

SAFETY DATA SHEET



Conforms to regulation (EC) no. EU 453/2010

SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Product Name: ProtoBlock System Reagent A

Product Number: CL-252A

1.2 Relevant Identified Uses of the Substance/Mixture and Uses Advised Against

Investigational research by professional users

1.3 Details of the Supplier of the Safety Data Sheet

Manufacturer

National Diagnostics
305 Patton Drive
Atlanta, GA 30036
(404) 699-2121
(800) 526-3867
info@nationaldiagnostics.com

1.4 Emergency Telephone Number

ChemTel Inc.

Contract number MIS8894340
1-800 255-3924 (United States, Canada, Puerto Rico & US Virgin Islands)
01-800-099-0731 (Mexico)
400-120-0751 (China)
000-800-100-4086 (India)
1-300-954-583 (Australia)
0-800-591-6042 (Brazil)
+1-813-255-3924 (All other regions)

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

Not a hazardous substance or mixture according to regulation (EC) No. 1272/2008.

2.2 Label Elements

This product has no labeling elements associated with EC directives or respective national laws.

2.3 Other Hazards

None found.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixture

Chemical Names/Description

Mixture of milk proteins, glycoproteins, and carbohydrates.

Component List

Component	% Comp.	CAS #	EC #	1278/2008 Classification
Nonhazardous Biomolecule Mixture	100	N.A.	N.A.	N.A.
Proprietary Metal Complex	<1			N.A.

SECTION 4 - FIRST AID MEASURES

4.1 Description of First Aid Measures

Inhalation

Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion

If large amounts were swallowed, give water or milk to drink and get medical advice.

Skin

Wash exposed area with soap and water. Get medical advice if irritation develops.

Eyes

Wash thoroughly with running water. Get medical advice if irritation develops.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

Inhalation

Nonhazardous Biomolecule Mixture:

Coughing and shortness of breath with the inhalation of high concentrations.

Proprietary Metal Complex:

No data

Ingestion

Nonhazardous Biomolecule Mixture:

Upset stomach with the consumption of large quantities.

Proprietary Metal Complex:

No data

Skin

Nonhazardous Biomolecule Mixture:

Redness, itching.

Proprietary Metal Complex:

No data

Eyes

Nonhazardous Biomolecule Mixture:

Redness, itching.

Proprietary Metal Complex:

No data

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

Unknown/not applicable

SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishing media

Water spray, dry chemical, alcohol-resistant foam, or carbon dioxide.

5.2 Special Hazards Arising from the Substance/Mixture

Hazardous Combustion Products

Thermal decomposition products may include toxic oxides of nitrogen and carbon.

Hazardous Decomposition Products

Carbon dioxide, carbon monoxide, and nitrogen oxides may form when heated to decomposition.

Hazardous Polymerization

Will not occur under normal conditions of use (See Sections 10.4 & 10.5).

5.3 Advice for Firefighters

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

5.4 Further Information

No data available.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions

Wear appropriate protective equipment as specified in Section 8.

6.2 Environmental Precautions

Prevent discharge into the environment. Dike spills and stop leakage where practical. Do not allow material to enter drains.

6.3 Methods and Materials for Containment and Cleaning Up

Remove all sources of ignition. Ventilate area of leak or spill. Clean up spills in a manner that does not disperse dust into the air. Reduce airborne dust and prevent scattering by moistening with water.

6.4 References to Other Sections

For disposal information, see Section 13. For protective clothing and equipment, see Section 8.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Avoid contact and inhalation. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.

7.2 Conditions for Safe Storage (including any incompatibles)

Keep in a tightly closed container, stored in a cooled, dry, ventilated area.

Incompatibles

Nonhazardous Biomolecule Mixture:

Strong oxidizers.

Proprietary Metal Complex:

Strong bases.

7.3 Specific End Uses

Investigational research by professional users

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PRECAUTIONS

8.1 Control Parameters

Component: Nonhazardous Biomolecule Mixture

ACGIH Threshold Limit Value (TLV): none established

OSHA Permissible Exposure Limit (PEL): none established

Component: Proprietary Metal Complex

ACGIH Threshold Limit Value (TLV): none established

OSHA Permissible Exposure Limit (PEL): None established

8.2 Exposure Controls

Engineering Controls

A system of local and/or general exhaust is recommended to keep employee exposures low. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source.

Respiratory Protection

Not expected to require personal respirator usage.

Eye Protection

Safety glasses.

Skin Protection

Wear protective gloves and clean body covering clothing.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical & Chemical Properties

a. Appearance	White powder	b. Odor	None
c. Odor Threshold	N.A.	d. pH	No Data
e. Melting/Freezing Point (°C)	0	f. Boiling point (°C)	No Data
g. Flash Point (°C)	N.A.	h. Evaporation Rate	N.A.
i. Flammability	N.A.	j. Upper/Lower Flammability or Explosive Limits	N.A.
k. Vapor Pressure	No Data	l. Vapor Density (Air = 1)	No Data
m. Relative Density	No Data	n. Water Solubility	Soluble
o. Partition Coefficient n-octanol/water	Mixture	p. Autoignition Temperature (°C)	N.A.
q. Decomposition Temperature (°C)	N.A.	r. Viscosity	No data available.
s. Explosive Properties	N.A.	t. Oxidizing Properties	N.A.

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity

10.2 Chemical Stability

Stable under normal conditions of use and storage.

10.3 Possibility of Hazardous Reactions

Will not occur under normal conditions of use (See Sections 10.4 & 10.5).

10.4 Conditions to Avoid

Incompatibles.

10.5 Incompatible Materials

Nonhazardous Biomolecule Mixture:

Strong oxidizers.

Proprietary Metal Complex:

Strong bases.

10.6 Hazardous Decomposition Products

Carbon dioxide, carbon monoxide, and nitrogen oxides may form when heated to decomposition.

SECTION 11 - TOXICOLOGICAL INFORMATION

Product LD50 Values

Oral Rat LD50 (mg/kg)

Dermal Rabbit LD50 (mg/kg)

Component Cancer List Status

	NTP Carcinogen		IARC Category
	Known	Anticipated	
Nonhazardous Biomolecule Mixture	No	No	None
Proprietary Metal Complex	No	No	No

Potential Health Effects

Inhalation

Nonhazardous Biomolecule Mixture

Inhalation of high concentrations of dust may irritate the throat.

Proprietary Metal Complex

No data

Ingestion

Nonhazardous Biomolecule Mixture

May produce abdominal irritation if large quantities are consumed.

Proprietary Metal Complex

No data

Skin

Nonhazardous Biomolecule Mixture

May irritate the skin on some super-sensitive persons.

Proprietary Metal Complex

No data

Eyes

Nonhazardous Biomolecule Mixture

May cause mechanical irritation.

Proprietary Metal Complex

No data

Carcinogenicity

Nonhazardous Biomolecule Mixture

No components are listed as known or anticipated carcinogens by NTP or IARC.

Proprietary Metal Complex

No data

Mutagenicity

Nonhazardous Biomolecule Mixture

No information found.

Proprietary Metal Complex

No data

Reproductive Toxicity

Nonhazardous Biomolecule Mixture

No information found.

Proprietary Metal Complex

No data

Teratogenic Effects

Nonhazardous Biomolecule Mixture

No information found.

Proprietary Metal Complex

No data

Routes of Entry

Nonhazardous Biomolecule Mixture
No information found.

Proprietary Metal Complex
No data

Target Organ Statement

Nonhazardous Biomolecule Mixture
No information found.

Proprietary Metal Complex
No data

SECTION 12 - ECOLOGICAL INFORMATION

12.1 Toxicity

COMPONENT: Nonhazardous Biomolecule Mixture

	Vertebrates	Invertebrates	Algae	Microorganisms
Aquatic Toxicity (ppm unless otherwise noted)	No data	No data	No data	No data

	Birds	Arthropods	Plants	Microorganisms
Terrestrial Environment Toxicity (ppm unless otherwise noted)	No data	No data	No data	No data

COMPONENT: Proprietary Metal Complex

	Vertebrates	Invertebrates	Algae	Microorganisms
Aquatic Toxicity (ppm unless otherwise noted)	No data	No data	No data	No data

	Birds	Arthropods	Plants	Microorganisms
Terrestrial Environment Toxicity (ppm unless otherwise noted)	No data	No data	No data	No data

12.2 Persistence and Degradability

Nonhazardous Biomolecule Mixture
No data

Proprietary Metal Complex
No data

12.3 Bioaccumulative Potential

Nonhazardous Biomolecule Mixture
No data

Proprietary Metal Complex
No data

12.4 Mobility in Soil

Nonhazardous Biomolecule Mixture
No data

Proprietary Metal Complex
No data

12.5 Results of PBT and vPvB Assessment

Nonhazardous Biomolecule Mixture
No data

Proprietary Metal Complex
No data

12.6 Other Adverse Effects

Nonhazardous Biomolecule Mixture
None

Proprietary Metal Complex
None

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Offer surplus or non-recyclable product to licensed disposal company. Disposal is subject to user compliance with applicable law and product

characteristics at time of disposal. Dispose of packaging as product.

SECTION 14 - TRANSPORT INFORMATION

	ADR/RID	IATA	IMO	DOT
14.1 UN Number	N.A.	N.A.	N.A.	N.A.
14.2 Shipping Name	No Regulated	Not Regulated	No Regulated	No Regulated
14.3 Hazard Class	N.A.	N.A.	N.A.	N.A.
14.4 Packing Group	N.A.	N.A.	N.A.	N.A.
14.5 Environmental Hazards	N.A.	N.A.	N.A.	N.A.
14.6 Special Precautions	N.A.	N.A.	N.A.	N.A.

SECTION 15 - REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance/Mixture

United States

TSCA Regulatory Statement

All intentional ingredients are listed on the TSCA Inventory.

SARA 311/312 Hazard Categories

Component	Fire	Pressure	Reactivity	Acute	Chronic
Nonhazardous Biomolecule Mixture	No	No	No	No	No
Proprietary Metal Complex	No	No	No	Yes	Yes

Europe

EEC Regulatory

All intentional ingredients are listed on the European EINECS Inventory.

SECTION 16 - OTHER INFORMATION

Revisional Updates

4/26/2019 - Updated Section 1.4

5/29/2015 - Updated Sections 2.1 and 3.2

4/16/2013 - Released Version 1.0

NFPA Codes

Health 0 Flammability 1 Reactivity 0

Dangers

Nonhazardous Biomolecule Mixture

None

Proprietary Metal Complex

None

MANUFACTURER DISCLAIMER: The information given herein is offered in good faith as accurate, but without guarantee. Conditions of the use and suitability of the product for particular uses are beyond our control. All risks of use of the product are therefore assumed by the user. Nothing is intended as a recommendation for uses which infringe valid patents or as extending license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users.