

**TBE Buffer 5X****TBE****SECTION 1 Identification of the Substance/Mixture and of the Company/Undertaking****1.1. Product identifier**

Identification of the product : Mixture  
Product code : TBE  
Trade name : TBE Buffer 5X

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

Use : For research purposes only

**1.3. Details of the supplier of the safety data sheet**

Company identification : **Formedium Ltd.**  
King's Lynn, England, PE31 6DJ  
Tel: +44(0)1485 609069  
Web: www.Formedium.com  
E-mail: info@formedium.com

**1.4. Emergency telephone number**

Emergency phone nr : Tel: +44(0)1485 609069 (local time : 9.00 to 17.00)  
National Poison Information Centre :Europe UK : +44 0845 4647 (this service is only available to health professionals)  
See [www.toxbase.org](http://www.toxbase.org) for a local poison centre

**SECTION 2 Hazards Identification****2.1. Classification of the substance or mixture****Classification according to Regulation ( EC ) 1272/2008**

Physical hazards: Not classified  
Health hazards: Reproductive toxicity, Category 1B  
Environmental hazards: Not classified

**Signal Word: DANGER**

Hazard Statements: H360FD – May damage fertility. May damage the unborn child.

**2.2. Label elements****Labelling according to Regulation EC 1272/2008**

Hazard Statements: H360FD – May damage fertility. May damage the unborn child.

Precautionary Statements: P308 + P313 – IF exposed or concerned: Get medical advice/attention.  
P201 – Obtain special instructions before use.  
P280 – Wear protective gloves/protective clothing/eye protection/face protection  
P260 – Do not breathe dust/fume/gas/mist/vapours/spray  
P202 – Do not handle until all safety precautions have been read and understood

**Principle Routes of Exposure / Potential Health Effects**

Eyes: Irritating to eyes.  
Skin: Irritating to skin.  
Inhalation: Irritating to respiratory system.  
Ingestion: May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting or diarrhoea.

**Specific Effects**

Carcinogenic effects: None  
Mutagenic effects: None  
Reproductive toxicity: May cause adverse reproductive effects – such as birth defects, miscarriages or infertility.  
Sensitisation: None  
Target Organ Effects: None under normal conditions.

**TBE Buffer 5X****TBE****SECTION 3 Composition / Information on Ingredients****Chemical characterization** : Mixtures

Component:	CAS No.	EINECS	Classification
Boric acid	10043-35-3	233-139-2	Repr. 1B, H360; Skin irrit. 2, H315; Eye irrit. 2, H319; STOT SE 3, H335

For the full text of the H-Statements mentioned in this Section, see Section 16.

**SECTION 4 First Aid Measures****4.1. Description of first aid measures**

**General information** : Notes to physician :- Treat symptomatically.

**Inhalation** : Remove to fresh air. If not breathing, give artificial respiration. Call a doctor or poison centre immediately.

**Skin contact** : Wash off with plenty of water for at least 15 minutes. Take off all contaminated clothing and wash it before re-use. Immediate medical attention is required.

**Eye contact** : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.  
Remove contact lenses, if present and easy to do.

**Ingestion** : Call a doctor or poison centre immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.

**TBE Buffer 5X****TBE****SECTION 5 Fire-fighting Measures****5.1. Extinguishing media**

**Suitable extinguishing media** : Water spray. Carbon Dioxide (CO2). Foam. Dry chemical.

**5.2. Special hazards arising from the substance or mixture**

Not known.

**5.3. Advice for fire-fighters**

Wear self-contained breathing apparatus and chemical suit.

**SECTION 6 Accidental Release Measures****6.1. Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.  
Always wear recommended Personal Protective Equipment.

**6.2. Environmental precautions**

No special environmental precautions required.

**6.3. Methods and material for containment and cleaning up**

Soak up with inert absorbent material

**6.4. Reference to other sections****Environmental precautions**

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

See Section 12 for more information.

**SECTION 7 Handling and Storage****7.1. Precautions for safe handling**

Use personal protective equipment as required.  
Avoid contact with skin, eyes and clothing.

**7.2. Conditions for safe storage including any incompatibilities**

Keep in a dry, cool and well-ventilated place. Keep in properly labelled containers. Keep containers tightly closed.

**Recommended storage temperature:**

Room temperature.  
Keep away from light.

**7.3. Specific end use(s)**

For research use only.

**TBE Buffer 5X****TBE****SECTION 8 Exposure controls / Personal protection****8.1. Control parameters****Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

**8.2. Exposure controls****Engineering measures**

Ensure adequate ventilation, especially in confined areas.

**Personal protective equipment****Eye /face protection**

Safety glasses with eye-shields.

**Skin and body protection**

Wear suitable protective clothing.

**Respiratory protection**

In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Skin protection**

Handle with gloves. Gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN 374. The gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with the product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Control of environmental exposure**

Prevent product from entering drains. Do not allow material to contaminate ground water system.

**TBE Buffer 5X****TBE****SECTION 9 Physical and Chemical Properties****9.1. Information on basic physical and chemical properties**

<b>Form</b>	: Liquid
<b>Colour</b>	: Colourless
<b>Odour</b>	: Odourless
<b>Odour Threshold</b>	: No information available
<b>pH</b>	: No information available
<b>Melting point</b>	: No information available.
<b>Boiling point</b>	: No information available.
<b>Flash point</b>	: No information available.
<b>Evaporation rate</b>	: No information available.
<b>Flammability (solid, gas)</b>	: No information available.
<b>Lower explosion limit</b>	: No information available.
<b>Upper explosion limit</b>	: No information available.
<b>Vapour pressure</b>	: No information available.
<b>Relative vapour density</b>	: No information available.
<b>Density</b>	: 1.07 g/cm <sup>3</sup> at 20 °C
<b>Relative density</b>	: No information available.
<b>Water solubility</b>	: No information available.
<b>Partition coefficient: n-octanol/water</b>	: No information available.
<b>Auto-ignition temperature</b>	: No information available.
<b>Decomposition temperature</b>	: No information available.
<b>Viscosity, dynamic</b>	: No information available.
<b>Explosive properties</b>	: Not classified as explosive.
<b>Oxidizing properties</b>	: None
<b><u>9.2. Other Information</u></b>	
<b>Other data</b>	: None

**TBE Buffer 5X****TBE****SECTION 10 Stability and Reactivity****10.1. Reactivity**

None known.

**10.2. Chemical stability**

The product is chemically stable under standard ambient conditions (room temperature).

**10.3. Possibility of hazardous reactions**

Hazardous reaction has not been reported.

**10.4. Conditions to avoid**

None under normal processing.

**10.5. Incompatible materials**

No dangerous reaction known under conditions of normal use.

**10.6. Hazardous decomposition products**

None under normal use conditions.

**SECTION 11 Toxicological Information****11.1. Information on toxicological effects****Acute toxicity:**

Component:	CAS No.	Oral (LD50)
Boric acid	10043-35-3	2660 mg/Kg (Rat)

**Irritation** Conclusive but not sufficient for classification.

**Corrosivity** Conclusive but not sufficient for classification.

**Sensitisation** Conclusive but not sufficient for classification.

**Additional toxicological information**

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

When used and handles according to specifications the product does not have any harmful effects to our experience and the information provided to us.

**11.2. Additional information****Endocrine disrupting properties**

The Substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**TBE Buffer 5X****TBE****SECTION 11 Ecological Information****12.1. Toxicity**

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

**12.2. Persistence and degradability**

No information available.

**12.3. Bioaccumulative potential**

No information available.

**12.4. Mobility in soil**

No information available.

**12.5. Results of PBT and vPvB assessment**

No information available.

**12.6. Other adverse effects**

No information available.

**12.7. Endocrine disrupting properties**

The Substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**SECTION 13 Disposal considerations****13.1. Waste treatment methods**

The generation of waste should be avoided or minimized where possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in accordance with approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national / federal regulations.

**SECTION 14 Transport Information****14.1. UN Number**

Not classified as dangerous in the meaning of transport regulations

**14.2. Proper shipping name**

Not applicable

**14.3. Transport Hazard Classification**

Not applicable

**14.4. Packing Group**

Not applicable

**14.5. Environmental Hazards**

Not applicable

**14.6. Special precautions for user**

Not applicable

**14.7. Bulk Transport – annex II Marpol 73/78 - IBC**

Not applicable

**TBE Buffer 5X****TBE****SECTION 15 Regulatory Information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Ensure all national / local regulations are observed. See label for full details, information.  
This safety datasheet complies with the requirements of Regulation (EU) No. 2015/830.

**Substances of very high concern (SVHC) according to REACH, Article 57**

**Boric acid** CAS No.: 10043-35-3

**15.2. Chemical Safety Assessment**

Not established.

**SECTION 16 Other Information****Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide.  
The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.  
Formedium Ltd. shall not be held liable for any damage resulting from handling or from contact with the above product.

**Relevant phrases**

H360FD – May damage fertility. May damage the unborn child.

**Revision**

Complete SDS revision

End of document