

SAFETY DATA SHEET

1. Identification of the substance/mixture and of the company/undertaking

Identification of the substance/preparation

| Product code | LC5300 |
|--------------|------------------------------|
| Product name | NOVEX IEF ANODE BUFFER (50X) |

Company/Undertaking Identification

24 hour Emergency Response:

Life Technologies 5791 Van Allen Way PO Box 6482 Carlsbad, CA 92008 +1 760 603 7200 Life Technologies 5250 Mainway Drive Burlingont, ONT CANADA L7L 6A4 800/263-6236

866-536-0631 301-431-8585 Outside of the U.S. +1-301-431-8585

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

2. Hazards identification

GHS - Classification

Signal Word not hazardous

Health Hazard not hazardous

Physical Hazards

not hazardous

Principle Routes of Exposure/ Potential Health effects

> Eyes Skin Inhalation Ingestion

May cause eye irritation with susceptible persons. May cause skin irritation in susceptible persons. May be harmful by inhalation. May be harmful if swallowed.

Revision Date17-Apr-2013Product codeLC5300

Page 1 / 5 Product name NOVEX IEF ANODE BUFFER (50X)

| Carcinogenic effects | none | |
|-----------------------|------|--|
| Mutagenic effects | none | |
| Reproductive toxicity | none | |
| Sensitization | none | |

Target Organ Effects

No known effects under normal use conditions.

HMIS

| Health | 0 |
|--------------|---|
| Flammability | 0 |
| Reactivity | 0 |

| 3. Composition/information on ingredients | | | | | |
|---|-----------|-----------|-----|--|--|
| Chemical Name CAS-No EINECS-No Weight % | | | | | |
| Phosphoric acid | 7664-38-2 | 231-633-2 | 1-5 | | |

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

| 4. First aid measures | | |
|-----------------------|--|--|
| Skin contact | Rinse with plenty of water. If symptoms arise, call a physician. | |
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician. | |
| Ingestion | Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Do not induce vomiting without medical advice. | |
| Inhalation | Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration. | |
| Notes to physician | Treat symptomatically. | |

5. Fire-fighting measures

| Suitable extinguishing media | Water spray. Carbon dioxide (CO2). Foam. Dry chemical. |
|---|--|
| Special protective equipment for firefighters | Wear self-contained breathing apparatus and protective |
| | suit. |

| 6. Accidental release measures | |
|--------------------------------|--|
| Personal precautions | Use personal protective equipment. |
| Methods for cleaning up | Soak up with inert absorbent material. |

Environmental precautions

Prevent further leakage or spillage if safe to do so.

See Section 12 for additional information.

7. Handling and storage

Handling

Always wear reccommended Personal Protective Equipment. No special handling advice required. Keep in a dry, cool and well-ventilated place.

Storage

8. Exposure controls/personal protection

Exposure limits

We are not aware of any national exposure limit.

| Chemical Name | OSHA PEL | OSHA PEL (Ceiling) | ACGIH OEL (TWA) | ACGIH OEL (STEL) |
|-----------------|---------------------|--------------------|---------------------|---------------------|
| Phosphoric acid | 1 mg/m ³ | none | 1 mg/m ³ | 3 mg/m ³ |

Engineering measures Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

| Respiratory protection | In case of insufficient ventilation wear suitable respiratory equipment. |
|---------------------------|--|
| Hand protection | Impervious gloves. |
| Eye protection | Safety glasses with side-shields. |
| Skin and body protection. | Lightweight protective clothing. |
| Hygiene measures | Handle in accordance with good industrial hygiene and safety practice. |
| Environmental exposure | Prevent product from entering drains. |
| controls | |

9. Physical and chemical properties

General Information

| Form Appearance Odor | liquid No information available No information available | |
|---|--|--|
| Boiling Point/Range Melting point/range Flash point Autoignition temperature Oxidizing properties Water solubility | °C no data available No information available. soluble | °F no data available °F no data available °F no data available °F no data available |

10. Stability and reactivity

| Stability Materials to avoid Hazardous decomposition | Stable under normal conditions. No dangerous reaction known under conditions of normal use. None under normal use | |
|--|---|--|
| products polymerization | Hazardous polymerisation does not occur. | |
| | 11. Toxicological information | |

Acute toxicity

not hazardous

| Chemical Name | LD50 (oral,rat/mouse) | LD50 (dermal,rat/rabbit) | LC50 (inhalation,rat/mouse) |
|--|--|---------------------------|-----------------------------|
| Phosphoric acid | = 1530 mg/kg (Rat) | no data available | >850mg/m ³ (Rat) |
| Principle Routes of Expose Potential Health effects Eyes Skin Inhalation Ingestion Carcinogenic effects Mutagenic effects Reproductive toxicity Sensitization | May cause eye irritatic May cause skin irritatic May be harmful by inh May be harmful if swal none none none | | |
| Target Organ Effects | none No known effects unde | er normal use conditions. | |
| | 12. Ecologic | al information | |
| Ecotoxicity effects Mobility Biodegradation Bioaccumulation | No information availab No information availab Inherently biodegradal Does not bioaccumula | le. ble | |

| Chemical Name | Freshwater Algae Data | Water Flea Data | Freshwater Fish Species Data | Microtox Data | log Pow |
|------------------------------|--------------------------|---------------------------------------|---------------------------------|---------------|---------|
| Phosphoric acid 7664-38-2 | | Daphnia magna EC50=4.6 mg/L (12 h) | | | |

13. Disposal considerations

Dispose of in accordance with local regulations.

14. Transport information

IATA

| Proper shipping name | Not classified as dangerous in the meaning of transport regulations |
|----------------------|---|
| Hazard class | none |
| Subsidiary Class | none |
| Packing group | none |
| UN-No | None |

15. Regulatory information

| Component | TSCA |
|-----------------|--------|
| Phosphoric acid | Listed |
| 7664-38-2(1-5) | |

U.S. Federal Regulations

SARA 313

This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contains HAPs.

U.S. State Regulations

| Chemical Name | Massachusetts - RTK | New Jersey - RTK | Pennsylvania - RTK | Illinois - RTK | Rhode Island - RTK |
|-----------------|---------------------|------------------|--------------------|----------------|--------------------|
| Phosphoric acid | Listed | Listed | Listed | - | Listed |

California Proposition 65

This product does not contain chemicals listed under Proposition 65

WHMIS Hazard Class

Non-controlled

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR

16. Other information

Reason for Revision

(M)SDS sections updated.

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unkown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS MSDS DOES NOT CONSTITUTE A WARRENTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PUPOSE.

End of Safety Data Sheet