

1. Identification Product identifier

**Recommended use** 

Distributor

Other means of identification

Synonyms

**Recommended restrictions** 

# **SAFETY DATA SHEET**

#### **Tromethamine Injection**

Tromethamine (USP); TRIS (Base); Trisamine; TRIS Systemic alkalizer and fluid replenisher None known. Manufacturer/Importer/Supplier/Distributor information Milla Pharmaceuticals Inc.,

> an A.forall Company White Bear Lake, MN 55110 Phone: 1-833-251-8643 E-mail: bd@millapharma.com

### 2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Not classified.	
OSHA defined hazards	Not classified.	
Label elements		
Hazard symbol	None	
Signal word	Not classified.	
Hazard statements	Not classified.	
Hazard(s) not otherwise classified (HNOC) None known.		
Supplemental information	None.	

# 3 Composition/information on ingredients

Chemical name	CAS number	%
Acetic acid	64-19-7	**
Tromethamine	77-86-1	1-5
Sodium chloride	7647-14-5	*
*Proprietary		
**To adjust pH		
4. First-aid measures		
Inhalation	Move to fresh air. Get immediate medical attention.	
Skin contact	Remove contaminated clothing. Wash off with soap and large amount of water. Get medical attention.	
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes. Get medical attention.	
Ingestion	Do not give anything orally to an unconscious person. Rinse mouth. Get medical attention immediately.	
Most important symptoms/effects,	Low blood sugar and respiratory de	pression
acute and delayed Indication of immediate medical attent	ion None	
and special treatment needed		

#### 5. Fire-fighting measures

Suitable extinguishing media Unsuitable extinguishing media Specific hazards arising from the chemical Special protective equipment and precautions for firefighters Firefighting equipment/instructions Alcohol-resistant foam, water, dry chemical powder, Carbon dioxide (CO<sub>2</sub>). None known.

During fire toxic gases may form and fine particles may result in explosions. Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Personal protective equipment should be used. Move containers from fire area if you can do so without risk.

# 6. Accidental release measures

<b>b.</b> Accidental release measure	5
Personal precautions, protective	Use appropriate personal protective equipment. For personal protection, see
equipment and emergency procedures	section 8 of the SDS.
Methods and materials for containment	Prevent further spillage and contain the source of spill if it is safe to do
and cleaning up	SO.
	Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
Environmental precautions	Avoid discharge into the environment.
7. Handling and storage	
Precautions for safe handling	Observe good industrial hygiene and safety practices.
Advice on safe handling	Restrict access to work area. Avoid breathing vapor or mist. Avoid
	contact with eyes, skin and clothing. When handling, use
	appropriate personal protective equipment (see Section 8). Wash
	thoroughly after handling. Releases to the environment should be
	avoided. Review and implement appropriate technical and procedural
	waste water and waste disposal measures to prevent occupational
	exposure or environmental releases. Potential points of process
	emissions of this material to the atmosphere should be controlled with
Conditions for onfo storage, including	dust collectors, HEPA filtration systems or other equivalent controls.
Conditions for safe storage, including any incompatibilities	Store as directed per the product labeling.
8. Exposure controls/personal	protection
Appropriate engineering controls	Good general ventilation should be used. Ventilation rates should be
	matched to conditions. If applicable, use process enclosures, local
	exhaust ventilation, or other engineering controls to maintain airborne
	levels below recommended exposure limits. If exposure limits have
Individual protection measures, such as	not been established, maintain airborne levels to an acceptable level.
Individual protection measures, such as Eye/face protection	Wear safety glasses or goggles in case of possible eye contact.
Skin protection	Wear appropriate chemical resistant gloves. Nitrile rubber or natural
Hand protection	rubber gloves are recommended.
Skin protection	
Other	Wear suitable protective clothing.

# OtherWear suitable protective clothing.Respiratory protectionThe need for respiratory protection depends on the airborne<br/>concentrations and environmental conditions.

# 9. Physical and chemical properties

Physical state	Solution.	
Color	No information available.	
Odor	Not applicable.	
Odor threshold	No data available.	
Molecular Formula	Mixture	
Molecular Weight	Mixture	
Solvent Solubility	No data available	
Water Solubility	No data available	
pH	No data available	
Melting/Freezing Point (°C)	No data available	
Boiling Point (°C)	No data available	
Partition Coefficient(n-octanol/water)	No data available	
Decomposition Temperature (°C)	No data available	
Evaporation Rate (Gram/s)	No data available	
Vapor Pressure (kPa)	No data available	
Vapor Density (g/mL)	No data available	
Relative Density	No data available	
Viscosity	No data available	
Flammability (solid, gas)	Not applicable	
Flash point	No data available	
Upper/lower flammability or explosive limits		
Explosive limit - lower (%)	No data available	
Explosive limit - upper (%)	No data available	
Auto-ignition temperature	No data available	

Explosive properties	No information available	
10. Stability and Reactivity	<b>.</b>	
Reactivity	No data available Stable under normal conditions of use	
Chemical Stability Possibility of Hazardous Reactions	No information available	
11. Toxicological Information		
Acute toxicity	classification criteria are not met	
Reproductive toxicity	classification criteria are not met	
Carcinogenicity	classification criteria are not met	
12. Ecological Information		
Environmental Overview	Releases to the environment should be avoided.	
Ecotoxicity	<u>Tromethamine</u>	
	Toxicity to daphnia and other aquatic invertebrates:	
	$EC_{50}$ - Daphnia - > 980 mg/L - 48 h	
	Toxicity to algae: EC₅₀ - Algae - 397 mg/L - 72 h NOEC - Algae - 100 mg/L - 72 h	
	LC₅₀ – Fathead Minnow - 88 mg/L - 96 h	
	LC <sub>50</sub> – Bluegill Sunfish - 75 mg/L - 96 h	
	LC <sub>50</sub> – Goldfish - 423 mg/L - 24 h	
Persistence and Degradability	No data available	
Bio-accumulative Potential	No data available	
Mobility in Soil	No data available	
13. Disposal Considerations		
Dispose of in a manner consistent with fed	leral, state, and local regulations	
14. Transport Information		
Not regulated for transport under USDOT,	EUADR, IATA, or IMDG regulations	
15. Regulatory Information		
Tromethamine		
CERCLA/SARA 313 Emission r		
California Proposition 65 Inventory - United States TSCA	Not Listed A - Sect. 8(b) Present	
Water		
CERCLA/SARA 313 Emission r	eporting Not Listed	
California Proposition 65	Not Listed	
Inventory - United States TSCA	A - Sect. 8(b) Present	
Acetic Acid		
CERCLA/SARA 313 Emission r		
California Proposition 65	Not listed	
Inventory - United States TSCA Hazardous Substances Require		
16. Additional Information		
	2224	
SDS Creation Date: July 18,	2024	

SDS Creation Date:	July 18, 2024
SDS Revision Date:	December 20, 2024
SDS Revision Notes:	SDS creation/revision dates

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