

Dilurex 1X TEA Wash Buffer

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Issue date: 11/8/2023 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Dilurex 1X TEA Wash Buffer
Product code : 4Z2006 - all sizes

1.2. Recommended use and restrictions on use

Use of the substance/mixture : For laboratory and manufacturing use only
Restrictions on use : Not for food, drug or household use

1.3. Supplier

Exocell
Ethos Biosciences, Inc.
2070 Center Square Road
Logan Township, New Jersey 08085
United States
T +1-856-224-0900; +1-800-441-0366 Technical Service; Monday-Friday: 8:00 AM-5:00 PM, Eastern US Time
www.ethosbiosciences.com

1.4. Emergency telephone number

Emergency number : 800-424-9300 CHEMTREC (USA) -- 24 Hours/Day, 7 Days/Week

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labeling

No labeling applicable

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

98% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)
98% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
98% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

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3.2. Mixtures

| Name | Product identifier | % | GHS US classification |
|------------------|---------------------|--------|---|
| Deionized Water | CAS-No.: 7732-18-5 | > 98 | Not classified |
| sodium chloride | CAS-No.: 7647-14-5 | < 0.9 | Not classified |
| Proclin 300 | CAS-No.: 55965-84-9 | < 0.1 | Not classified |
| TWEEN 20 | CAS-No.: 9005-64-5 | 0.05 | Not classified |
| sodium hydroxide | CAS-No.: 1310-73-2 | < 0.03 | Met. Corr. 1, H290 Acute Tox. 4 (Dermal), H312 Skin Corr. 1, H314 Eye Dam. 1, H318 |
| triethanolamine | CAS-No.: 102-71-6 | < 0.02 | Not classified |

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

| | |
|---------------------------------------|--|
| First-aid measures after inhalation | : Remove person to fresh air and keep comfortable for breathing. |
| First-aid measures after skin contact | : Wash skin with plenty of water. |
| First-aid measures after eye contact | : Rinse eyes with water as a precaution. |
| First-aid measures after ingestion | : Call a poison center/doctor/physician if you feel unwell. |

4.2. Most important symptoms and effects (acute and delayed)

No additional information available

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

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6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| sodium hydroxide (1310-73-2) | |
|--|---------------------|
| USA - ACGIH - Occupational Exposure Limits | |
| ACGIH OEL C | 2 mg/m ³ |
| triethanolamine (102-71-6) | |
| USA - ACGIH - Occupational Exposure Limits | |
| ACGIH OEL TWA | 5 mg/m ³ |

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

| |
|-------------------------|
| Hand protection: |
| Protective gloves |
| Eye protection: |
| Safety glasses |

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Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|----------------------------|
| Physical state | : Liquid |
| Appearance | : Clear, colorless liquid. |
| Color | : Colorless |
| Odor | : odorless |
| Odor threshold | : No data available |
| pH | : 6.7 – 6.9 |
| Melting point | : No data available |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : No data available |
| Relative evaporation rate (butyl acetate=1) | : No data available |
| Flammability (solid, gas) | : Not applicable. |
| Vapor pressure | : No data available |
| Relative vapor density at 20°C | : No data available |
| Relative density | : No data available |
| Solubility | : No data available |
| Partition coefficient n-octanol/water (Log Pow) | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosion limits | : No data available |
| Explosive properties | : No data available |
| Oxidizing properties | : No data available |

sodium chloride

| | |
|---------------------------|------------------------|
| Boiling point | 1461 °C |
| Flash point | Not applicable |
| Auto-ignition temperature | Not applicable |
| Vapor pressure | Not applicable (solid) |

TWEEN 20

| | |
|----------------|-------------------|
| Flash point | 148 °C |
| Vapor pressure | < 1.3 hPa (20 °C) |

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| sodium hydroxide | |
|---------------------------|-------------------------------------|
| Boiling point | 1388 °C (1013 hPa) |
| Flash point | Not applicable (solid) |
| Auto-ignition temperature | No data available in the literature |
| Vapor pressure | < 0.01 hPa (25 °C) |

| Proclin 300 | |
|---------------------------|-------------------------------------|
| Boiling point | No data available in the literature |
| Flash point | Not applicable (solid) |
| Auto-ignition temperature | No data available in the literature |
| Vapor pressure | No data available in the literature |

| triethanolamine | |
|---------------------------|-------------------------------|
| Boiling point | 336 °C (1013 hPa) |
| Flash point | 179 °C (Closed cup, 1013 hPa) |
| Auto-ignition temperature | 324 °C (1013 hPa, T2) |
| Vapor pressure | 0.019 hPa (20 °C) |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

| Dilurex 1X TEA Wash Buffer | |
|-------------------------------------|---|
| Unknown acute toxicity (GHS US) | 98% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 98% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 98% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist)) |
| sodium chloride (7647-14-5) | |
| LD50 oral rat | > 3980 mg/kg body weight (Rat, Experimental value, 20% aqueous solution, Oral) |
| LD50 dermal rabbit | > 10000 mg/kg (Rabbit, Experimental value, Dermal) |
| LC50 Inhalation - Rat | > 42 mg/l air (1 h, Rat, Male, Experimental value, 20% aqueous solution, Inhalation (aerosol)) |
| sodium hydroxide (1310-73-2) | |
| ATE US (dermal) | 1100 mg/kg body weight |
| Proclin 300 (55965-84-9) | |
| LD50 oral rat | 66 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Calculated by reference to active substance, Oral, 14 day(s)) |
| LD50 dermal rat | > 141 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s)) |
| LC50 Inhalation - Rat | 0.17 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Calculated by reference to active substance, Inhalation (dust), 14 day(s)) |
| triethanolamine (102-71-6) | |
| LD50 oral rat | 6400 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 7 day(s)) |
| LD50 dermal rabbit | > 2000 mg/kg body weight (Equivalent or similar to OECD 402, Rabbit, Experimental value, Dermal, 14 day(s)) |
| Skin corrosion/irritation | : Not classified pH: 6.7 – 6.9 |
| sodium chloride (7647-14-5) | |
| pH | 7.5 (18 °C) |
| TWEEN 20 (9005-64-5) | |
| pH | 6 (10 %) |
| sodium hydroxide (1310-73-2) | |
| pH | 14 (5 %) |
| Proclin 300 (55965-84-9) | |
| pH | No data available in the literature |
| triethanolamine (102-71-6) | |
| pH | 11 (25 %) |
| Serious eye damage/irritation | : Not classified pH: 6.7 – 6.9 |

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| | |
|-------------------------------------|---|
| sodium chloride (7647-14-5) | |
| pH | 7.5 (18 °C) |
| TWEEN 20 (9005-64-5) | |
| pH | 6 (10 %) |
| sodium hydroxide (1310-73-2) | |
| pH | 14 (5 %) |
| Proclin 300 (55965-84-9) | |
| pH | No data available in the literature |
| triethanolamine (102-71-6) | |
| pH | 11 (25 %) |
| Respiratory or skin sensitization | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| STOT-single exposure | : Not classified |
| STOT-repeated exposure | : Not classified |
| Aspiration hazard | : Not classified |
| Viscosity, kinematic | : No data available |
| sodium chloride (7647-14-5) | |
| Viscosity, kinematic | Not applicable (solid) |
| TWEEN 20 (9005-64-5) | |
| Viscosity, kinematic | 363.636 mm ² /s |
| sodium hydroxide (1310-73-2) | |
| Viscosity, kinematic | No data available in the literature |
| Proclin 300 (55965-84-9) | |
| Viscosity, kinematic | Not applicable (solid) |
| triethanolamine (102-71-6) | |
| Viscosity, kinematic | 830.2 mm ² /s (20 °C, Equivalent or similar to OECD 114) |

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

| | |
|-------------------------------------|---|
| sodium chloride (7647-14-5) | |
| LC50 - Fish [1] | 5840 mg/l (ASTM, 96 h, Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, Lethal) |
| sodium hydroxide (1310-73-2) | |
| LC50 - Fish [1] | 189 mg/l (48 h, Leuciscus idus, Fresh water, Experimental value) |
| EC50 - Crustacea [1] | 40 mg/l (48 h, Ceriodaphnia sp., Experimental value, Locomotor effect) |

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| Proclin 300 (55965-84-9) | |
|--|--|
| LC50 - Fish [1] | 0.19 mg/l (EPA OPP 72-1, 96 h, Oncorhynchus mykiss, Flow-through system, Fresh water, Experimental value, GLP) |
| EC50 - Crustacea [1] | 0.007 mg/l (48 h, Acartia tonsa, Salt water, Experimental value, GLP) |
| ErC50 algae | 19.9 µg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Skeletonema costatum, Static system, Salt water, Experimental value, GLP) |
| triethanolamine (102-71-6) | |
| LC50 - Fish [1] | 11800 mg/l (APHA, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Nominal concentration) |
| EC50 - Crustacea [1] | 609.88 mg/l (ASTM E1192, 48 h, Ceriodaphnia dubia, Static system, Fresh water, Experimental value, Lethal) |
| ErC50 algae | 216 mg/l (DIN 38412-9, 72 h, Scenedesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration) |
| 12.2. Persistence and degradability | |
| Dilurex 1X TEA Wash Buffer | |
| Persistence and degradability | Not rapidly degradable |
| sodium chloride (7647-14-5) | |
| Persistence and degradability | Biodegradability: not applicable. |
| Chemical oxygen demand (COD) | Not applicable (inorganic) |
| ThOD | Not applicable (inorganic) |
| TWEEN 20 (9005-64-5) | |
| Persistence and degradability | Readily biodegradable in water. |
| sodium hydroxide (1310-73-2) | |
| Persistence and degradability | Biodegradability: not applicable. |
| Chemical oxygen demand (COD) | Not applicable (inorganic) |
| ThOD | Not applicable (inorganic) |
| Proclin 300 (55965-84-9) | |
| Persistence and degradability | Not readily biodegradable in water. |
| Deionized Water (7732-18-5) | |
| Persistence and degradability | Not rapidly degradable |
| triethanolamine (102-71-6) | |
| Persistence and degradability | Biodegradable in the soil, No inhibition of nitrification, Readily biodegradable in water. |
| Biochemical oxygen demand (BOD) | 0.02 g O ₂ /g substance |
| Chemical oxygen demand (COD) | 1.5 g O ₂ /g substance |
| ThOD | 2.04 g O ₂ /g substance |

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12.3. Bioaccumulative potential

| sodium chloride (7647-14-5) | |
|---|--|
| Bioaccumulative potential | Not bioaccumulative. |
| TWEEN 20 (9005-64-5) | |
| Bioaccumulative potential | No bioaccumulation data available. |
| sodium hydroxide (1310-73-2) | |
| Bioaccumulative potential | Not bioaccumulative. |
| Proclin 300 (55965-84-9) | |
| BCF - Fish [1] | 41 – 54 (OECD 305: Bioconcentration: Flow-Through Fish Test, 28 day(s), Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, Fresh weight) |
| Partition coefficient n-octanol/water (Log Pow) | -0.32 – 0.7 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 20 °C) |
| Bioaccumulative potential | Low potential for bioaccumulation (BCF < 500). |
| triethanolamine (102-71-6) | |
| BCF - Fish [1] | 0.4 – 3.9 l/kg (Equivalent or similar to OECD 305, 6 week(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value) |
| Partition coefficient n-octanol/water (Log Pow) | -1.9 (Weight of evidence approach, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C) |
| Bioaccumulative potential | Low potential for bioaccumulation (BCF < 500). |

12.4. Mobility in soil

| sodium chloride (7647-14-5) | |
|--|---|
| Surface tension | 73.03 mN/m (23 °C, 14.5 g/l) |
| Ecology - soil | No (test)data on mobility of the substance available. |
| sodium hydroxide (1310-73-2) | |
| Surface tension | No data available in the literature |
| Ecology - soil | No (test)data on mobility of the substance available. |
| Proclin 300 (55965-84-9) | |
| Surface tension | No data available in the literature |
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 0.81 – 1 (log Koc, Calculated value) |
| Ecology - soil | Highly mobile in soil. |
| triethanolamine (102-71-6) | |
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 1.06 – 1.27 (log Koc, SRC PCKOCWIN v1.66, Calculated value) |
| Ecology - soil | Highly mobile in soil. |

12.5. Other adverse effects

No additional information available

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SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not regulated
Proper Shipping Name (TDG) : Not regulated
Proper Shipping Name (IMDG) : Not regulated
Proper Shipping Name (IATA) : Not regulated

14.3. Transport hazard class(es)

DOT
Transport hazard class(es) (DOT) : Not regulated

TDG
Transport hazard class(es) (TDG) : Not regulated

IMDG
Transport hazard class(es) (IMDG) : Not regulated

IATA
Transport hazard class(es) (IATA) : Not regulated

14.4. Packing group

Packing group (DOT) : Not regulated
Packing group (TDG) : Not regulated
Packing group (IMDG) : Not regulated
Packing group (IATA) : Not regulated

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT
Not regulated

TDG
Not regulated

IMDG
Not regulated

IATA
Not regulated

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

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SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

| | | |
|------------------|--------------------|---------|
| sodium chloride | CAS-No. 7647-14-5 | < 0.9% |
| TWEEN 20 | CAS-No. 9005-64-5 | 0.05% |
| sodium hydroxide | CAS-No. 1310-73-2 | < 0.03% |
| Proclin 300 | CAS-No. 55965-84-9 | < 0.1% |
| triethanolamine | CAS-No. 102-71-6 | < 0.02% |

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA

Deionized Water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Deionized Water (7732-18-5)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

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| Full text of H-phrases | |
|------------------------|---|
| H290 | May be corrosive to metals |
| H312 | Harmful in contact with skin |
| H314 | Causes severe skin burns and eye damage |
| H318 | Causes serious eye damage |

Safety Data Sheet (SDS), USA

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