

Safety Data Sheet

Section I: Product and Company Information

Product Trade Name	<i>SuperG Plus Blocking Buffer</i>
Product Number.....	105102, 105103
Chemical Nature	Aqueous, protein-free solution preserved with 0.02% methylisothiazolone and 0.02% bromonitrodioxane
Product Use Description	R&D use only. Not for drug, household or other uses.
Manufacturer's Name.....	Grace Bio-Labs, Inc.
Address.....	325 SW Cyber Drive Bend, Oregon 97702 US
Emergency Telephone Number	Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-527-3887
Telephone Number for Information....	1 (800) 813-7339
Fax Number	(541) 318-0242
Prepared by	Regulatory Affairs

Section II: Hazards Identification

EMERGENCY OVERVIEW:

CAUTION! MAY CAUSE EYE IRRITATION.

Based on percentages of hazardous ingredients in this product, this product is not classified as "dangerous" under EU Directives (67/548/EEC and 1999/45/EC) or hazardous under US OSHA Hazard Communication regulations (29 CFR 1910.1200).

POTENTIAL HEALTH EFFECTS:

Skin:	No evidence of adverse effects.
Eyes:	May cause eye irritation.
Ingestion:	No evidence of adverse effects.
Inhalation:	No evidence of adverse effects.

Carcinogenicity

No component of this product presents at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, or OSHA.

Section III: Composition/Information on Ingredients

Ingredient Name	CAS #	%	EINECS #	EU Classification (See Section XVI)
Proprietary formulation; no hazardous components above 1% or carcinogens above 0.1%	None	100	None	Not Classified
2-Methyl-4-isothiazolin-3-one (methylisothiazolone)	2682-20-4	0.02	220-239-6	N, C, R20/21/22-34-43-50/53, S24-26-36/37/39-45-60-61
5-Bromo-5-nitro-1,3-dioxane (bromonitrodioxane)	30007-47-7	0.02	250-001-7	Xn, R22, S36/37/39

Section IV: First Aid Measures

Eye Exposure	Introduction into the eye could cause mechanical irritation. In case of contact, wash eyes immediately with large amounts of water or normal saline for at least 15 minutes, lifting the upper and lower lids to assure adequate flushing. Seek medical attention if irritation develops.
Skin Exposure	No adverse acute effects are expected via this route of entry. Flush with water, and then thoroughly wash affected area with soap and water.
Ingestion	No data on ingestion of the material is available. Extremely large oral doses may produce gastrointestinal disturbance. If swallowed, consult with medical staff or poison control center to determine if any immediate response or follow-up actions are recommended.
Inhalation	No adverse acute effects are expected via this route of entry. No special first aid measures are necessary; inhalation or aspiration unlikely.
Notes to Physicians	None.

Section V: Fire Fighting Measures

NFPA Hazard Classification	Health: 0 Flammability: 0 Reactivity: 0 Other:
Extinguishing Media	No restriction; use appropriate agent for surrounding fire.
Fire Fighting Procedure	Wear full protective clothing, including self-contained breathing apparatus. Although presenting no special fire hazard in normal use, the material will burn and could contribute to an existing fire.
Hazardous Combustion Products	Toxic fumes of carbon monoxide, carbon dioxide, and nitrogen oxides.
Unusual Fire and Explosion Hazards	None.

Section VI: Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Wear suitable laboratory protective clothing. Absorb spill with inert material and then place in a disposal container. Wash the area of the spill thoroughly with soap and water.

Section VII: Handling and Storage

HANDLING:

Refer to Section VIII for recommended precautionary measures when handling *SuperG Plus Blocking Buffer*.

STORAGE:

Store refrigerated at 4C.

Section VIII: Exposure Control / Personal Protection

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200):

None

Exposure Limits

OSHA PEL	ACGIH TLV
None established	None established

ENGINEERING CONTROLS:

Not respirable as a liquid.

PERSONAL PROTECTIVE EQUIPMENT:

- Safety goggles or glasses with side shields
- Protective clothing – lab coat
- Protective gloves – disposable rubber gloves

GENERAL HYGIENE CONTROLS:

- Practice good chemical hygiene when handling
- Avoid contact with eyes, skin and clothing
- Do not ingest material
- Safety shower and eyewash station available near location of use

Section IX: Physical and Chemical Properties

Flash Point	Not available	Specific Gravity (H₂O=1)	Not available
Flammable Limits	Not available	Melting Point	Not available
Auto-Ignition Temperature	Not available	Freezing Point	Not available
Flammability (solid, gas)	Not flammable	Evaporation Rate	Not available
Explosive Properties	Not explosive	Boiling Point	100°C
Oxidizing Properties	Not an oxidizer	Viscosity	Not available
Vapor Pressure (mmHg)	Not available	pH	6.6 - 7.2
Vapor Density (AIR=1)	Not available	Percent Volatiles	Not available
Relative Density	Not available	Solubility in Water	Complete
Partial coefficient:			
n-octanol/water	Not available		
Appearance	Clear, translucent liquid		
Physical State	Liquid		
Odor	None		

Section X: Stability and Reactivity Data

Stability	Chemically stable under ordinary conditions of use and storage.
Conditions to Avoid	None known
Materials to Avoid	None known
Hazardous Decomposition or Byproducts	Toxic fumes of carbon monoxide, carbon dioxide, and nitrogen oxides.
Hazardous Polymerization	Will not occur.

Section XI: Toxicological Information

Though complete toxicity information on **SuperG Plus Blocking Buffer** is not available, none of its components are known to be toxic or hazardous at use concentrations.

The product contains the mercury-free preservatives, 2-Methyl-4-isothiazolin-3-one (0.02%) and 5-Bromo-5-nitro-1,3-dioxane (0.2%) which can produce adverse health effects in their concentrated forms.

5-Bromo-5-nitro-1,3-dioxane: Acute Oral Toxicity (LD50): 455 mg/kg [rat], 590 mg/kg [mouse].

Section XII: Ecological Information

No data available.

Section XIII: Disposal Considerations

APPROPRIATE WASTE DISPOSAL METHOD:

Observe all federal, state and local laws when considering most appropriate disposal method.

Section XIV: Transport Information

UN Number	Non-regulated, non-hazardous for transport
UN Proper Shipping Name	Non-regulated, non-hazardous for transport
Transport Hazard Class(es)	Non-regulated, non-hazardous for transport
Packing Group	Non-regulated, non-hazardous for transport
Environmental Hazard	Not available
Reportable Quantity (RQ)	None known
Emergency Telephone Number	CHEMTREC: 1-800-424-9300 (US and Canada)
(During Transport)	+1 703-527-3887 (International)
Special Precautions for User	None known

Section XV: Regulatory Information

US FEDERAL REGULATIONS

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):

Not Applicable.

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): Not Listed

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 EPA HAZARD CATEGORIES: Acute Health Hazard

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

INTERNATIONAL REGULATIONS

There are no hazardous ingredients in an amount that requires identification and labeling according to European Community Directives.

EUROPEAN UNION'S REACH (REGISTRATION, EVALUATION, AND AUTHORIZATION OF CHEMICALS)

This product meets the definition of a "preparation." The aggregate volume of each non-exempt substance in this product does not exceed the 1 metric ton per year threshold; therefore, registration is not required.

This safety data sheet has been prepared to comply with the requirements of Annex II, European Community Regulation No. 1907/2006 (REACH) and ANSI Z400.1-2004 guidelines.

Section XVI: Other Information

EU CLASSIFICATION:

Hazard Code:	N = Dangerous for the environment C = Corrosive Xn = Harmful
Risk Statement:	20/21/22 = Harmful if inhalation, in contact with skin and if swallowed 22 = Harmful if swallowed 34 = Causes burns 43 = May cause sensitization by skin contact 50/53 = Very toxic to aquatic organisms, may cause long-term adverse effects
Safety Statement:	24 = Avoid contact with skin 26 = In case of contact with eyes, rinse immediately with plenty of water and seek medical advice 36/37/39 = Wear suitable protective clothing, gloves and eye/face protection 45 = In case of accident or if you feel unwell, seek medical advice immediately 60 = This material and/or its container must be disposed of as hazardous waste 61 = Avoid release to the environment

The above product information is believed to be correct, however, Grace Bio-Labs, Inc. makes no representation of its accuracy or completeness. Persons receiving this information must exercise their independent judgment in determining the products safety and suitability for its intended use.

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