

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

1.1. Product identifier - Product name: HI 4010-06 TISAB III Fluoride Buffer - Product Code:30333

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

Use of substance / mixture: PC21: Laboratory chemicals.

1.3. Details of the supplier of the safety data sheet

Company name: EDT DirectiON Ltd, The Old Silo Store, St.Radigund's Abbey Farm, Dover, CT15 7DL UK

Tel: +44(0)1304 829960

Email: [Info@edt.co.uk](mailto:Info@edt.co.uk)

1.4. Emergency telephone number -Emergency tel: +44(0)1304 829960

## Section 2: Composition/information on ingredients

Component:	EC No:	CAS No:	Hazard Class:	Phrases:	Concentration:
Ammonium Chloride	235-186-4	12125-02-9	Acute Tox. 4 Eye Irrit. 2 Xn	H302, H319 R: 22-36	> 15% - < 25%
1,2-Cyclohexylenedinitrilotetra-Acetic Acid	236-308-9	123333-90-4	Skin irrit. 2 Eye Irrit. 2 Xi	H315, H319 R: 36-38	> 1% - < 10%

## Section 3: Hazards identification

Causes serious eye irritation.

According to Regulation (EC) No. 1272/2008:

Classification: Eye Irritation (Category 2)

Signal Word: Warning

Pictograms:



Hazard Statements: H319: Causes serious eye irritation.

Precaution Statements: P280: Wear protective gloves/protective clothing/eye protection/face protection. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

According to Directives 67/548/EEC and 1999/45/EC:

Symbol: Xi: Irritant

R-phrases: 36/38: Irritating to eyes and skin.

S-phrases: 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

## Section 4: First-aid measures

After Inhalation: Remove to fresh air.

After Skin Contact: Wash affected area with plenty of water. Remove contaminated clothing.

After Eye Contact: Rinse out immediately with plenty of water with the eyelid held wide open. Call in ophthalmologist.

After Swallowing: Make victim drink plenty of water, call in physician.

General Information: Not available.

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**Section 5: Fire-fighting measures**

**Suitable Extinguishing Media:** Water spray, Carbon Dioxide, Dry Chemical Powder, Appropriate Foam.

**Special Risks:** Development of hazardous combustion gases or vapors possible in the event of fire. The following may develop in the event of fire: Nitrogen Oxides, Hydrochloric Acid

**Special Protective Equipment:** Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.

**Additional Information:** Contain escaping vapors with water. Prevent fire-fighting water from entering surface water or groundwater.

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**Section 6: Accidental release measures**

**Personal Precautions:** Do not inhale vapors/aerosols. Avoid substance contact. Ensure supply of fresh air in enclosed rooms. Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

**Environmental Precautions:** Do not allow to enter sewerage system.

**Additional Notes:** Take up with liquid-absorbent material. Clean up affected area and dispose according to local regulation.

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**Section 7: Handling and storage**

**Handling:** Avoid generation of vapors/aerosols. Do not inhale substance.

**Storage:** Store at room temperature (+15 to +25 °C). Tightly closed in a dry and well-ventilated place.

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**Section 8: Exposure controls/personal protection**

Type	Value	Source
TWA (8hr)	10 mg/m <sup>3</sup> (fume)	UK

**Engineering:** Safety shower and eye wash.

**Personal Protective Equipment:** Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

**Respiratory Protection:** Required when vapors/aerosols are generated. Work under hood.

**Protective Gloves:** Rubber or plastic

**Eye Protection:** Goggles or face mask

**Industrial Hygiene:** Immediately change contaminated clothing. Wash hands and face after working with substance.

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**Section 9: Physical and chemical properties**

**Appearance:** Yellow liquid

**Odor:** Weakly of acetic acid

**Melting Point:** NA

**Density at 20°C:** 1.08 g/cm<sup>3</sup>

**pH at 20°C:** ~ 5.0

**Boiling Point:** ND

**Solubility:** Soluble

**Thermal Decomp.:** NA

**Explosion Limit:** ND

**Flash Point:** ND

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**Section 10: Stability and reactivity**

**Conditions to be Avoided:** Heating

**Hazardous Decomposition Products:** In the event of fire: See section 5.

**Hazardous Polymerization:** Will not occur.

**Substances to be Avoided:** Alkali hydroxides, acids, halogen-halogen compounds nitrates, chlorates, heavy metal salts, nitrites, hydrogen cyanide chlorine.

**Further Information:** Unsuitable working materials: copper, copper compounds.

**Section 11: Toxicological information****Product Toxicity**

Quantitative data on the toxicity of this product is not available.

**Potential Health Effects:**

**Inhalation:** Irritations of the mucous membranes, coughing, and dyspnoea.

**Skin Contact:** Slight irritation symptoms.

**Eye Contact:** Irritations.

**Ingestion:** Mucosal irritations. headache, nausea, unconsciousness.

**Further Data:** The following applies to ammonium salts in general: after swallowing: local irritation symptoms, nausea, vomiting, diarrhoea. Systemic effect: after the uptake of very large quantities: drop in blood pressure, collapse, CNS, disorders, spasms, narcotic conditions, respiratory paralysis, haemolysis. further hazardous properties cannot be excluded. The product should be handled with the usual care when dealing with chemicals.

**Section 12: Ecological information**

Quantitative data on the ecotoxicity of this product is not available.

**APPLICABLE TO PARTIAL COMPONENT:**

The following applies to Ammonium chloride – as the pure substance

**Biologic degradation:** Methods for the determination of biodegradability are not applicable to inorganic substances.

**Behavior in environmental compartments:**

**Distribution:** log Pow: -4.37 (calculated).

**Biological effects:** No bioaccumulation is to be expected (log Pow < 1). Ecotoxic effects:

**Fish toxicity:** C. carpio LC50: 209 mg/L /96 h (IUCLID).

**Daphnia toxicity:** Daphnia magna EC50: > 100 mg/L /48 h (Lit.).

**Further Data:** Do not allow to enter waters, waste water, or soil!

**Section 13: Disposal considerations**

**Waste Disposal:** Chemical residues are generally classified as special waste and thus covered by local regulations. Contact local authorities or disposal companies for advice. Handle contaminated packaging in the same way as the substance itself.

**Section 14: Transport information**

**Land:** Not subject to transport regulations

**Sea:** Not subject to transport regulations

**Air:** Not subject to transport regulations

**Section 15: Regulatory information**

Complies with European Regulations (EC) No. 1907/2006 and No. 1272/2008.

Complies with European Council Directives 67/548/EEC and 1999/45/EC.

Complies with OSHA Regulation 29 CFR 1910.1200.

Complies with Canadian Regulation SOR/88-66

**Section 16: Other information**

Text of phrases under Section 3

H302: Harmful if swallowed.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

R22: Harmful if swallowed.

R36/38: Irritating to eyes and skin.

**Revision Information**

**Revision Date:** 13-12-2016

**Supersedes edition of:** 01-06-2012

**Reason for revision:** Regulation (EC) No. 1272/2008 Compliance

**Legend**  
NA: Not Applicable  
ND: Not Determined

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.