

MATERIAL SAFETY DATA SHEET

Date Revised: June 26, 2012

1. PRODUCT AND COMPANY INFORMATION

Product Name: Flow Cytometry Permeabilization Buffer
Catalog Number: 22016
Unit Size: 100 mL
Manufacturer/Supplier: Biotium, Inc.
3159 Corporate Place, Hayward, CA 94545, USA
Phone: 1-510-265-1027, Fax: 1-510-265-1352
Web: <http://www.biotium.com>
Emergency Phone: 1-510-589-7179

2. COMPOSITION AND INFORMATION ON INGREDIENTS

Molecular Formula:	Molecular Weight:	CAS Number/Name/Concentration:
$(C_2H_4O)_n C_{14}H_{22}O$	~625	9002-93-1/ TRITON X-100 <1% with other non-hazardous ingredients

Preserved with 0.25% ProClin™ 950, containing 9.5-9.9% active ingredient 2-methyl-4-isothiazolin-3-one (C₄H₅NOS); CAS# 2682-20-4; Xi: Irritant, R 36/38-43; S 24/25-35-36/37 (0.052%–0.63% / 50–600 ppm active ingredient).

3. HAZARDS IDENTIFICATION

Emergency Overview:
Harmful by ingestion, irritant

POTENTIAL HEALTH EFFECTS

Inhalation: Harmful by inhalation.
Ingestion: Harmful if swallowed.
Skin: Slightly hazardous in contact with skin (irritant).
Eyes: Harmful in contact with eyes (irritant).
Chronic Exposure: No data available,
Target Organs: Eyes, Skin (irritant).

4. FIRST AID MEASURES**Oral Exposure**

Never give anything by mouth to an unconscious person. Call a physician.

Inhalation Exposure

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Dermal Exposure

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing. Wash clothing before reuse.

Eye Exposure

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

5. FIRE FIGHTING MEASURES

Use carbon dioxide, dry chemical extinguishers, foam extinguishers or water. An approved self-contained breathing apparatus and protective clothing are recommended. NFPA Ratings: Health: 2 Flammability: 2 Reactivity: 0.

6. ACCIDENTAL RELEASE MEASURES

Use appropriate protective equipment and methods to clean up spilled substance promptly. Absorb spill onto an appropriate material. Collect and dispose of all waste in accordance with applicable laws.

7. HANDLING AND STORAGE

Storage

Store at room temperature.

Handling

Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Under no circumstances eat, drink, or smoke while handling this material. Wash hands and face thoroughly after working with material. Contaminated clothing should be removed and washed before re-use.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Gloves, protective clothing and eyewear should be worn and safe laboratory practices followed. Use in a well ventilated area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Odor:	None
Solubility in Water:	Soluble
Specific Gravity:	No data available
pH:	7.4
Boiling Point:	100°C
Melting Point:	0°C
Flash Point:	Essentially the same as water
Vapor Pressure:	Essentially the same as water

10. STABILITY AND REACTIVITY

Stability: Stable when stored as directed.

Thermal Decomposition: No data available.

Dangerous Reactions: No data available.

Dangerous Products of Decomposition: No dangerous decomposition products identified.

11. TOXICOLOGICAL INFORMATION

Routes of Exposure:	Multiple routes: May cause irritation. May be harmful by inhalation, ingestion, or skin absorption.
RTECS Number:	Not available.
Toxicity:	LD50 Rat: 1800 mg/kg.
Carcinogenicity:	No data available.

12. ECOLOGICAL INFORMATION

Do not allow product to enter drinking water supplies, wastewater or soil. This material is harmful to aquatic life.

13. DISPOSAL CONSIDERATIONS

Consult local, state or national regulations for proper disposal. Chemical residues are generally classified as hazardous or special waste, and as such are covered by regulations, which vary according to location. Contact your local waste disposal authority for advice, or pass to a chemical disposal company.

14. TRANSPORT INFORMATION

DOT

Hazards Class: Not listed
UN Number: Not listed
Packing Group: Not available
Proper Shipping Name (Technical Name): Triton X-100 (less than 1%)

IATA

Hazardous for air Transport: Non-Hazardous for air transport.

15. REGULATIONS

US Regulations

SARA Listed: Not listed
US Toxic Substances Control Act (TSCA): Not listed
US Other: Not applicable

EU Regulations

EEC EINECS Number:
EEC Risk Statements:
EEC Safety Statements:
Other Country Regulations: Not listed

16. OTHER INFORMATION

Disclaimer: The information provided above is believed to be correct to our best knowledge, but does not purport to be all inclusive, and shall be used only as a guide. This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. Biotium shall not be held liable for any damage resulting from handling or contact with the above product.