

Material Safety Data Sheet Version No.: 0(Rev. date : 2021-07-12)

10x Reaction Buffer

1. Product and Company Information

- A. Product Name : 10x Reaction Buffer
- B. Recommended Use : For Research Use Only
- C. Supply Information :
 - Company : Bioneer
 - Address: 8-11 Munpyeongseo-ro, Daedeok-gu, Daejeon 34302, Republic of Korea
 - Emergency telephone number : +82-42-930-8777

2. Product and Company Information

A. Risk-Hazard Classification : Acute toxicity classification : Class 4

- B. Caution Items Including Preventative measures
 - \bigcirc Pictogram : No Information
 - \bigcirc Signal word : No Information
 - \bigcirc Hazard statement(s) : No Information
 - \bigcirc Precautionary statements
 - Prevention : No Information
 - Response : No Information
 - Storage : No Information
 - Disposal : No Information

C. Other Risks-Hazards Not Included in Risk-Hazard Classification (NFPA) : No information.

3. Composition/Information on ingredient

Chemical name	Synonyms	CAS No.	Weight(%)
Tris-HCI		1185-53-1	5 - 7
Sodium Chloride		7647-14-5	5 - 7

Magnesium Chloride	7786-30-3	0.5 - 3
Bovine Serum Albumin	9048-46-8	0.1 – 1

4. First Aid Measure

A. Upon Eye contact : Rinse thoroughly with plenty of water for at least 20 minutes.

- B. Upon Skin Contact : Rinse thoroughly with plenty of water for at least 20 minutes.
- C. Upon Inhalation: Seek medical attention if exposure or contact is suspected.
- D. Upon Ingestion : Seek medical attention if exposure or contact is suspected.
- E. The most important acute and delayed symptoms/effects : No information.
- F. Notes to Physician : No Information..

5. Fire-fighting Measures

A. Proper(Improper) Extinguishing Material : To extinguish fire related to this material, use alcohol foam, dioxide or water spraying.

- B. Specific Hazards from Chemicals : No Information.
- C. Firefighting Protection and Precautions : Rescuers must wear appropriate protection.

6. Accidental Release Measures

- A. Personal precautions : Immediately wipe spills and follow prevention measures.
- B. Environmental precautions : Prevent introduction into waterways, sewers, basements and sealed spaces.

C. Methods and materials for containment and cleaning up : Absorb liquids and clean contaminated area with detergent and water.

7. Handling and Storage

- A. Handling Precautions : Be aware of conditions and chemicals to avoid.
- B. Storage Precautions : Keep -20 $\,\,^\circ\!\!{\rm C}_{\,\cdot}$

8. Exposure Controls / Personal Protection

- A. Chemical Exposure Standards, Biological Exposure Standards Etc. : No information.
- B. Proper Physical Management : No Information.
- C. Personal Protection
- Respiratory Protection : wear respiratory mask approved by KOSHA(Korea Occupation Safety Health Agency)
- \odot Eye Protection : wear Chemical Safety protective goggle or glasses approved by KOSHA(Korea Occupation Safety

Health Agency)

- Hand Protection : wear Chemical Safety gloves approved by KOSHA(Korea Occupation Safety Health Agency)
- Body Protection : wear protective clothes approved by KOSHA(Korea Occupation Safety Health Agency)

9. Physical and Chemical Properties

- A. Appearance : Liquid, transparentness
- B. Odor : None.
- C. Odor threshold : No Information
- D. pH: No Information
- E. Melting point/Freezing point : No Information
- F. Initial boiling point/range : No Information
- G. Flash point : No Information
- H. Evaporation rate : No Information
- I. Flammability(Solid, Liquid) : No Information
- J. Flammability Limits upper/lower : No Information
- K. Vapor pressure : No Information
- L. Solubility : No Information
- M. Vapor density : No Information
- N. Viscosity : No Information
- O. n octanol/water partition coefficient : No Information
- P. Autoignition temperature : No Information
- Q. Decomposition temperature : No Information
- R. Specific gravity : No Information
- S. Molecular weight : No Information
- 10. Stability and Reactivity

- A. Stability : Stable under recommended storage conditions.
- B. Possibility of harmful response : No Information.
- C. Conditions to avoid (electric discharge, impact, vibration etc) : Ignition source of Heat, spark, flame
- D. Material to avoid : Combustible materials.
- E. Hazardous Decomposition Products : No Information.

11. Toxicological Information

- A. Probable Exposure Path
 - Respiratory : can be harmful if inhaled.
 - \bigcirc Ingestion : can be harmful if swallowed.
 - \bigcirc Eye/Skin : Harmful in contact with skin. Can be caused skin irritation.

B. Health Hazard Information

- \bigcirc Acute Toxicity : No Information.
- \bigcirc Skin corrosive or irritant : can be caused skin irritation.
- \bigcirc Serious eye damage or irritant : can be caused eye irritation.
- Respiratory Hypersensitivity : No Information.
- Skin Hypersensitivity : No Information.
- Carcinogenic Properties : No Information.
- \bigcirc Reproductive Cell Mutation Properties : No Information.
- Reproductive Toxicity : No Information
- Target Organ Toxicity (Single Exposure) : No Information
- \bigcirc Target Organ Toxicity (Repeat Exposure) : No Information
- \bigcirc Inhalation Toxicity : No Information
- C. Numerical measures of toxicity(Acute toxicity estimates etc) : No Information

12. Ecological Information

- A. Biological Toxicity : No Information
- B. Persistency and Degradability : No Information
- C. Bioconcentration : No Information
- D. Soil Mobility : No Information
- E. Other Toxic Effects : No Information

13. Disposal Considerations

- A. Waste disposal method : Dispose of material in accordance with formally disposal company.
- B. Disposal Considerations : Dispose contents and vessel in accordance with regulation by the waste disposal law.

14. Transport Information

- A. Not regulated in the meaning of transport regulations.
 - IMDG: Non-hazardous for sea freight.
 - ADR: Non-hazardous for road transport.
 - RID: Non-hazardous for rail transport.
 - ICAO/IATA: Non-hazardous for air transport.
- B. UN Number: Not applicable
- C. UN Proper Shipping Name: Not applicable
- D. Transport hazard class: Not applicable
- E. Packing group: Not applicable
- F. Marine pollutant: Not applicable
- G. The special vehicle Safety measures: Not applicable

15. Regulatory Information

This safety datasheet compiles with the requirements of Regulation (EC) No. 1272/2008

- A. Regulation by Industrial safety and health act: Not applicable
- B. Regulation by chemicals control act: Not applicable
- C. Regulation by Safety control of dangerous substance act: Not applicable
- D. Regulation by the waste control act: Not applicable
- E. Regulation by other domestic and foreign regulatory: Not information available

16. Other References

Created: 2016-02-02 (YYYY-MM-DD)

Last updated: 2020-06-24 (YYYY-MM-DD), version 1.0

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