

# Material Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.

Trade Name: PHB Pellet  
Product Code: ENMAT Y3000P

Version: 3.0

Revision Date: 2021/1/10

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Product name: PHB Pellet

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: A thermoplastic polyester with a variety of uses

Uses advised against: Not mentioned

### 1.3 Details of the supplier of the safety data sheet

Company Name: Ningbo Tianan Biologic Material Co., Ltd  
68 Dagang 6th Rd. Beilun Ningbo China

Tel: +86-574-86895240

E-mail: [jessy@tianan-enmat.com](mailto:jessy@tianan-enmat.com)

### 1.4 Emergency telephone number

24-hour emergency: +86-13336636366

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

The product has not been classified as hazardous according to the legislation in force.

Classification according to Regulation (EC) No 1272/2008 as amended.

Not classified

### 2.2 Label Elements

Not applicable

### 2.3 Other hazards

None

## SECTION 3: Composition/information on ingredients

Chemical name	CAS Number	Content	Hazardous
Poly(3-Hydroxybutyric acid)	26744-04-7	> 98%	No
Boron nitride	10043-11-5	1%	No
KY1010 (antioxidant)	6683-19-8	0.5%	No

REACH Registration No.: PHB is exempted from REACH registration.

## SECTION 4: First aid measures

**General Information:** Not toxic

### 4.1 Description of first aid measures

**Inhalation:** Not applicable

**Skin Contact:** After contact with skin, wash immediately with plenty of water and soap. Cool burns with molten

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material with warm water, consult doctor if molten resin sticks to skin. Use gloves. Get medical attention if irritation occurs.

**Eye contact:** Get medical attention if irritation occurs.

**Ingestion:** Never give to an unconscious person. Call a physician immediately if getting choked

## 4.2 Most important symptoms and effects, both acute and delayed:

Swallowing by mistake may get choked

## SECTION 5: Firefighting measures

**5.1 Extinguishing Media:** Water, carbon dioxide, dry powder, foam.

Inappropriate Extinguishing Media: None

**5.2 Specific Hazards by the Chemical Composition, by Its Burned Products or by the Emitted**

Gases: Burning products include carbon monoxide(CO), carbon dioxide(CO<sub>2</sub>), or crotonic acid.

**5.3 Special Protection in Fire Fighting:**

Wear self-containing breathing apparatus and chemical- protective clothing.

## SECTION 6: Accidental release measures

**6.1 Personal Protection:** None

**6.2 Protection of the Environment:** None

**6.3 Procedures for Cleaning/Collection:** Shovel into suitable container for disposal.

**6.4 Additional Information:** Biodegradable

## SECTION 7: Handling and storage:

**7.1 Precautions for safe handling:**

Minimize airborne dust and eliminate all ignition sources. Keep away from heat, hot surfaces, sparks, and flame.

**7.2 Conditions for safe storage:**

Store in a cool place, sealed. Keep at temperatures below 140F (60C).

**7.3 Specific end use(s):**

Thermoplastics processing to make biodegradable products

## SECTION 8: Exposure controls/personal protection

### 8.1 Control Parameters

**Specific Limits in Germany (AGW):** Not applicable

**Specific Limits of the EU:** Not applicable

**Surveillance of the Exposition:** Not applicable

### 8.2 Individual protection measures, such as personal protective equipment

**Personal Protection:** Not applicable

**Respiratory Protection:** Wear a NIOSH-certified respirator in case of burning

**Hand Protection:** Wear gloves when handling molten resins

**Eye Protection:** Not applicable

**Protection of the Body:** Not applicable

**Information for Work Hygiene:** Not applicable

**Environmental Protection:** Not applicable, biodegradable

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Form: Pellets  
Color: Off-white to beige  
Odor: Odorless to slightly sourish  
Explosion: Not applicable  
Lower Explosion Limit: Not applicable  
Upper Explosion Limit: Not applicable  
Vapor Pressure: Not applicable  
Density: 1.25g/ml, (ISO 2811-1)  
Solubility in Water: Not soluble  
PH Value: Not applicable  
Boiling Point Range: Not applicable  
Flammability Point: Not applicable  
Ignition Temperature: Not applicable

9.2 Other information: None

## SECTION 10: Stability and reactivity

### 10.1 Reactivity:

Under normal conditions: stable

### 10.2 Chemical Stability:

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions:

None

### 10.4 Conditions to avoid:

Extremes of temperature and direct sunlight; avoid strong acids, alkali, oxidizing agents.

### 10.5 Incompatible Materials:

Not known

### 10.6 Hazardous Decomposition Products:

None

## SECTION 11: Toxicological information

**General Information:** Not toxic, not irritant

**Toxicological Information:** None

**Observation During Use:** None

**Data for composition:** No toxic additives

## SECTION 12: Ecological information

### 12.1 Toxicity

**Fish:** Not applicable

**Aquatic Invertebrates:** Not applicable

**Water Plants:** Not applicable

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**12.2 Persistence and Degradation:** Biodegradable

**12.3 Bioaccumulation Potential:** Does not bioaccumulate. Inherently biodegradable.

**12.4 Mobility in soil:** Biodegradable

**12.5 Results of PBT and vPvB:** Not available

**12.6 Other adverse effects:** No data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

General information: No data available

Disposable methods: Dispose like plastics

Contaminated Packaging: No data available

## SECTION 14: Transport information

### 14.1 UN number:

Not regulated as a dangerous good

### 14.2 UN proper shipping name

Not regulated as a dangerous good

### 14.3 Transport hazard class(es)

Not regulated as a dangerous good

### 14.4 Packing group

Not regulated as a dangerous good

### 14.5 Environmental hazards

Not regulated as a dangerous good

### 14.6 Special precautions for user

Not applicable

### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations / legislation specific for the substance or mixture

Not applicable

### 15.2 Chemical safety assessment

No safety analysis was performed for this product or composition

## SECTION 16: Other information

**EU Regulations:** Not regulated

**Restrictions Suggested by the Producer:** Not applicable

**Other Suggestions:** Not applicable

**Changes Since Last Update:** None

**Producer of the Safety Data Sheet:** Ningbo Tianan Biologic Material Co., Ltd.

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**END OF DATA SHEET**