

Material Safety Data Sheet Version No.: 3.0 (Rev. date: 2022-09-27)

1M Tris-HCl

•	Product and company identification								
	Α.	Product Name: 1M Tris-HCI							
	Β.	Recommended Use: Researc	search Use Only						
	C.	C. Supply Information Company: Bioneer 							
		○ Address: 8-11, Munpyeor	ngseo-ro, Daedeok-gu, Daej	aedeok-gu, Daejeon 306-220, Republic of Korea					
		○ Emergency telephone number: +82-42-930-8777							
2.	На	Hazards identification							
	Α.								
	No data available								
	Β.	Label elements							
		○ Hazard pictograms							
		Not applicable							
		○ Signal word							
		Not applicable							
		○ Hazard statements							
		Not applicable							
		 Precautionary statement 	3						
	Not applicable								
	C.	C. Hazards - Other hazards which do not result in classification - Hazard Risk							
		Not applicable							
3.	Composition/information on ingredients								
		Chemical name	Synonyms	CAS No.	Weight (%)				
		Trizma base		77-86-1	< 20%				
4.	First aid measures								
	A. First-aid measures after eye contact								
	Rinse eyes with water as a precaution.								

- B. First-aid measures after skin contact
 Wash skin with plenty of water.
- C. First-aid measures after inhalationRemove person to fresh air and keep comfortable for breathing.
- D. First-aid measures after ingestionCall a poison center or a doctor if you feel unwell.
- E. Other medical advice or treatment Treat symptomatically.

5. Fire-fighting measures

- A. Suitable (and unsuitable) extinguishing media
 - Suitable extinguishing media: Water spray, dry powder, foam, carbon dioxide.

Unsuitable extinguishing media: No data available

B. Special hazards arising from the substance or mixture

No data available

C. Special protective equipment and precautions for fire-fighters

Protection during firefighting:

Do not attempt to take action without suitable protective equipment.

Self-contained breathing apparatus.

Complete protective clothing.

6. Accidental release measures

A. Personal precautions, protective equipment and emergency procedures

Ventilate spillage area.

Do not attempt to take action without suitable protective equipment.

Dispose of materials or solid residues at an authorized site.

- B. Environmental precautions and protective procedures
 Avoid release to the environment.
- C. Methods and material for containment and cleaning up Take up liquid spill into absorbent material.

7. Handling and storage

A. Precautions for safe handling

O Precautions for safe handling

Ensure good ventilation of the work station.

Wear personal protective equipment.

○ Hygiene measures

Do not eat, drink or smoke when using this product.

Always wash hands after handling the product.

- B. Conditions for safe storage
 - Storage conditions
 - Store in a well-ventilated place.

Keep cool.

8. Exposure controls / personal protection

- A. Occupational Exposure Limits
 - No data available
- B. Appropriate engineering controls
 - Appropriate engineering controls: Ensure good ventilation of the work station.
 - Environmental exposure controls: Avoid release to the environment.
- C. Personal protection

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment

Eye protection: Safety glasses

Hand protection: Protective gloves

Skin and body protection: Wear suitable protective clothing

9. Physical and chemical properties

- A. Appearance: Liquid
- B. Odor: No data available
- C. Odor threshold: No data available
- D. pH: No data available
- E. Melting / freezing point: Not applicable / No data available
- F. Initial boiling point and boiling range: No data available
- G. Flash point: No data available
- H. Evaporation rate: No data available
- I. Flammability (solid, gas): Not applicable
- J. Upper / lower flammability or explosive limits: No data available
- K. Vapor pressure: No data available
- L. Solubility: No data available
- M. Vapor density: No data available
- N. Relative density: No data available
- O. Partition coefficient n-octanol/water: No data available
- P. Auto-ignition temperature: No data available
- Q. Decomposition temperature: No data available
- R. Viscosity: No data available
- S. Molecular mass: No data available

10. Stability and Reactivity

A. Chemical stability and Possibility of hazardous reactions

The product is non-reactive under normal conditions of use, storage and transport.

Stable under normal conditions.

No dangerous reactions known under normal conditions of use.

B. Conditions to avoid

None under recommended storage and handling conditions.

C. Incompatible materials

No data available

D. Hazardous decomposition products
 Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

A. Information on exposure routes

Oral: Not classified

Skin and eyes contact: Not classified

Inhalation: Not classified

B. Health hazards

Acute toxicity (oral): Not classified

Acute toxicity (dermal): Not classified

Acute toxicity (inhalation): Not classified

Skin corrosion/irritation: Not classified

Serious eye damage/irritation: Not classified

Respiratory sensitization: Not classified

Skin sensitization: Not classified

Carcinogenicity: Not classified

Mutagenicity: Not classified

Reproductive toxicity: Not classified

STOT-single exposure: Not classified

STOT-repeated exposure: Not classified

Aspiration hazard: Not classified



12. Ecological information

A. Exotoxicity

Ecology – general: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute): Not classified

Hazardous to the aquatic environment, long-term (chronic): Not classified

B. Persistence and degradability

No data available

C. Bioaccumulative potential

No data available

D. Mobility in soil

No data available

- E. Other adverse effects
 - Ozone: Not classified

Other adverse effects: No additional information available

13. Disposal considerations

A. Disposal method

Dispose of contents/container in accordance with licensed collector's sorting instructions.

B. Disposal precaution

No data available

14. Transport information

UN RTDG	ADR	IMDG	ΙΑΤΑ				
A. UN number							
Not regulated for tra	Not regulated for transport						
B. UN proper shipping	B. UN proper shipping name						
Not applicable	Not applicable	Not applicable	Not applicable				
C. Transport hazard cl	ass(es)						
Not applicable	Not applicable	Not applicable	Not applicable				
D. Packaging group	D. Packaging group						
Not applicable	Not applicable	Not applicable	Not applicable				
E. Marine pollutant							
Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the				
environment: No	environment: No	environment: No	environment: No				
		Marine pollutant: No					

No supplementary information available

F. Special precautions for user: No data available

15. Regulatory information

Α.	Occupational Safety and Health Act				
	Hazardous Substances Prohibited for Manufacturing: Not applicable				
	Hazardous Substances Requiring Permission: Not applicable				
	Threshold Limit Values Chemicals: Not applicable				
	Hazardous Substances Below Permissible Level: Not applicable				
	Hazardous Substances Subject to Working Environment Measurement: Not applicable				
	Hazardous Substances Subject to Workers Requiring Health Examination: Not applicable				
	Hazardous Substances Subject to Control: Not applicable				
	Substance Subject to PSM Submission: Not applicable				
В.	Chemicals Control Act				
	Toxic Chemicals: Not applicable				
	Prohibited Chemicals: Not applicable				
	Restricted Chemicals: Not applicable				
	Substance requiring preparation for accidents: Not applicable				
C.	ACT ON REGISTRATION, EVALUATION, ETC. OF CHEMICALS (K-REACH)				
	Korea Existing Chemicals Inventory (KECI): Applicable				
	Priority Existing Chemical ('PEC') - subject to registration: Not applicable				
	Priority Control Substances (Korea): Not applicable				
	CMR Substances (Korea): Not applicable				
D.	Safety Control of Dangerous Substances Act				
	Safety Control of Dangerous Substances Act: Not applicable				
Ε.	Wastes Control Act				
	Hazardous Substances in Designated wastes: Not applicable				
	Types of wastes: No data available				
F.	Other Domestic and International Regulatory Information				
	Persistent Organic Pollutants(POPs) Control Act: Not applicable				
	Ozone Depleting Substances(ODS): Not applicable				
	O International (EU Regulatory Information)				
	EU Candidate list (SVHC): Contains no substance on the REACH candidate list				
	EU authorization list (REACH Annex XIV): Contains no REACH Annex XIV substances				
	EU restriction list (REACH Annex XVII): Not applicable				

○ US Regulatory Information

CERCLA Section 103 (40CFR302.4): Not applicable EPCRA Section 302 (40CFR355.30): Not applicable EPCRA Section 304 (40CFR355.40): Not applicable EPCRA Section 313 (40CFR372.65): Not applicable

International agreements
 No data available

16. Other information

Bioneer Corporation makes no warranty or representation to its completeness, accuracy or currency. This material is intended for use by persons with pertinent technical skills and at their discretion and risk. It is the responsibility of the user to determine the product's suitability for its intended use, the product's safe use, and the product's proper disposal. Disposal of hazardous material may be subject to federal, state or local laws or regulations.