



## **PolyDetector Peroxidase Block Material Safety Data Sheet**

### **Section 1 – Product Information and Company Information**

Product Name	PolyDetector Peroxidase Block
Product Numbers	BSB 0050, BSB 0051, BSB 0052, BSB 0053 and BSB 0054
Brand	Bio SB
Company	Bio SB Inc.
Street Address	69 Santa Felicia Dr.
City, State, Zip, Country	Santa Barbara CA 93117 US
Technical Phone:	805 692 2768
Fax:	805 692 2769

### **Section 2- Composition /Information on ingredients**

<b>Name / %</b>	<b>Formula</b>	<b>CAS #</b>	<b>Hazard Classification</b>
Sodium Azide 0.1- <1%	$\text{NaN}_3$	26628-22-8	T: S35, S45 S53, S61

### **Section 3- Hazards Identification**

#### **EMERGENCY OVERVIEW**

Toxic (USA) Toxic (EU).

Heating may cause an explosion. Toxic in contact with skin and if swallowed.

Contact with acids liberates a toxic gas. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Readily absorbed through skin. Sodium azide may react with lead and copper plumbing to form highly explosive metal azides. Target organ(s): Nerves. Heart.

#### **HMIS RATING**

HEALTH:	2
FLAMMABILITY:	0
REACTIVITY:	2

#### **NFPA RATING**

HEALTH:	2
FLAMMABILITY:	0
REACTIVITY:	2

## **Section 4- First Aid Measures**

### **ORAL EXPOSURE**

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately.

### **DERMAL EXPOSURE**

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes.

### **EYE EXPOSURE**

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

## **Section 5- Fire Fighting Measures**

Container explosion may occur under fire conditions. Azide reacts with many heavy metals such as lead, copper, mercury, silver gold to form explosive compounds. Copper and lead azides are more sensitive than nitroglycerine. Azide reacts with metal alides to give a range of metal azide halides, many of which are explosive. Incompatible with chromyl chloride, hydrazine, bromine, carbon disulfide, dimethyl sulfate, dibromomalonitrile. An explosion occurred when a mixture of sodium azide, methylene chloride, dimethyl sulfoxide, and sulfuric acid were being concentrated on a rotary evaporator.

### **FLASH POINT**

N/A

### **AUTOIGNITION TEMP**

N/A

### **FLAMMABILITY**

N/A

### **EXTINGUISHING MEDIA**

Suitable: Dry chemical powder.

Unsuitable: Do not use water.

### **FIREFIGHTING**

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s): Emits toxic fumes under fire conditions.

## **Section 6- Accidental Release Measures**

### **PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL**

Flush to sewer if allowed or collect on absorbent and dispose in approved landfill.

### **PROCEDURE (S) OF PERSONAL PRECAUTION (S)**

Exercise appropriate precautions to minimize direct contact with skin or eyes.

### **METHODS FOR CLEANING UP**

Sweep up, place in a bag and hold for waste disposal. Wash spill site after material pick up is complete.

## Section 7- Handling and Storage

### HANDLING

User Exposure: Avoid contact with eyes, skin, and clothing. Wear gloves when handling product.

### STORAGE

Suitable: Keep tightly close. Store between 4°C to 8°C.

### SPECIAL REQUIREMENTS

Heat sensitive.

## Section 8- Exposure Controls / PPE

### PERSONAL PROTECTIVE EQUIPMENT

Hand: Protective gloves.

Eye: Chemical safety goggles.

### GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Wash thoroughly after handling.

### EXPOSURE LIMITS, RTECS

Country	Source	Type	Value
USA	ACGIH	Ceiling	co0.29 MG/M3 (SODIUM AZIDE)
New Zealand	OEL		
Remarks: check ACGIH TLV			
USA	NIOSH	Ceiling	co0.1 PPM (SK)

## Section 9- Physical / Chemical Properties

Appearance                      Physical State: Liquid  
    Color: Colorless  
    Form: Liquid

Solubility in water              N/A\*  
Specific gravity                  N/A\*  
Melting point                    N/A\*  
Evaporation Rate                N/A\*

\*N/A = not available

## Section 10- Stability and Reactivity

### STABILITY

Stable: Stable

Conditions of Instability: Heat sensitive.

Conditions to Avoid: Explodes when heated.

Materials to Avoid: Halogenated solvents Avoid contact with metals. Avoid contact with acid, acid chlorides.

## HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Nitrogen oxides reacts with protic solvents (water, alcohols, amines, etc.) to release toxic hydrazoic acid.

Hazardous Decomposition Products Formed Upon Contact with Water: Reacts with protic solvents (water, alcohols, amines, etc.) to release toxic hydrazoic acid

## HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur.

## Section 11- Toxicological Information for Powder form

### ROUTE OF EXPOSURE

Skin Contact: May cause local discomfort.

Eye Contact: May cause eye irritation.

Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion: May be harmful if swallowed.

### SIGNS AND SYMPTOMS OF EXPOSURE

Exposure can cause; Nausea, headache, and vomiting. Laboratory experiments in animals have shown sodium azide to produce a profound hypotensive effect, demyelination of myelinated nerve fibers in the central nervous system, testicular damage, blindness, attacks of rigidity, and hepatic and cerebral effects.

### TOXICITY DATA

Oral Woman	LDLO	786 mg/kg
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Remarks: Behavioral: Convulsions or effect on seizure threshold. Behavioral: Coma.

Cardiac: Arrhythmias (including changes in conduction).

Oral Man	LDLO	29 mg/kg
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Remarks: Brain and coverings: Increased intracranial pressure. Cardiac: Pulse rate.

Lungs, Thorax, or Respiration: Acute pulmonary edema.

Oral Rat	LD50	27 mg/kg
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Skin Rabbit	LD50	20mg/kg
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### CHRONIC EXPOSURE – CARCINOGEN

Species: Rat

Route of Application: Oral

Dose: 2730 GM / KG

Exposure Time: 78W

Frequency: C

Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Endocrine:

Tumors. Skin and Appendages: Other: Tumors.

## Section 12- Ecological Information

### ACUTE ECOTOXICITY TESTS

Test Type: EC50 Daphnia  
Species: Daphnia magna  
Time: 24 h  
Value: 32 mg/l

## Section 13- Disposal Considerations

### APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Contact a licensed professional waste disposal service to dispose of this material.  
Observe all federal, state, and local environmental regulations.

## Section 14- Transport Information

### DOT

Proper Shipping Name: Sodium Azide  
Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

### IATA

Non-Hazardous for Air Transport: Non-Hazardous for air transport.

### Contains

Sodium Azide 0.1- <1%

### HAZARD SYMBOL:

**T**



- S35: This material and its container must be disposed of in a safe way
- S45: In case of accident or if you feel unwell seek medical advice immediately
- S53: Avoid Exposure – Obtain special instructions before use.
- S61: Avoid release to the environment. Refer to special instructions/ safety data sheet  
Restricted to professional users.

## Section 15- Other Information

### DISCLAIMER

For Laboratory use only. Not for drug, household or other uses.

## WARRANTY

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. Bio SB Inc., shall not be held liable for any damage resulting from handling or from contact with the above product.