

Safety data sheet

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

1.1 Product identifier

Trade name: **DB 5 Dilution Buffer**
Part number: 11150, 11665, 12495 (KR-266)

1.2 Relevant identified uses of the substance or mixture and uses advised against application of the substance / the preparation :

Laboratory chemicals; kit component. Not to be used for purposes other than those specified in product literature.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: EnviroLogix Inc., 500 Riverside Industrial Pkwy.
Portland ME 04103, USA
Phone: (207) 797-0300

1.4 Emergency telephone number: (207) 797-0300 Technical Service

SECTION 2. Hazards identification.

2.1 Classification of the substance or mixture

Classification according to 29CFR 1910.1200: Eye Damage Category 1
Aquatic Toxic, Chronic Category 2

2.2 Label elements

Labeling according to 29CFR 1910.1200:

Pictogram:



Signal word: Warning

Hazard Statements: H318 Causes serious eye damage

H411 Toxic to aquatic life with long lasting effects

Precautionary Statements: P264 Wash hands thoroughly after handling
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.
P337+P313 IF eye irritation persists: Get medical attention/advice

2.3 Other Statements

Restricted to professional users

SECTION 3. Composition/information on ingredients.

3.2 Mixture				
Chemical name	CAS No	EC No	Classification According to 29CFR 1910.1200	Amount (%)
Sodium Tetraborate Decahydrate	1303-96-4	215-540-4	H360 Rep 1B	< 3 %
p-tertiary Octylphenoxy polyethyl alcohol (Triton X-100)	9002-93-1		H302 Acute Tox. Oral 4 H315 Skin Irrit. 2 H318 Eye Dam. 1 H411 Aquatic Chronic 2	1 %
Surfynol	9014-85-1		H315 Skin irritation 2 H318 Eye damage 1 H335 STOT SE 3	2 %
1,2 Benzisothiazolin-3-one (Proxel- GXL)	2634-33-5	220-120-9	H302 Acute Tox. 4; H315 Skin Irrit. 2 H317 Skin Sens. 1 (C \geq 0.05%) H318 Eye Dam. 1 ; H400 Aquatic Acute 1	0.048 %

SECTION 4. First aid measures.
4.1 Description of first aid measures

After inhalation :

In case of inhalation. Remove to fresh air. If not breathing give artificial respiration. Get medical attention immediately.

After skin contact :

In case of skin contact. Remove contaminated clothing and shoes immediately. Wash affected area with mild soap or detergent for at least 10 minutes or until no evidence of chemical remains.

After eye contact :

In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. Lifting eyelids occasionally, until no evidence of chemical remains. Get medical attention immediately.

After swallowing :

In case of ingestion. DO NOT Induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Call a physician immediately.

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

None

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

None

SECTION 5. Firefighting measures.
5.1 Extinguishing media:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture:

None

5.3 Advice for firefighters:

Wear protective gear appropriate for fire conditions including respiratory protective gear.

SECTION 6. Accidental release measures.

- 6.1 Personal precautions, protective equipment and emergency procedures:** In the case of spilled mixture wear gloves to prevent skin contact. In the case of a large spill, additional protection is recommended.
- 6.2 Environmental precautions:** Do not discharge mixture to sewer system or waterways.
- 6.3 Methods and material for containment and cleanup:** Absorb in paper towel and discard in appropriate waste. Clean with water afterwards. Large spills may be neutralized with dilute solutions of sodium carbonate or calcium oxide.
- 6.4 References to other sections:** For safe handling refer to Section 7. For information on PPE refer to Section 8. For disposal refer to Section 13

SECTION 7. Handling and storage.

- 7.1 Precautions for safe handling:** Practice good chemical hygiene when handling. Avoid contact with eyes, skin, and clothing.
- 7.2 Conditions for safe storage, including any incompatibilities:** Store in tightly closed, non-metal container, in a corrosive compatible area. Prevent direct sunlight and heat. Store in well aired storage rooms.
- 7.3 Specific end use(s):** Apart from the uses mentioned in section 1.2, no other specific uses are stipulated

SECTION Exposure controls/personal protection.

8.1 Exposure limits:

Components with limit values that require monitoring at the workplace:

	EH40/2005	OSHA
Sodium Tetraborate Decahydrate	8 Hr TWA = 5mg/m ³	8 Hr TWA = 10 mg/m ³

8.2 Exposure Controls:

- 8.2.1 Engineering controls** Facilities using this mixture should be equipped with an eyewash and safety shower. Use general or local exhaust ventilation to keep airborne concentrations below permissible exposure limits.
- 8.2.2 General protective and hygienic measures:** The usual precautionary measures should be adhered to when handling chemicals.
- Eye Protection:** Safety glasses with side shields, goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). Eye and face protection regulations are described by OSHA (US) in 29CFR1910.133. Do not wear contact lenses when working with chemicals
- Hand Protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
- Breathing Equipment:** Appropriate respiratory protection should be determined according to local conditions using risk analysis protocols. An approved disposable air purifying particulate respirator may be used as a backup to engineering controls. Always use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
- 8.2.3 Environmental exposure controls:** Contain spills, do not allow into environment

SECTION 9. Physical and chemical properties.

9.1 Information on basic physical and chemical properties:

a) Appearance:	Clear liquid, colorless to slight yellow.
b) Odor:	None
c) Odor Threshold:	No Data Available
d) pH:	8.6
e) Melting point/freezing point:	No Data Available
f) Boiling point/Boiling range:	No Data Available.
g) Flash point:	Not applicable.
h) Evaporation rate:	No Data Available
i) Flammability (solid, gaseous):	No Data Available
j) Upper/lower flammability or explosive limits:	No Data Available
k) Vapor pressure:	No Data Available
l) Vapor density	No Data Available
m) Relative density:	No Data Available
n) Solubility(ies):	Fully miscible, water.
o) Partition Coefficient: n-Octanol/water:	No Data Available
p) Auto-ignition temperature:	No Data Available
q) Decomposition temperature:	No Data Available
r) Viscosity:	No Data Available
s) Explosive properties:	No Data Available.
t) Oxidizing properties:	No Data Available

9.2 Other information: No further relevant information available.

SECTION 10. Stability and reactivity.

10.1 Reactivity:	No data available
10.2 Chemical Stability:	Stable under normal temperatures and pressures.
10.3 Possibility of hazardous reactions:	Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid:	No specific data
10.5 Incompatible materials:	No Data Available.
10.6 Hazardous decomposition products:	Under normal conditions of storage and use, hazardous decompositions products should not be produced.

SECTION 11. Toxicological information.

Information on Toxicological Effects

Triton X-100

Acute toxicity:	Oral LD50 –Rat- 1800mg/kg Dermal LD50- Rabbit- 8000 mg/kg
Sensitization:	No sensitizing effects known
CMR (carcinogenity, mutagenicity and toxicity for reproduction) effects:	No CMR effects.
Additional toxicological information:	No Additional Information

SECTION 12. Ecological information.

12.1 Toxicity: Triton X-100	Fish: LC50 Pimephales promelas (fathead minnow) – 8.9mg/l – 96.0 hr Daphnia: EC50 – Daphnia – 26 mg/l – 48 hr
12.2 Persistence and degradability :	No Data Available
12.3 Bio accumulative potential:	No Data Available
12.4 Mobility in soil :	No Data Available
12.5 Results of PBT and vPvB assessment:	Not available as a chemical safety assessment, not required/not conducted.
12.6 Other adverse effects:	No Data Available

SECTION 13. Disposal considerations.

Waste treatment methods:	Contact a licensed professional waste disposal service to dispose of this material. Disposal of surplus or waste solutions must be in accordance with applicable local, state, and national laws and regulations.
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SECTION 14. Transport information.

14.1 UN-Number DOT, ADR, ADN, IMDG, IATA :	Not Hazardous for Transport
14.2 UN proper shipping name DOT, ADR, ADN, IMDG, IATA :	Not Hazardous for Transport
14.3 Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA):	Not Hazardous for Transport
14.4 Packing group (DOT, ADR, IMDG, IATA):	Not Hazardous for Transport
14.5 Environmental hazards	No environmental hazard.
14.6 Special precautions for user :	None
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code:	No information available.

SECTION 15. Regulatory information.

15.1 Safety, health, and environmental regulations	
US Federal Regulations	
OSHA	Not a hazardous material
SARA 313	Not listed
US State Regulations	
European/International Regulations	
European labeling in accordance with EC Directives	Not hazardous according to European directives
15.2 Chemical Safety Assessment	Not carried out

SECTION 16. Other information.

This information is true based on our present knowledge. However, EnviroLogix makes no representation of its accuracy or completeness. Persons receiving this information must exercise their independent judgment in determining the product's safety and suitability for its intended use. This document shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship

*EHS Department
EnviroLogix Inc.*

Codes:

H302 Harmful if swallowed **H315** Causes skin irritation **H317** May cause an allergic skin reaction
H318 Causes Serious Eye Damage **H335** May cause respiratory irritation **H411** Toxic to Aquatic Life with Long Lasting
Effects