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 B **Product Number:** CL-252B

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

Buffered solution with surfactants and 0.1% proprietary preservative.

Component List

Component	% Comp.	CAS #	EC #	1278/2008 Classification
Proprietary Preservative	0.1%			H300, H400, H410

SECTION 4 - FIRST AID MEASURES

4.1 Description of First Aid Measures

Inhalation

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

Ingestion

Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Call a physician.

Skin

Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eyes

Immediately flush eyes with plenty of water for at least fifteen minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

Inhalation
Sore throat, coughing, dizziness, shortness of breath and fainting (also symptoms parallel to ingestion)

Ingestion
Breathlessness, pulmonary edema and rapid heartbeat within 5 minutes. Nauseau, vomiting, headache, restlessness, and diarrhea may occur within 15 minutes. Other symptoms may include low blood pressure, abnormal breathing, reduced body temperature, reduced body pH, convulsions, collapse and death.

Skin
Causes irritation, redness, and pain (also symptoms parallel to ingestion)

Eyes
Irritation, redness, pain and blurred vision.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed
Unknown/not applicable

SECTION 5 - FIRE FIGHTING MEASURES
5.1 Extinguishing media
N.A.

5.2 Special Hazards Arising from the Substance/Mixture
Hazardous Combustion Products
N.A.

Hazardous Decomposition Products
May form lead/copper azide in laboratory plumbing.

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

5.3 Advice for Firefighters
N.A.

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
Contain and clean up spill immediately, prevent from entering floor drains. Contain liquids using absorbents. Shovel all spill materials into disposal drum. Scrub spill area with detergent, flush with copious amounts of 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
Benzoyl chloride plus potassium hydroxide, bromine, carbon disulfide, chromyl chloride, copper, dibromalononitrile, dimethyl sulfate, lead, barium carbonate, sulfuric acid, nitric acid.

7.3 Specific End Uses
Investigational research by professional users

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PRECAUTIONS
8.1 Control Parameters
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 below the Airborne Exposure Limits. 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

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

Skin Protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical & Chemical Properties

a. Appearance	Colorless liquid	**b. Odor**	None
c. Odor Threshold	N.A.	**d. pH**	7.4
e. Melting/Freezing Point (^{o}C)	0	**f. Boiling point (^{o}C)**	100
g. Flash Point (^{o}C)	N.A.	**h. Evaporation Rate**	as water
i. Flammability	N.A.	**j. Upper/Lower Flammability or Explosive Limits**	N.A.
k. Vapor Pressure	as water	**l. Vapor Density (Air = 1)**	as water
m. Relative Density	as water	**n. Water Solubility**	soluble
o. Partition Coefficient n-octanol/water	Mixture	**p. Autoignition Temperature (^{o}C)**	N.A.
q. Decomposition Temperature (^{o}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

Don't store near acids.

10.5 Incompatible Materials

Benzoyl chloride plus potassium hydroxide, bromine, carbon disulfide, chromyl chloride, copper, dibromalononitrile, dimethyl sulfate, lead, barium carbonate, sulfuric acid, nitric acid.

10.6 Hazardous Decomposition Products

May form lead/copper azide in laboratory plumbing.

SECTION 11 - TOXICOLOGICAL INFORMATION

Product LD50 Values

Oral Rat LD50 (mg/kg)

27000

Dermal Rabbit LD50 (mg/kg)

20000

Component Cancer List Status

	NTP Carcinogen		
	Known	**Anticipated**	**IARC Category**
Proprietary Preservative	No	No	None

Potential Health Effects

Inhalation

Contains 0.1% of a preservative that in concentrated form is highly toxic, causing irritation to the respiratory tract and mucous membranes, sore

throat, coughing, dizziness, shortness of breath and fainting.

Ingestion
Contains 0.1% of a preservative which if ingested in quantity may cause breathlessness, pulmonary edema and rapid heartbeat within 5 minutes. Nausea, vomiting, headache, restlessness, and diarrhea may occur within 15 minutes. Other symptoms may include low blood pressure, abnormal breathing, reduced body temperature, reduced body pH, convulsions, collapse and death.

Skin
Contains 0.1% of a preservative which in concentration causes irritation, redness, and pain, may be absorbed through the skin with symptoms parallel to ingestion.

Eyes
Irritation, redness, pain and blurred vision.

Carcinogenicity
No information found.

Mutagenicity
No information found.

Reproductive Toxicity
No information found.

Teratogenic Effects
No information found.

Routes of Entry
Inhalation, ingestion, skin contact.

Target Organ Statement
Sodium azide may affect the nervous system, kidneys, and cardiovascular system.

SECTION 12 - ECOLOGICAL INFOMATION

12.1 Toxicity

	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
No data

12.3 Bioaccumulative Potential
No data

12.4 Mobility in Soil
No data

12.5 Results of PBT and vPvB Assessment
No data

12.6 Other Adverse Effects
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	Not regulated	Not regulated	Not regulated	Not 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
Proprietary Preservative	Yes	No	Yes	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 N.A. **Flammability** N.A. **Reactivity** N.A.

Dangers

Proprietary Preservative

H300 - Fatal if swallowed.
H400 - Very toxic to aquatic life.
H410 - Very toxic to aquatic life with long lasting effects.