

# MATERIAL SAFETY DATA SHEET



Conforms to 93/112/EC and ISO 11014-1

## 1. Chemical Product and Company Identification

**Product Name:** Butyl PBD

**Product Number:** SFC-20

### Chemical Names/

#### Description:

2-[4-biphenyl]-5-[4-tert-butylphenyl]-1,3,4-oxadiazole

### Manufacturer

National Diagnostics  
305 Patton Drive  
Atlanta, GA 30336

### Telephone Numbers

(800) 526-3867  
(404) 699-2121

### Emergency Numbers

#### Chemtrec

**(800) 424-9300 (U.S. & Canada)**  
**01-703-527-3887 (outside U.S. & Canada)**

## 2. Composition/Information on Ingredients

Component	% Comp.	CAS #	EINECS #	TLV (Units)
Butyl PBD	99	15082-28-7	239-135-7	none established

## 3. Hazards Identification

### Appearance and Odor

White, odorless powder.

#### EMERGENCY OVERVIEW - IMMEDIATE HAZARD

THE TOXICOLOGICAL PROPERTIES OF THIS MATERIAL HAVE NOT BEEN INVESTIGATED. USE APPROPRIATE PROCEDURES TO PREVENT OPPORTUNITIES FOR DIRECT CONTACT WITH THE SKIN OR EYES AND TO PREVENT INHALATION.

#### EMERGENCY OVERVIEW - CHRONIC HAZARD WARNING:

No information found.

### Potential Health Effects

#### Inhalation

No information found.

#### Ingestion

Information limited. Should be assumed moderately toxic like other aromatic compounds and having the capacity to cause nausea, vomiting and diarrhea as well as depression and possibly liver or kidney

damage on acute exposure. The toxic effects will probably be limited by its low water solubility.

**Skin**

No information found.

**Eyes**

No information found.

**Signs and Symptoms of Overexposure**

**Inhalation**

No information found.

**Ingestion**

Nausea, vomiting, diarrhea.

**Skin**

No information found.

**Eyes**

No information found.

**Carcinogenicity**

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

**Mutagenicity**

No information found.

**Reproductive Toxicity**

No information found.

**Teratogenic Effects**

No information found.

**Routes of Entry**

No information found.

**Target Organ Statement**

No information found.

**4. First Aid Measures**

**Inhalation**

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

**Ingestion**

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical attention immediately.

**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.

**5. Fire Fighting Measures**

Flash Point	No Data	Flammable Limits	No Data
Flash Point Method	No Data	Autoignition temperature	No Data

**Extinguishing media**

Use agent most appropriate to extinguish fire.

### **Protective Equipment**

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.

### **Hazardous Combustion Products**

Irritating and toxic fumes and gases.

### **Unusual Fire and Explosion Hazards**

N.A.

NFPA Codes:    Health   N.D.    Flammability   N.D.    Reactivity   N.D.

## **6. Accidental Release Measures**

### **Steps to be taken in case material is released or spilled**

Remove all sources of ignition. Ventilate area. Clean up in a manner that does not disperse dust. Use non-sparking tools and equipment. Reduce airborne dust by moistening with water. Pick up for recovery or disposal and place in a closed container.

### **Waste Disposal Method**

Disposal must be made in accordance with applicable federal, state, and local regulations.

### **Personal Precautions**

Wear appropriate protective equipment as specified in section 8.

## **7. Handling and Storage**

### **Handling**

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

### **Storage**

Keep in a tightly closed container, stored in a cooled, dry, ventilated area. Protect from physical damage. Isolate from incompatible materials (section 10).

### **Storage Temperature**

Room Temperature

### **Disposal**

Observe all national, state, and local regulations regarding disposal.

## **8. Exposure Controls/Personal Protection**

### **Airborne Exposure Limits**

Component: Butyl PBD

ACGIH Threshold Limit Value (TLV):    none established

OSHA Permissible Exposure Limit  
(PEL):    none established

### **Engineering Controls**

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

### **Respiratory Protection**

For conditions of use where exposure to the dust or mist is apparent, a full-face dust/mist respirator may be worn. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator.

## 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.

## Other Control Measures

There is insufficient data in the published literature to assign complete numerical safety ratings and laboratory protective equipment for this product. Special precautions must be used in storage, use and handling.

## 9. Physical Properties

<b>Boiling point</b>	N.A.	<b>Evaporation Rate</b>	No Data
<b>Melting point</b>	136 - 140 C	<b>Solubility in water</b>	Insoluble
<b>Vapor pressure (mmHg)</b>	No Data	<b>pH</b>	N.A.
<b>Vapor density (Air = 1)</b>	No Data	<b>Specific gravity (H<sub>2</sub>O = 1)</b>	No Data
<b>% volatile by volume</b>	No Data		

## 10. Stability and Reactivity

### Stability

Stable under normal temperatures and pressures.

### Conditions to Avoid

Incompatibles.

### Hazardous Decomposition Products

Irritating and toxic fumes and gases.

### Hazardous Polymerization

Will not occur

### Incompatibles

Butyl PBD:

Strong oxidants.

## 11. Toxicological Information

### Product LD50 Values

Butyl PBD	Oral Rat LD50 (mg/kg):	No Data
Butyl PBD	Dermal Rabbit LD50 (mg/kg):	No Data

### Component Cancer List Status

	NTP Carcinogen		IARC Category
	Known	Anticipated	
Butyl PBD	No	No	None

## 12. Ecological Information

### Butyl PBD

No information available.

## 13. Disposal Considerations

Observe all national, state, and local regulations regarding disposal.

## 14. Transport Information

### D.O.T.

Proper Shipping Name: Not Regulated.

Hazard Class: N.A.

UN Number: N.A.

Packing Group: N.A.

### I.A.T.A.

Proper Shipping Name: Not Regulated.

Hazard Class: N.A.

UN Number: N.A.

Packing Group: N.A.

### I.M.O.

Proper Shipping Name: Not Regulated.

Hazard Class: N.A.

UN Number: N.A.

Packing Group: N.A.

## 15. Regulatory Information

### 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
Butyl PBD	N.D.	N.D.	N.D.	N.D.	N.D.

### Europe

#### EEC Regulatory

All intentional ingredients are listed on the European EINECS Inventory.

## 16. Other Information

**NFPA Codes:**    **Health**   **N.D.**    **Flammability**   **N.D.**    **Reactivity**   **N.D.**

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