

## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT IDENTIFICATION

- Trade Name: ClearPAGE™ Turbo SDS Running Buffer
- Catalog numbers: FB14053, FB14500
- Manufacturer/Supplier: C.B.S. Scientific Company  
P.O. Box 856  
Del Mar, California 92014  
U.S.A.
- Information department: Technical Services, customer support.
- Telephone number: (858) 755-4959

### 2. COMPOSITION / INFORMATION OF COMPONENTS

Mixture of the substances listed below with non-hazardous additions, including recombinant proteins not from animal sources

Chemical Name	%	CAS #	EINECS #
Mops	2 - 5	1132-61-2	214-478-5
Tris-hydroxymethyl-amino-methane hydrochloride (Tris-HCl)	2 - 4	77-86-1	201-064-4
Sodium Dodecyl Sulphate	0.1 - 2.5	151-21-3	205-788-1
Sodium Bisulfite	0.002 - 0.5	7681-57-4	231-673-0

### 3. HAZARDS IDENTIFICATION

#### Potential Health Effects:

#### EMERGENCY OVERVIEW

CAUTION!

MAY BE IRRITATING TO THE SKIN, EYES, AND UPPER RESPIRATORY TRACT.  
MAY BE HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN.

#### Eye:

IRRITANT

Can cause minor irritation, tearing and reddening.

#### Skin:

IRRITANT

Can cause moderate skin irritation, reddening and inflammation. Not likely to cause acute or permanent damage.

#### Inhalation:

IRRITANT

Can cause moderate respiratory irritation.

#### Ingestion:

If ingested, this material may be irritating to mouth, throat and gastrointestinal tract. May be harmful if swallowed.

#### Special Toxic Effects

CAUTION! THE TOXICOLOGICAL PROPERTIES OF THIS MATERIAL HAVE NOT BEEN FULLY INVESTIGATED.

### 4. FIRST AID MEASURES

#### After Eye Contact:

Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.

#### After Skin Contact:

Wash with soap and water under a drench shower. Remove contaminated clothing, launder immediately and discard contaminated leather goods. Get medical attention immediately.

#### After Inhalation:

Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately.

#### After Ingestion:

If swallowed, wash out mouth with water provided person is conscious.

Never give anything by mouth to an unconscious person. Get medical attention.

## 5. FIRE FIGHTING MEASURES

Flashpoint	ND
Lower Flammable Limit %	ND
Upper Flammable Limit %	ND
Autoignition Temperature	ND

### Extinguishing Media:

Use extinguisher media appropriate for surrounding fire.

### Firefighting Techniques / Equipment:

As in any fire, wear self-contained breathing apparatus pressure-demand (MHSA/NIOSH approved or equivalent) and full protective gear. Evacuate the area and fight fire from a safe distance.

### Hazardous Combustion Products:

MAY EMIT TOXIC FUMES UNDER FIRE CONDITIONS.

## 6. ACCIDENTAL RELEASE MEASURES

Accidental releases may be subject to special reporting requirements and other regulatory mandates. Refer to section 8 for personal protection equipment recommendations.

### Spill Cleanup:

Exposure to the spilled material may be irritating. Follow personal protective equipment recommendations found in Section 8 of this MSDS.

## 7. HANDLING AND STORAGE

### Handling Procedures:

DO NOT GET IN EYES, ON SKIN OR CLOTHING. Wash hands thoroughly before eating, drinking or smoking.

### Storage:

Store at ambient pressure. Store in a cool location. Isolate from incompatible materials and conditions. Keep container(s) closed. The material is suitable for most general chemical storage areas, including refrigerators, but not to be stored with food.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Additional Information about design of technical facilities:

No special exhaust ventilation, process enclosures, or other engineering controls are necessary when handling or using this product to avoid overexposure.

### General hygiene measures:

Wash contaminated clothing before reuse. Discard contaminated shoes. Wash thoroughly after handling.

### Personal Protective Equipment:

The usual precautionary measure are to be adhered to when handling chemicals

### Eye Protection:

An eye wash station must be available where this product is used. Wear chemically resistant safety glasses with side shields when handling this product. Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Do not wear contact lenses. Have an eye wash station available.

### Hand Protection:

Wear protective gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, smoking and when leaving work. Have a safety shower available.

### Material of Gloves:

The selection of suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

### Other:

Wear protective clothing e.g. laboratory coat

## 9. PHYSICAL AND CHEMICAL PROPERTIES

General information:	
Form	Liquid
Color	Transparent (at room temperature)
Odor	Odorless

Change in condition:	
Melting point/range	N/A
Boiling point/range	N/A
Autoignition temperature	N/A
Explosion limits	N/A
Explosive properties	N/A
Flammability	N/A
Flash point	N/A
Oxidizing properties	N/A
Partitioning Coefficient	N/A
pH-value at 22 C	7.6-8.4
SG / Density	N/A
Solubility in/miscibility with water	N/A
Vapor density	N/A
Vapor pressure	N/A
Viscosity	N/A

## 10. STABILITY AND REACTIVITY

### Stability/Incompatibility:

Stable under normal conditions of use. Incompatible with oxidizing agents, acids, acid chlorides and acid anhydrides.

### Reactivity:

Strong oxidizing agents. Temperatures above the high flash point of this combustible material in combination with sparks, open flames, or other sources of ignition. Mechanical shock.

### Hazardous Decomposition Products:

Thermal decomposition may produce toxic fumes Nitrogen oxides, Carbon dioxide. Carbon monoxide.

### Hazardous Polymerization:

Will not occur.

## 11. TOXICOLOGICAL INFORMATION

### FOLLOWING DATA FOR TRIS (FREE BASE):

CAUTION! THE TOXICOLOGICAL PROPERTIES OF THIS MATERIAL HAVE NOT BEEN FULLY INVESTIGATED. FOLLOW GOOD LABORATORY PRACTICES WHEN HANDLING.

### Routes of Exposure

Inhalation, ingestion, skin and eye contact

## LD50

REGISTRY OF THE TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS)

RTECS # TY2900000 (listed as : 1,3-propanediol, 2-amino-2-(hydroxymethyl)-)

The oral LD50 – rat is = 5,900 mg/kg.

Intravenous LD50 – rat = 1800 mg/kg. Intravenous LD50 – mouse = 1210 mg/kg.

## Carcinogenicity

NOT LISTED BY IARC, NTP OR OSHA AS A CARCINOGEN.

## Additional Toxicological Information

To the best of our knowledge the toxicological properties of this product have not been thoroughly investigated (Coomassie Blue)

## 12. ECOLOGICAL INFORMATION

Ecotoxicological Information: No ecological information available.

Environmental Fate (Degradation, Transformation, and Persistence): Bioconcentration is not expected to occur. Biodegrades at a moderate rate.

## 13. DISPOSAL CONSIDERATIONS

### Waste Disposal

Dispose in accordance with local and national official environmental regulations

## 14. TRANSPORT INFORMATION

Land transport RID/ADR class	Non-hazardous for road transport.
Maritime transport IMDG class	Non-hazardous for sea transport.
Air transport ICAO/IATA class	Non-hazardous for air transport.

## 15. REGULATORY INFORMATION

Classification and labelling according to EU directives:

Indication of danger: C (corrosive)

R 36/37/38 Irritating to eyes, respiratory system and skin.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical adv

S36/37/39 Wear suitable protective clothing, gloves & eye/face protection.

S38 In case of insufficient ventilation, wear suitable respiratory equipment.

## 16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. C.B.S. Scientific Company, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or delivery note for additional terms and conditions of sale.

### Disclaimer:

For R&D use only. Not for drug household or other use

### Abbreviations:

ND- Not Determined

NA- Not Applicable

SARA- Superfund and Reauthorization Act

HMIS- Hazard Material Information System

WHMIS- Workplace Hazard Materials Information System

NTP- National Toxicology Program

OSHA- Occupational Health and Safety Administration

IARC- International Agency for Research on Cancer

PROP 65- California Safe Drinking Water and Toxic Enforcement Act of 1986

EINECS- European Inventory of Existing Commercial Chemical Substances

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.