

## SAFETY DATASHEET

### Bluepha® PHA powder BP350-PD

according to Regulation (EC) No. 1907/2006

Version 2.0 Revision Date 06.30.2023

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GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA

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

### 1.1 Product identifiers

Product Name: Poly((R)-3-hydroxybutyrate-co-(R)-3-hydroxyhexanoate)

Product Code: BP350-PD

Brand: Bluepha®

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

Identified Uses : Laboratory chemicals, Manufacture of substances

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

Company: Jiangsu Lansu Biomaterial Co., Ltd.

Zhongshan 6th Road, Binhai Coastal Industrial Park, Yancheng, China

Telephone: +86 10-69730126

E-mail address: [contact@bluepha.com](mailto:contact@bluepha.com)

## 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.

This substance is not classified as dangerous according to Directive 67/548/EEC.

### 2.2 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Chemical Name	CAS No.	Content (%)
Poly((R)-3-hydroxybutyrate-co-(R)-3-hydroxyhexanoate)	147398-31-0	≥99.5
Water	7732-18-5	≤0.5

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## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### If inhaled

If inhaled, move the patient to fresh air. If the patient is not breathing, give artificial respiration.

#### In case of skin contact

Take off immediately all contaminated clothing. Rinse skin with water/ shower.

#### In case of eye contact

Rinse out with plenty of water. Remove contact lenses.

#### If swallowed

Make victim drink water (two glasses at most). Consult doctor if feeling unwell.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide (CO<sub>2</sub>) dry powder.

#### Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

### 5.2 Special hazards arising from the substance or mixture

Carbon oxides.

Combustible.

Development of hazardous combustion gases or vapours possible in the event of fire.

### 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire-fighting if necessary.

### 5.4 Further information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

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## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

### 6.2 Environmental precautions

Do not let product enter drains.

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### 6.3 Methods and materials for containment and cleaning up

Sweep up and collect spills. Keep in suitable, closed containers for disposal.

Observe possible material restrictions(see sections 7 and 10).

### 6.4 Reference to other sections

For disposal see section 13.

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Provide proper exhaust ventilation in areas where dust is formed. Prepare normal measures for preventive fire protection.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in a ventilated and cool warehouse, avoid direct sunlight and prevent moisture.

Air, light, heat, and moisture sensitive.

### 7.3 Specific end use(s)

A part from the uses mentioned in section 1.2 no other specific uses are stipulated

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Components with workplace control parameters

### 8.2 Exposure controls

#### Appropriate engineering controls

General industrial hygiene practice.

#### Personal protective equipment

##### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses.

##### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

##### Body Protection

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US)

or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or GEN (EU). The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

#### Control of environmental exposure

Do not let product enter drains.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

a)	Appearance Form	Powder
b)	Colour	White, opaque
c)	Odour	Odourless to slightly sourish
d)	pH	No data available
e)	Melting Temperature ( $T_m$ )	136±2°C
f)	Glass Transition Temperature ( $T_g$ )	-3±1°C
g)	Initial boiling point and boiling range	No data available
h)	Flash point	Not applicable
i)	Evaporation rate	No data available
j)	Flammability (solid, gas)	No data available
k)	Upper/lower flammability or explosive limits	No data available
l)	Vapour pressure	No data available
m)	Vapour density	No data available
n)	Relative density	1.20±0.02g/cm <sup>3</sup>
o)	Bulk density	0.2±0.05g/cm <sup>3</sup>
p)	Water solubility	Not soluble
q)	Partition coefficient: noctanol/water	No data available
r)	Auto-ignition temperature	No data available
s)	Decomposition temperature	250°C
t)	Viscosity	No data available
u)	Explosive properties	No data available
v)	Oxidizing properties	No data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

### 10.2 Chemical stability

The product is chemically stable under recommended storage conditions.

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### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

Strong oxidizing agents

### 10.6 Hazardous decomposition products

Other decomposition products - no data available

In the event of fire: see section 5

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

No data available

#### Skin corrosion/irritation

No data available

#### Serious eye damage/eye irritation

No data available

#### Respiratory or skin sensitisation

No data available

#### Germ cell mutagenicity

No data available

#### Carcinogenicity

No data available

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### Reproductive toxicity

No data available

#### Specific target organ toxicity - single exposure

No data available

#### Specific target organ toxicity - repeated exposure

No data available

#### Aspiration hazard

No data available

#### Additional Information

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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## SECTION 12: Ecological information

### 12.1 Toxicity

No data available

### 12.2 Persistence and degradability

No data available

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Other adverse effects

No data available

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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

#### Contaminated packaging

Dispose of as unused product.

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## SECTION 14: Transport information

### 14.1 UN number

ADR/RID: -

IMDG: -

IATA: -

### 14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

### 14.3 Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA: -

### 14.4 Packaging group

ADR/RID: -

IMDG: -

IATA: -

### 14.5 Environmental hazards

ADR/RID: No

IMDG Marine pollutant: No

IATA: No

### 14.6 Special precautions for user

Not classified as dangerous in the meaning of transport regulations.

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## **SECTION 15: Regulatory information**

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

### **15.2 Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out

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## **SECTION 16: Other information**

### **Further information**

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.

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