

MATERIAL SAFETY DATA SHEET

1. PRODUCT IDENTIFICATION

- Trade Name: ClearPage™ TG Transfer Buffers
- Catalog numbers: FB82500
- Manufactured for/Supplier: C.B.S. Scientific Company, Inc.
P.O. Box 856
Del Mar, California 92014
U.S.A.
- Information department: Technical Services, customer support.
- Telephone number: +1 (858) 755-4959

2. COMPOSITION / INFORMATION OF COMPONENTS

Mixture of the substances listed below with non-hazardous additions.

Chemical Name	%	CAS #	EINECS #
Glycine	15 to 20%	56-40-6	200-272-2
Tris-hydroxymethyl-amino-methane ("Tris")	2 to 4%	77-86-1	201-064-4
Sodium Dodecyl Sulphate	0.5 to 2.0%	151-21-3	205-788-1

3. HAZARDS IDENTIFICATION

Potential Health Effects:

Eye:

Direct contact may cause irritation, blurred vision, tearing and reddening.

Skin:

May cause skin irritation, resulting in reddening, itching and inflammation. Not likely to cause acute or permanent damage.

Inhalation:

May cause moderate respiratory irritation.

Ingestion:

Irritating to mouth, throat and stomach. May be harmful if swallowed.

Chronic:

May be harmful.

Special Toxic Effects

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

4. FIRST AID MEASURES

Eye:

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 medical attention if irritation develops or persists.

Skin:

Wash with soap and water under a drench shower. Remove contaminated clothing and shoes, and launder before reuse. Get medical attention if irritation develops or persists.

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.

Ingestion:

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

Note to Physician:

Treat symptomatically.

5. FIRE FIGHTING MEASURES

Unusual Hazards Data

Flashpoint: ND.
Lower 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

Storage pressure: Ambient.

Handling Procedures:

Avoid contact with eyes, skin and on clothing. Wash hands thoroughly before eating, drinking or smoking.

Storage Procedures:

Store in a cool location. Avoid contact with strong oxidizers. 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

Exposure Limits:

Component	OSHA PEL (ppm)	AGCIH TWA (ppm)
TRIS	ND	ND
Glycine	ND	ND

Engineering Controls:

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

Personal Protective Equipment:

Eye:

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.

Skin:

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.

Respiratory:

No special equipment is required.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance/physical state:	Liquid solution / suspension
Odor:	No odor.
Boiling point (°C):	ND
Melting Point (°C):	ND
Solubility in water:	ND
pH:	8.1 to 8.5
Vapor Pressure:	ND
Vapor Density:	ND
Specific Gravity/Density:	ND
Octanol/water Partition Coeff:	ND
Volatiles:	ND
Evaporation Rate:	ND
Viscosity:	ND

10. STABILITY AND REACTIVITY

Stability:

Incompatible with strong oxidizing agents.

Hazardous Decomposition Products:

MAY EMIT TOXIC FUMES UNDER FIRE CONDITIONS.

Hazardous Polymerization:

Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: There are no known acute toxicity effects from this product.

Dermal / Skin: ND

Inhalation/respiratory: ND

Oral/Ingestion: ND

Target Organs: ND.

Mutagens: ND.

Carcinogenicity: ND. Not listed by IARC, NTP, or OSHA as a carcinogen.

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

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

Regulatory Information:
Not applicable.

Disposal Method:
Clean up and dispose of waste in accordance with all federal, state, and local environmental regulations. Dispose of by incineration following Federal, State, Local, or Provincial regulations.

14. TRANSPORT INFORMATION

Proper Shipping Name: NOT REGULATED
Hazard Class: NA
Subsidiary Hazards: NA
ID number: NA
Packaging Group: NA

15. REGULATORY INFORMATION

United States TSCA: This product is solely for research and development purposes. It may only be handled by technically qualified individuals.

State Regulations: Based on available information, this material does not contain any components currently known to the State of California to cause cancer, birth defects or reproductive harm at levels which would be subject to Proposition 65.

Canada DSL/NDSL: ND

WHMIS ND

European Union:

Product Risk Phrases: None assigned.

Product Safety Phrases: None assigned.

Product Classification: Not classified.

EINECS Number: See page 1 of this document.

16. OTHER INFORMATION

HMIS rating 0 – 4:

Fire: 0

Health: 1

Reactivity: 0

Nfpa ratings: ND

Abbreviations:

ND- No 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.