilated area.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P301 + P312 + P330	IF SWALLOWED: Call a POISON CENTER / Doctor if you feel unwell. Rinse mouth.

	P302 + P352	IF ON SKIN: Wash with plenty of water.
	P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER / Doctor if you feel unwell.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P332 + P313	If skin irritation occurs: Get medical advise/attention.
	P337 + P313	If eye irritation persists: Get medical advise/attention.
	P362 + P364	Take off contaminated clothing, and wash it before reuse.
	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
	P405	Store locked up.
	P501	Dispose of contents / container to an approved waste disposal plant.

3 – COMPOSION / INFORMATION ON INGREDIENTS

Synonyms: **2-Benzyl-2-Imidazoline Hydrochloride**

INGREDIENT	Concentration	CAS No.	EC No.	Index No.
Tolazoline Hydrochloride	90 -100 %	59-97-2	200-447-3	- - -

4 – FIRST AID MEASURES

Inhalation:	Remove victim to fresh air. If victim is not breathing, give artificial respiration and call for medical assistance.
Skin contact:	Wash with plenty of soap and water. Consult a physician if irritation persists.
Eye contact:	Rinse immediately and cautiously with plenty of water for at least 15 minutes. Get medical advice/attention.
Ingestion:	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Most important symptoms / effects	The most important symptoms/effects are presented in Section 2 and/or 11.

5 – FIRE-FIGHTING MEASURES

Extinguishing media:	Water spray, alcohol resistant foam, dry chemical, carbon dioxide.
Combustion Exposure Hazards:	Hazardous decomposition products formed under fire conditions: Carbon Oxides. Nitrogen Oxides.

Fire-Fighting equipment and precaution:	Wear a positive-pressure self-contained breathing apparatus if necessary,
Sensitivity to mechanical impact:	Not sensitive.
Sensitivity to static discharge:	N/D

NFPA **Risk** **0=Low** **4=High**	HEALTH	FLAMMABILITY	REACTIVITY	HAZARDS
	1	0	0	

6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Use personal protective equipment. Avoid dust formation. Avoid inhaling dust. Use in a properly ventilated area. Avoid contact with skin and eyes.
Environmental Precautions:	Avoid product entering into drains.
Method & Material for containment and cleaning up:	Product may be wet-brushed and placed in a container for disposal according to local, state and federal regulations. Avoid dust formation.

7 – HANDLING AND STORAGE

Precautions for safe handling:	Do not get on skin, eyes and clothing. Avoid dust formation. Use in a well ventilated area.
Conditions for Safe Storage:	Keep container tightly closed in a dry and well-ventilated area.

8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

No control parameters have been found for this product.

COMPONENT	CAS-No	VALUE	CONTROL PARAMETERS	BASIS
Tolazoline Hydrochloride	67-63-1	TWA	None listed	

Eye Protection:	Safety glasses or chemical safety goggles and/or a full face shield if splashing is possible.
Hand Protection:	Use chemical resistant gloves.
Body Protection:	None normally required.
Respiratory Protection:	Where risk assessment shows air-purifying respirators are appropriate, follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. None required in properly vented areas. If ventilation is not available, wear a respirator.
Engineering Controls:	Ensure adequate ventilation.

9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Solid	**Auto ignition temperature:**	N/D
Color:	White	**Upper Explosion Limit:**	N/D
Odour:	N/D	**Lower Explosion Limit:**	N/D
Odour threshold::	N/D	**Vapour pressure:**	N/D
pH:	N/D	**Vapour density: (air = 1)**	N/D
Melting point:	173 - 176°C	**Relative density**	N/D
Boiling point:	N/D	**Water solubility:**	Freely soluble
Boiling range:	N/D	**Decomposition temperature:**	N/D
Density	N/D	**Refractive Index:**	N/D
Flash point:	N/A	**Viscosity:**	N/A
Evaporation rate: (n-Butyl Acetate = 1)	N/A	**Partition coeficient: n-octanol / water**	Log Pow 1.268

10 – STABILITY AND REACTIVITY

Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	Incompatible products, excess heat and strong oxidants.
Incompatible materials:	Oxidizing agents.
Hazardous decomposition products:	Hazardous decomposition products formed under fire conditions: Carbon Oxides. Nitrogen oxides and Hydrogen Chloride gas.

11 – TOXICOLOGICAL INFORMATION

COMPONENTS	LD_{50} ORAL	LD_{50} DERMAL	LC_{50} INHALATION
Tolazoline Hydrochloride	1200 mg/kg (rat) 400 mg/kg (mouse)	No Data	No Data
Skin Corrosion / irritation	No data available.		
Serious eye damage / eye irritation	No data available.		
Respiratory or skin sensitisation	No data available.		
Germ cell Mutagenicity	No data available.		
Carcinogenicity	This product **does not** contain any compounds listed by IARC or ACGIH classified as a carcinogen.		
Reproductive toxicity	No data available.		
Teratogenicity	No data available.		
Aspiration hazard	No data available		
Symptoms of Exposure	May cause respiratory irritation.		
Synergistic effects	No data available		
Addition information	To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.		

12 – ECOLOGICAL INFORMATION

COMPONENTS	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates	Toxicity to Algea
Tolazoline Hydrochloride	LC_{50} – Pimephales promelas (Fathead minnow) – 354 mg/l – 96 h.	No data available	No data available
Persistence and degradability	No data available.		
Bioaccumulative potential	No data available.		
Mobility in soil	No data available.		
PBT and vPvB assessment	No data available		
Other adverse effects	No data available.		

13 – DISPOSAL CONSIDERATIONS

Product	Contact a licensed professional waste disposal service to dispose of this material. Do not dispose in drain.
Contaminated clothing	Wash before reusing clothes.
Contaminated packaging	Dispose as unused product above.

14 – TRANSPORT INFORMATION

	TDG	IMDG	IATA
Shipping Name:	Not regulated for TDG	Not regulated for IMDG	Not regulated for IATA

15 – REGULATORY INFORMATION

US Regulations	SDS complies with OSHA's Hazard Communication Rule 29, CFR 1910.1200
Canada Classification	SDS in compliance with provisions of information as set out in Canadian Standard – Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)9a) of the Hazardous Product Act (HPA)). Classification D2B.
International	- -

16 – OTHER INFORMATION

Information on the preparation of SDS:	Prepared by Cochimbec Inc. Safety Personnel July 2, 2019 Revision 0 I.C. 1,2,14
Abbreviations:	ACGIH = American Conference of Governmental Industrial Hygienists ASTM = American Society for Testing and Materials BCF = Bioconcentration Factor CAS = Chemical Abstract Services CCOHS = Canadian Center for Occupational Health & Safety CEN (EU) = Committée Européen de Normalisation CERCLA = Comprehensive Environmental Response Compensation & Liability Act CFR = Code of Federal Regulations CMR = Carcinogenic-mutagenic-toxic for reproduction CPR = Controlled Products Regulations DIN = German Institute for Standardisation DOT = Department of Transport EC_{50} = Half maximal effect concentration EINECS = European Inventory of Existing Commercial Chemical Substances GHS = Global Harmonization System

	GLP = Good Laboratory practice GMO = Genetic Modified Organism IARC = International Agency for research on Cancer IATA = International Air Transport Association ISO = International Organisation for Standardisation IDLH = Immediate danger to life and health IMDG = International Maritime Dangerous Goods LC_{50} = Lethal concentration causing 50% death LD_{50} = Lethal dose causing 50% death LOAEL = Lowest Observed Adverse Effect Level LOEL = Lowest Observed Effect Level N/A = Not Applicable N/D = No Data N/E = Not Established NFPA = National Fire Protection Association NIOSH = National Institute for Occupational Safety & Health NTP = National Toxicology Program OECD = Organisation for Economic Co-operation & Development OEL = Occupational exposure limit OHSC = Occupational health & safety council (committee) OSHA = Occupational Safety & Health Administration PBT = Persistent, Bioaccumulation, Toxic PEL = Permissible Exposure Limit RCRA = Resource Conservation & Recovery Act RTECS = Registry of Toxic Effects of Chemical Substances SARA = Species at Risk Act STEL = Short term exposure limit STEV = Short term exposure value STOT = Specific Target Organ Toxicity TDG = Transport of Dangerous Goods TLV = Threshold limit value TMD = Transport de Matières Dangereuses TSCA = Toxic Substance Control Act TWA = Time weighted Average TWAEV = Time weighted average exposure value UN = United Nations vPvB = very Persistent and very Bioaccumulative VOC = Volatile Organic Compounds WEEL = Workplace Environment Exposure Limit WHO = World Health Organisation WHMIS = Workplace Hazardous Material Information System W/V = Weight / Volume W/W = Weight / Weight

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End of Safety Data Sheet