

Version: 3.1 / EN

Page 1 of 15

Print date:

Revision date: 18.07.2018

SECTION 1: *Identification of the Substance/Mixture and of the Company/Undertaking*

1.1 Product identifier :

Substance name : TBE, 5X, Ultrapure, filtered, sterile, Molecular Biology Grade

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended restrictions on use : For professional users only.

1.3 Details of the supplier of the safety data sheet

Manufacturer / Supplier : ROJETechnologies

Street address / P.O. Box : ROJE street, 69th alley, Foroudgah blvd, Sanaat square, 8917357485,
Yazd, Iran

Country ID / Postcode / Place : Iran

Telephone number : +98 35 3723 7122

TeleFax : +98 35 3723 7122

E-Mail : safety@rojetechnologies.co

National contact: ROJETechnologies

1.4 Emergency Telephone Number

Opening Hours: 8-15:00 Sa to Wed and 8-13:00 Thurs

Language Of The Phone Service: English/ Persian

Only Available During Office Hours.

SECTION 2: *Hazards Identification*

2.1 Classification of the substance or mixture

2.1.1 classification according to regulation (EC) No 1272/2008 (CLP)

H315 - Causes skin irritation. H320 - Causes eye irritation.

H335 - May cause respiratory irritation.

Version: 3.1 / EN

Page 2 of 15

Print date:

Revision date: 18.07.2018

P260 - Do not breathe dust/fumes/gas/mist/vapors/spray. P264 - Wash skin thoroughly after handling.

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P308+P313 - IF exposed or concerned: Call a POISON CENTER or doctor/physician.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]



Hazard pictograms:	None
Signal word:	None
Hazard statements:	Not applicable
Prevention	Not applicable
Response	Not applicable
Storage	Not applicable
Disposal	Not applicable

2.1.2 Carcinogenicity:

IARC	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
OSHA	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Version: 3.1 / EN

Page 3 of 15

Print date:

Revision date: 18.07.2018

NTP**No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.****2.3 Other hazards**

Not applicable

SECTION 3: *Composition/Information on Ingredients*

3.1 Substances

Substances name:	TBE Buffer
INDEX No.:	No data available
EC NO.:	No data available
REACH No.:	No data available
CAS No.:	No data available
Purity:	No data available
Synonymes:	No data available
Stabilisers:	No data available
Hazard impurities:	No data available

3.2 Mixtures

Description of the mixture: No data available

Hazardous ingredients The product contains no substances which at their given concentration, are considered to be hazardous to health.

SECTION 4: *First Aid Measures*

4.1 Description of first aid measures

Version: 3.1 / EN

Page 4 of 15

Print date:

Revision date: 18.07.2018

- General notes: Move out of dangerous area. Show this material safety data sheet to the doctor in attendance.
- following inhalation: If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.
- following skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
- following eye contact: Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
- following ingestion: If accidentally swallowed obtain immediate medical attention. Rinse mouth with water. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: Not applicable

Effects: Not applicable

4.3 Indication of any immediate medical attention and special treatment needed

Notes for doctor: No information available.

Special treatment: No information available.

SECTION 5: *Fire-Fighting Measures*

5.1 Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing : No information available.

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Not known.

Version: 3.1 / EN

Page 5 of 15

Print date:

Revision date: 18.07.2018

5.3 Advice for fire-fighters

Special protective equipment for firefighters: Standard procedure for chemical fires.

SECTION 6: *Accidental Release Measures*

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Protective equipment: Use personal protective equipment.
Ensure adequate ventilation.
Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

Emergency procedures: Evacuate the danger area or consult an expert if needed.

6.1.2 For emergency responders

Personal protective equipment: Use suitable fabric for personal protective clothing.

6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

6.3.1 For containment: acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

6.3.2 For cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

6.3.3 Other information: See section 8 for more information.

Version: 3.1 / EN

Page 6 of 15

Print date:

Revision date: 18.07.2018

SECTION 7: *Handling and Storage*

7.1 Precautions for safe handling

Advice on safe handling: Use personal protective equipment as required. No special handling advices are necessary.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions: Keep container tightly closed in a dry and well-ventilated place.

SECTION 8: *Exposure Controls/Personal Protection*

8.1 Control parameters Contains no substances with occupational exposure limit values.

8.2 Personal protection equipment :

8.2.2.1 Eye and face protection :Safety glasses Wear face-shield and protective suit for abnormal processing problems. Ensure that eyewash stations and safety showers are close to the workstation location.

8.2.2.2 Respiratory protection :In the case of vapor formation use a respirator with an approved filter.

8.2.2.3 Skin protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place. Footwear protecting against chemicals

8.2.2.4 Hand protection : The choice of an appropriate glove does not only depend on its material but also on other quality features and is

different from one producer to the other. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

8.2.2.5 Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

8.2.2.6 Respiratory protection : In the case of vapor formation use a respirator with an approved filter.

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties:

a) Appearance:	Clear, colorless solution
b) Odour:	None
c) Odour threshold:	No data available
d) pH:	8.3
e) Melting point / freezing point:	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
j) Upper / lower flammability or explosive limits	No data available
k) Vapour pressure	No data available
l) Vapour density	No data available
m) Relative density	1.16
n) Solubility(ies)	Soluble

Version: 3.1 / EN

Page 8 of 15

Print date:

Revision date: 18.07.2018

o) Partition coefficient: n-octanol/water	Mixture
p) Auto-ignition temperature	Not determined
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) oxidizing properties	No data available
9.2 Other information	No data available

SECTION 10: Stability and Reactivity

10.1 Reactivity:	None known.
10.2 Chemical stability:	Stable under normal conditions.
10.3 Possibility of hazardous reactions:	Hazardous reaction has not been reported.
10.4 Conditions to avoid:	Heat, incompatibles.
10.5 Incompatible materials:	No data available
10.6 Hazardous decomposition products:	No hazardous decomposition products.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

11.1.1 Acute toxicity:

Method:	No data available
Species:	No data available
Routes of exposure:	No data available
Effective doses:	No data available
Exposure time:	No data available
Results:	No data available

Version: 3.1 / EN

Page 9 of 15

Print date:

Revision date: 18.07.2018

11.1.2 Skin corrosion/irritation:

Method:	No data available
Species:	No data available
Routes of exposure:	No data available
Effective doses:	No data available
Exposure time:	No data available
Results:	No data available

11.1.3 Serious eye damage/irritation:

Method:	No data available
Species:	No data available
Routes of exposure:	No data available
Effective doses:	No data available
Exposure time:	No data available
Results:	No data available

11.1.4 Respiratory or skin sensitization:

Method:	No data available
Species:	No data available
Routes of exposure:	No data available
Effective doses:	No data available
Exposure time:	No data available
Results:	No data available

11.1.5 Germ cell mutagenicity:

Method:	No data available
Species:	No data available
Routes of exposure:	No data available
Effective doses:	No data available

Version: 3.1 / EN

Page 10 of 15

Print date:

Revision date: 18.07.2018

Exposure time: No data available

Results: No data available

11.1.6 Carcinogenicity:

Method: No data available

Species: No data available

Routes of exposure: No data available

Effective doses: No data available

Exposure time: No data available

Results: No data available

11.1.7 Reproductive toxicity:

Method: No data available

Species: No data available

Routes of exposure: No data available

Effective doses: No data available

Exposure time: No data available

Results: No data available

11.1.8 Summary of evaluation of the CMR propertiers:

Method: No data available

Species: No data available

Routes of exposure: No data available

Effective doses: No data available

Exposure time: No data available

Results: No data available

Version: 3.1 / EN

Page 11 of 15

Print date:

Revision date: 18.07.2018

11.1.9 STOT-single exposure:

Method:	No data available
Species:	No data available
Routes of exposure:	No data available
Effective doses:	No data available
Exposure time:	No data available
Results:	No data available

11.1.10 STOT-repeated exposure:

Method:	No data available
Species:	No data available
Routes of exposure:	No data available
Effective doses:	No data available
Exposure time:	No data available
Results:	No data available

11.1.10 Aspiration hazard:

Method:	No data available
Species:	No data available
Routes of exposure:	No data available
Effective doses:	No data available
Exposure time:	No data available
Results:	No data available

SECTION 12: Ecological Information

12.1 Toxicity

Acute (short-term) toxicity:

Fish:	No data available
Crustatacea:	No data available

Version: 3.1 / EN

Page 12 of 15

Print date:

Revision date: 18.07.2018

Algae/aquatic plants:	No data available
Other organisms:	No data available
Chronic (long-term) toxicity	
Fish:	No data available
Crustatacea:	No data available
Algae/aquatic plants:	No data available
Other organisms:	No data available
Ingredients:	No data available
maleic acid :	No data available
Toxicity to fish :	No data available

Toxicity to daphnia and other aquatic

invertebrates : No data available

Toxicity to algae : No data available

12.2 Persistence and degradability

Abiotic Degradation: No data available

Physical- and photo-chemical elimination

Biodegradation: No data available

Remarks: According to the results of tests of biodegradability this product is not readily biodegradable.

12.3 Bioaccumulative potential

Partition coefficient

n-octanol/water (log kow): No data available

Bioconcentration factor (BCF): No data available

12.4 Mobility in soil

Known or predicted distribution to environmental compartments: No data available

Version: 3.1 / EN

Page 13 of 15

Print date:

Revision date: 18.07.2018

Surface tension:

No data available

Adsorption/Desorption:

No data available

12.5 Results of PBT and vPvB assessment

12.6 Other adverse effects

No data available

12.7 Additional information

No data available

SECTION 13: Disposal Considerations

13.1 Waste treatment methods

Disposal methods Waste from residues : Send to a licensed waste management company.
Dispose of as hazardous waste in compliance with local and national regulations.

Contaminated packaging : Dispose of as unused product. Do not re-use empty containers.

SECTION 14: Transport Information

14.1. UNRTDG

Not regulated as a dangerous good

14.2. IATA-DGR

Not regulated as a dangerous good

14.3. IMDG-Code

Not regulated as a dangerous good

14.4. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

14.5. Domestic regulation

Version: 3.1 / EN

Page 14 of 15

Print date:

Revision date: 18.07.2018

49 CFR

Not regulated as a dangerous good

14.6. Special precautions for user :

Remarks :

**Not classified as dangerous in the
meaning of transport regulations.**

SECTION 15: Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

TSCA list : No data available

OSHA Hazards : No data available

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

US State Regulations

California Prop 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

Version: 3.1 / EN

Page 15 of 15

Print date:

Revision date: 18.07.2018

15.2 Chemical safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: Other Information

(i) Indication of changes: No information available

(ii) Abbreviations and acronyms: No information available

(iii) Key literature references and sources for data: No information available

(iv) Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]: No information available

(v) Relevant H-statements (number and full text): No information available

(vi) Training advice: No information available

(vii) Further information:

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.