

# Safety Data Sheet

according to Regulation (EC) No. 453/2010 (REACH)

Revision date: 08.04.2014

Version: 3.1

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## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

|                                |                                                              |
|--------------------------------|--------------------------------------------------------------|
| Trade name/designation:        | TBE buffer solution 5x concentrate (TRIS-borate-EDTA buffer) |
| Product No.:                   | J885 (Amresco)                                               |
| Substance name:                | TBE buffer solution 5x concentrate (TRIS-borate-EDTA buffer) |
| CAS No.:                       | 00-00-0                                                      |
| INDEX no.:                     | 000-000-00-0                                                 |
| REACH registration No.:        | Not yet communicated down the supply chain.                  |
| Other means of identification: | no data available                                            |

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

|                           |                          |
|---------------------------|--------------------------|
| Relevant identified uses: | General chemical reagent |
|---------------------------|--------------------------|

### 1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor)

*United Kingdom*

#### **VWR International Ltd.**

|                           |                              |
|---------------------------|------------------------------|
| Street                    | Hunter Boulevard, Magna Park |
| Postal code/city          | Lutterworth, LE17 4XN        |
| Telephone                 | 0800 22 33 44                |
| Telefax                   | 01455 55 85 86               |
| E-mail (competent person) | vwrlds@eu.vwr.com            |

#### **Emergency telephone**

|           |                     |
|-----------|---------------------|
| Telephone | +44 (0) 1270 502894 |
|-----------|---------------------|



## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### 2.1.1 Classification according to Regulation (EC) No. 1272/2008 [CLP]

| Hazard classes and hazard categories                                   | Hazard statements |
|------------------------------------------------------------------------|-------------------|
| Reproductive toxicity, category 1B                                     | H360FD            |
| Eye irritation, category 2                                             | H319              |
| Specific target organ toxicity (single exposure), category 3, vascular | H335              |
| Skin irritation, category 2                                            | H315              |

### 2.2 Label elements

#### 2.2.1 Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms



Signal word: **Danger**

| Hazard statements |                                                    |
|-------------------|----------------------------------------------------|
| H360FD            | May damage fertility. May damage the unborn child. |
| H319              | Causes serious eye irritation.                     |
| H335              | May cause respiratory irritation.                  |
| H315              | Causes skin irritation.                            |

| Precautionary statements |                                                                                                                                  |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| P302+P352                | IF ON SKIN: Wash with plenty of water/...                                                                                        |
| P304+P340                | IF INHALED: Remove person to fresh air and keep comfortable for breathing.                                                       |
| P305+P351+P338           | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P312                     | Call a POISON CENTER/doctor/.../if you feel unwell.                                                                              |



Other hazards

SVHC No

## SECTION 3: Composition / information on ingredients

### 3.1 Substances

not relevant (Product identifier)

### 3.2 Mixtures

Hazardous ingredients Classification according to Regulation (EC) No. 1272/2008 [CLP]

| Substance name                                        | Concentration | Product identifier                                                                                    | Hazard classes and hazard categories                                                                                                                        |
|-------------------------------------------------------|---------------|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tris(hydroxymethyl)aminomethane<br>(TRIS, Trometamol) | <10%          | CAS No.: 77-86-1<br>EC No.: 201-064-4<br>REACH No.:<br>Not yet communicated<br>down the supply chain. | Eye irritation, category 2 - H319<br>Specific target organ toxicity (single exposure),<br>category 3, vascular - H335<br>Skin irritation, category 2 - H315 |
| ortho-Boric acid                                      | 2-5%          | CAS No.: 10043-35-3<br>EC No.: 233-139-2<br>REACH No.:<br>01-2119486683-25                            | Reproductive toxicity, category 1B - H360FD                                                                                                                 |

This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH:

- ortho-Boric acid (ED/30/2010)

## SECTION 4: First aid measures

### 4.1 General information

IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

### After inhalation

Call a POISON CENTER/doctor/.... Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

### In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.

### After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

### In case of ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do not induce vomiting. Give nothing to eat or drink.

### 4.2 Most important symptoms and effects, both acute and delayed

no data available



#### 4.3 Indication of any immediate medical attention and special treatment needed

no data available

#### 4.4 Self-protection of the first aider

First aider: Pay attention to self-protection!

#### 4.5 Information to physician

no data available

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

##### Suitable extinguishing media

The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

##### Extinguishing media which must not be used for safety reasons

no restriction

#### 5.2 Special hazards arising from the substance or mixture

In case of fire may be liberated: Pyrolysis products, toxic

#### 5.3 Advice for firefighters

DO NOT fight fire when fire reaches explosives. In case of fire: Wear self-contained breathing apparatus.

#### 5.4 Additional information

Do not allow run-off from fire-fighting to enter drains or water courses. Do not inhale explosion and combustion gases. Use caution when applying carbon dioxide in confined spaces. Carbon dioxide can displace oxygen. Use water spray jet to protect personnel and to cool endangered containers.

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid generation of dust. Do not breathe dust. Provide adequate ventilation. Use personal protection equipment.

#### 6.2 Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

#### 6.3 Methods and material for containment and cleaning up

Spilled product must never be returned to the original container for recycling. Clean contaminated objects and areas thoroughly observing environmental regulations. Collect in closed and suitable containers for disposal.

#### 6.4 Additional information

Clear spills immediately.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Avoid: Inhalation Avoid contact with skin and eyes. Use extractor hood (laboratory). If handled uncovered, arrangements with local exhaust ventilation have to be used. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means. Protect from moisture.



## 7.2 Conditions for safe storage, including any incompatibilities

storage temperature: 15-25°C

Storage class: 10-13

Keep container tightly closed in a cool, well-ventilated place.

## 7.3 Specific end use(s)

no data available

# SECTION 8: Exposure controls/personal protection

## 8.1 Control parameters

## 8.2 Exposure controls

### 8.2.1 Appropriate engineering controls

no data available

### 8.2.2 Personal protection equipment

no data available

*Eye/face protection*

no data available

Recommendation: no data available

*Skin protection*

no data available

#### By short-term hand contact

|                                           |                   |
|-------------------------------------------|-------------------|
| Suitable material:                        | no data available |
| Thickness of the glove material:          | no data available |
| Breakthrough time (maximum wearing time): | no data available |
| Recommended glove articles:               | no data available |

#### By long-term hand contact

|                                           |                   |
|-------------------------------------------|-------------------|
| Suitable material:                        | no data available |
| Thickness of the glove material:          | no data available |
| Breakthrough time (maximum wearing time): | no data available |
| Recommended glove articles:               | no data available |

#### *Respiratory protection*

|                                            |                   |
|--------------------------------------------|-------------------|
| no data available                          |                   |
| Suitable respiratory protection apparatus: | no data available |
| Recommendation:                            | no data available |
| Suitable material:                         | no data available |
| Recommendation:                            | no data available |

#### *Additional information*

no data available

### 8.2.3 Environmental exposure controls

no data available



## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|                      |                   |
|----------------------|-------------------|
| (a) Appearance       |                   |
| Physical state:      | liquid            |
| Colour:              | colourless        |
| (b) Odour:           | no data available |
| (c) Odour threshold: | no data available |

#### Safety relevant basic data

|                                                  |                   |
|--------------------------------------------------|-------------------|
| (d) pH:                                          | 8.3 (20 °C)       |
| (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 |
| (i) Flammability (solid, gas):                   | not applicable    |
| (j) Upper/lower flammability or explosive limits |                   |
| lower explosion limit:                           | no data available |
| Upper explosion limit:                           | no data available |
| (k) Vapour pressure:                             | no data available |
| (l) Vapour density:                              | no data available |
| (m) Relative density:                            | no data available |
| (n) Solubility(ies)                              |                   |
| at 20°C.:                                        | no data available |
| Soluble (g/L) in:                                | 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                                    |                   |
| Kinematic viscosity:                             | no data available |
| Dynamic viscosity:                               | no data available |
| (s) Explosive properties:                        | not applicable    |
| (t) Oxidising properties:                        | not applicable    |

### 9.2 Other information

|                        |                   |
|------------------------|-------------------|
| Bulk density:          | no data available |
| Refraction index:      | no data available |
| Dissociation constant: | no data available |
| Surface tension:       | no data available |
| Henry constant:        | no data available |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

no data available

### 10.3 Possibility of hazardous reactions

no data available



#### 10.4 Conditions to avoid

no data available

#### 10.5 Incompatible materials

no data available

#### 10.6 Hazardous decomposition products

no data available

#### 10.7 Additional information

no data available

### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

##### Acute effects

*Acute oral toxicity:*

no data available

*Acute dermal toxicity:*

no data available

*Acute inhalation toxicity:*

no data available

##### Irritant and corrosive effects

*Primary irritation to the skin:*

Causes skin irritation.

*Irritation to eyes:*

Causes serious eye irritation.

*Irritation to respiratory tract:*

May cause respiratory irritation.

##### Respiratory or skin sensitisation

In case of skin contact: not sensitising

After inhalation: not sensitising

##### STOT-single exposure

May cause respiratory irritation.

##### STOT-repeated exposure

not applicable

##### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

###### Carcinogenicity

No indication of human carcinogenicity.

###### Germ cell mutagenicity

No indications of human germ cell mutagenicity exist.

###### Reproductive toxicity

May damage fertility. May damage the unborn child.



**Aspiration hazard**

not applicable

**Other adverse effects**

no data available

**Additional information**

no data available

## SECTION 12: Ecological information

### 12.1 Ecotoxicity

**Acute (short-term) fish toxicity:**

no data available

**Chronic (long-term) fish toxicity:**

no data available

**Acute (short-term) daphnia toxicity:**

no data available

**Chronic (long-term) daphnia toxicity:**

no data available

**Acute (short-term) algae toxicity:**

no data available

**Chronic (long-term) algae toxicity:**

no data available

### 12.2 Persistence and degradability

no data available

### 12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water: no data available

### 12.4 Mobility in soil:

no data available

### 12.5 Results of PBT/vPvB assessment

no data available

### 12.6 Other adverse effects

no data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**Appropriate disposal / Product**

Dispose according to legislation. Consult the appropriate local waste disposal expert about waste disposal.

Waste code product: no data available





#### Appropriate disposal / Package

Dispose of waste according to applicable legislation. Handle contaminated packages in the same way as the substance itself.

#### Additional information

no data available

### SECTION 14: Transport information

No dangerous good in sense of this transport regulation.

### SECTION 15: Regulatory information

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

##### General rules

Water hazard class (WGK):

#### 15.2 Chemical Safety Assessment

no data available

### SECTION 16: Other information

#### R-phrases

|           |                                                  |
|-----------|--------------------------------------------------|
| R36/37/38 | Irritating to eyes, respiratory system and skin. |
|-----------|--------------------------------------------------|

#### S-phrases

|           |                                                                    |
|-----------|--------------------------------------------------------------------|
| S36/37/39 | Wear suitable protective clothing, gloves and eye/face protection. |
|-----------|--------------------------------------------------------------------|

#### Additional information

Indication of changes: general update

*The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.*

