

Unmasking fluid T, TEC buffer (TRIS/ EDTA/Citrate solution) pH 8

Cat#: orb90420 (MSDS)

01. Identification of the substance/preparation and of the company/undertaking

Unmasking Fluid T

Utilisation of the compound / of the preparation

For research purposes only – antigen unmasking reactions in immunohistochemical procedures

02. Hazards Identification

Harmful if swallowed. Irritates eyes, skin, and air passages

03. Composition / Information on Ingredients

Chemical Characterization

Mixture of substances listed below

Dangerous Chemicals:

component a): Tris-(Hydroxymethyl) aminomethane free base (TRIS Base)

classification: 100 ml solution < 0.5 %; CAS #. 77-86-1; EC #. 201-064-4; Annex I Index # none

component b): Ethylendiamin-tetraessigsäure / Ethylenediaminetetraacetic acid (EDTA)

classification: 100 ml solution 0.5%; CAS #60-00-4; EG #. 20-449-4; INDEX # none

component c): Citric acid Monohydrate

classification 100 ml solution < 0.5%; CAS # 77-92-9; EC # 201-069-1, Index # none

04. First Aid Measures

General Note

Contact physician, show this MSDS.

Inhalation Exposure:

Transport person to fresh air. In case of apnoea carry out artificial respiration. In case of breathing difficulties apply oxygen.

Skin Exposure

After exposure to the skin wash with water.

Eye Exposure

After accidental contact with the eye wash with plenty of water, visit physician.

Oral Exposure

If swallowed, wash out mouth with plenty of water, provided person is conscious. Visit physician.

05. Fire Fighting Measure**Suitable Extinguishing Media**

Not applicable

Improper Extinguishing Media

Not applicable

Specific danger due to substance, preparation or combustion products or gas

Not applicable

Special Safety Equipment for Fire Fighting

Not necessary

Additional information

Due to the low concentration of the components the potential hazard is low.

06. Accidental release measures**Procedure of Personal Precautions**

Wear laboratory gloves and safety goggles

Procedure of Environmental Precautions

Remove accidentally spilled material with dry pulp.

07. Handling and Storage**Notes Regarding Secure Handling**

Open bottle with gloves only, close firmly after usage.

Notes Regarding Fire and Explosion Control

Not applicable

Additional Information**Storage Conditions**

Store tightly closed in a cold place 2-25°C

Storage Room and Container

No special equipment affordable

08. Exposure Control / Personal Protection**Exposure limit at working place and/or biological limits**

Not applicable

Working Place Limits (AGW) Germany

Not applicable

Personal Protection Equipment

Wear laboratory gloves and protective goggles

Inhalation Protection

Nicht anwendbar / Not applicable

Hand Guard

Material of gloves must conform to the specifications of EG Guideline 89/686/EWG and European Standard EN374

Eye Protection

Avoid contact with eyes, wear protective goggles

Skin protection

Use lab coat

Work Hygiene

No beverage, no food at the working environment

09. Physical and chemical properties**Appearance**

State of aggregation: liquid

Colour: colourless

Odour: odourless

Safety Relevant Data**Explosion Risk :**

Lower Explosion Limit: Not analysed

Upper Explosion Limit: Not analysed

Vapour Pressure: Not analysed

Relative Density: 1,05 g/cm³

Flow Time: Not analysed

Solubility in Water: completely miscible

pH Value 8.0+0.2

Boiling Point : Not analysed

Flash Point: Not flammable

Ignition Temperature : Not applicable

10. Stability and Reactivity

Stable at room temperature

Conditions to Avoid

High temperature

Materials to Avoid

Strong oxidizers

Hazardous Decomposition Products

CO, CO₂, (NO_x)

11. Toxicological Information

Toxicological Testing

a) Acute toxicity TRIS base: LD50 oral rat 5900 mg/kg;

b) Acute toxicity EDTA: LD50 oral, Rat 4000 mg/kg; LD50 oral Mouse 30 mg/kg

Acute toxicity Citric acid: LD50 oral Rat 3000 mg/kg; skin irritation rabbit 500 mg/24h mild; eye irritation 750 µg/24 h severe

12. Ecological Data

Ecotoxicity

Toxicity in Fish:

a) No data available concerning TRIS Base (77-86-1)

b

Aquatic Invertebrates:

b) N,N-Dimethylformamide: EC50 Daphnia magna (Water Flea) 113 mg/L – 48 h

Mobility

Persistence and Bio-degradability

Bioaccumulation Potential

13. Disposal Considerations

Substance / Preparation

Observe all local and regional regulations.

Package**Polluted Package**

Dispose like unused product

14. Transport Information**Transport by land ARD/RID**

Not dangerous goods

See schiffstransport IMDG/GGVSee / Transport by Sea

Not dangerous goods

Lufttransport ICAO-TI und IATA-DGR / Transport by Air

Not dangerous goods

15. Regulatory Information**Labelling According to EG Guidelines****Code Letter and Hazard Identification of the Product**

Xi irritant

R-Phrases

R36/37/38/52 Irritates eyes, air ways and skin; Harmful for aquatic organisms

S-Phrases

S26 In case of eye contact wash with plenty of water, consult physician.

S36 Wear appropriate cloth.

EU Regulations**National Regulations.**