

# Safety Data Sheet

## BioPBS™ (FD Type)

### 1. Identification of the substance and of the supplier

Safety Data Sheet according to Regulation (EU) 2020/878 (amending Annex II of REACH Regulation (EC) No 1907/2006)

#### 1.1 Product identifiers

Product Name : BioPBS™ (FD Type)  
Grade Name : FD92PM, FD92PB, FD92PK, FD72PM, FD72PB, FD52PM, FD52PB

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

Relevant Identified uses : Polymer  
Recommended use : For industrial processing only

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

Company : PTT MCC Biochem Company Limited 555/1 Energy Complex  
Tower, Building A, 16<sup>th</sup> Floor, Vibhavadi Rangsit Rd. Chatuchak,  
Bangkok 10900  
Telephone : +66 (0) 2140-3555  
Fax : +66 (0) 2140-3556

#### 1.4 Emergency telephone number

Emergency telephone number : +66 (0) 2140-3555  
For emergency information within the EU, please contact your local poison center.

### 2. Hazards Identification

This substance is not classified as hazardous according to Regulation (EC) No 1272/2008 (CLP).

#### 2.1 Classification according to Regulation (EC) No 1272/2008 (CLP)

Not classified.

#### 2.2 Label elements according to Regulation (EC) No 1272/2008 (CLP)

Hazard pictogram : None  
Signal word : None  
Hazard statements : None  
Precautionary statements : None required

#### 2.3 Other hazards

The substance does not contain SVHC substances  $\geq 0.1\%$  (w/w).

### 3. Composition/Information on Ingredients

3.1 Substance or mixture: Substance

3.2 Chemical name (or Nonproprietary name): Aliphatic Polyester  
Content: 98-100%

#### 3.3 Chemical or structural formula:

Polyester having the structure of  $-\text{[OC}_4\text{H}_8\text{O]}-$ ,  $-\text{[COC}_2\text{H}_4\text{CO]}-$  and  $-\text{[COC}_4\text{H}_8\text{CO]}$

### 3.4 CAS number:

67423-06-7

The product is a polymer and is exempted from registration under REACH.

## 4. First Aid Measures

### 4.1 Description of first aid measures

#### Inhalation:

Move person to fresh air. If patient is not breathing or breathing irregular, provide artificial respiration. Obtain medical attention by physician if symptoms persist.

#### Skin contact:

Remove pellets and dusts from skin, clothes, shoes, etc. If molten matter comes into contact with skin, pour plenty of water on the clothes in order to cool the affected skin area sufficiently. Take off the clothes and cover the affected skin area with clean gauze. Consult a specialist as soon as possible.

#### Eye contact:

Rinse the eyes with plenty of clean water for at least 15 minutes. While rinsing the eyes, open the eyelids wide with fingers to let the water reach all the portions of the eyes. Do not rub the eyes. Remove any contact lenses if easy to do. Then, consult an ophthalmologist.

#### Ingestion:

Wash the mouth thoroughly with water.

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

Molten polymer may cause burn. Dust contact with the eyes can lead to irritation.

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

Treatment is symptomatic and supportive.

## 5. Fire Fighting Measures

### 5.1 Extinguishing media

Water spray; Carbon dioxide; foam; dry chemical powder

### 5.2 Special hazards arising from the substance

Carbon monoxide, Carbon dioxide.

### 5.3 Special protective equipment and precautions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

## 6. Accidental Release Measure

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

If material remains on the floor or ground, it may make the surface slippery. Remove pellets frequently. Avoid generating dust. When working, wear appropriate protective equipment and avoid breathing dust. Eliminate all sources of ignition near the area of the leak. Use proper personal protection equipment as indicated in section 8.

### 6.2 Environmental precautions

To avoid affecting the environment, prevent spilled material from entering rivers or other aquatic environments.

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

Sweep up dispersed material and place it in an empty container that can be tightly closed. If possible, first moisten dispersed material to prevent dust from rising.

## 7. Handling and Storage

### 7.1 Precautions for safe handling

Handle in well-ventilated places.  
Avoid contact with skin and eyes.

Avoid breathing dust, vapour, as all types of polymers may develop dust during transporting or grinding of granules. Do not use hook for handling bag, stack correctly.

## 7.2 Conditions for safe storage, including any incompatibilities

### Storage stability:

Store in a dry place.

Protect against moisture.

Store away from excessive heat. No direct sunlight.

### General Advice:

Keep container tightly closed. Avoid deposition of dust.

## 8. Exposure Controls/Personal Protection

### 8.1 Control parameters

No EU occupational exposure limits established for this substance.

DNEL: Not available

PNEC: Not available

### 8.2 Appropriate engineering controls

Use local exhaust ventilation

### 8.3 Personal protective equipment

**Respiratory protection** : Dust respirator

**Hand protection** : Safety gloves

**Eye protection** : Safety glasses

**Skin and body protection** : Safety clothes (with long sleeves), safety shoes

### 8.4 Work / Hygienic Practices

Eating, drinking and smoking in work areas is prohibited.

Wash hands after use.

Remove contaminated clothing and protective equipment before entering eating areas.

## 9. Physical and Chemical Properties

|   |                     |
|---|---------------------|
| a) Appearance and Colour                          | White granule       |
| b) Odour  | Slight odour        |
| c) Odour threshold                                | No data available   |
| d) pH   | No data available   |
| e) Melting point/freezing point                   | 84°C                |
| f) Initial boiling point and boiling range        | Not applicable      |
| g) Flash point                                    | >300°C (estimated)  |
| h) Evaporation rate                               | No data available   |
| i) Flammability (solid, gas)                      | No data available   |
| j) Upper/lower flammability or explosive limits   | Not applicable      |
| k) Vapour pressure                                | Not applicable      |
| l) Vapour density                                 | Not applicable      |
| m) Relative density                               | 1.20 to 1.30        |
| n) Water solubility                               | Insoluble in water  |
| o) Partition coefficient: n-octanol/water log Pow | No data available   |
| p) Auto ignition temperature                      | > 300°C (estimated) |
| q) Decomposition temperature                      | No data available   |
| r) Viscosity                                      | No data available   |

## 10. Stability and Reactivity

### 10.1 Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

### 10.2 Chemical stability

The product is stable if stored and handled as prescribed/indicated.

### 10.3 Possibility of hazardous reactions

The product is stable if stored and handled as prescribed/indicated.

### 10.4 Conditions to avoid

High moisture and temperature

### 10.5 Incompatible materials

No data available

### 10.6 Hazardous decomposition products

Carbon monoxide, Carbon dioxide, Hydrocarbons and other oxides.

## 11. Toxicological Information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

|                                   |   |   |
|-----------------------------------|---|---|
| Acute toxicity                    | : | LD50 oral rat > 5000 mg/kg  |
| Skin corrosion/irritation         | : | May cause skin irritation. Molten polymer may cause thermal burns.          |
| Serious eye damage/irritation     | : | Dust or powder contact with the eyes can lead to mechanical irritation.     |
| Respiratory or skin sensitization | : | May affect to respiratory tract in case of the material is in powder state. |
| Germ cell mutagenicity            | : | Not classified.   |
| Carcinogenicity                   | : | Not classified.   |
| Reproductive toxicity             | : | Not classified.   |
| STOT – single exposure            | : | Not classified.   |
| STOT – repeated exposure          | : | Not classified.   |
| Aspiration hazard                 | : | With ingestion, nausea, vomiting, and diarrhea are common                   |

### 11.2 Information on other hazards

**Immediate effect** : May cause skin irritation. Mechanical eye irritation is possible. After inhalation of process fumes and vapour may cause soreness in the nose and throat, cough and wheezing are common.

**Chronic effects** : No data available

**Endocrine disrupting properties** : Not applicable.

## 12. Ecological Information

### 12.1 Ecotoxicity

Acute aquatic toxicity : No data available  
The substance is not classified as hazardous to the aquatic environment according to Regulation (EC) No 1272/2008.

**12.2 Persistence and degradability** : Biodegradation to CO<sub>2</sub> under controlled composting conditions (EN 13432)

**12.3 Bioaccumulative potential** : No data available

**12.4 Mobility in soil** : No data available

**12.5 Results of PBT and vPvB assessment** : PBT assessment: Not applicable.  
vPvB assessment: Not applicable.

### 12.6 Other adverse effects

Do not dump or discharge the material into aquatic environments, so as to prevent marine organisms from ingesting material.

## 13. Disposal Considerations

### 13.1 Waste treatment methods

Disposal must be according to applicable Federal, State and Local regulations

### 13.2 Contaminated packaging

Disposal must be according to applicable Federal, State and Local regulations

## 14. Transport Information

**14.1 UN number** : None

**14.2 UN proper shipping name** : None

|  |   |                   |
|--|---|-------------------|
| <b>14.3 Transport hazard class(es)</b>   | : | None              |
| <b>14.4 Packaging group</b>              | : | None              |
| <b>14.5 Environmental hazards</b>        | : | None              |
| <b>14.6 Transport in bulk</b>            | : | None              |
| <b>14.7 Special precautions for user</b> | : | No data available |

## 15. Regulatory Information

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

|                |   |   |   |
|----------------|---|---|---|
| <b>Europe:</b> | Registration, Evaluation, Authorisation and Restriction of Chemical Regulation (EC) No.1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP) | : | The substance is a polymer and is exempt from registration under Article 2(9) of REACH. |
|----------------|---|---|---|

### 15.2 Chemical Safety Assessment

No data available

## 16. Other Information

To the best of our knowledge, the information contained herein is corrected and reliable as of the date of publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, and disposal. The information relates only to the specific material designated and not valid for such material used in combination with any other material or in any process. It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose. PTT MCC Biochem Co.,Ltd. makes no warranties which extend beyond the description contained herein. Nothing herein shall constitute any implied warranty of merchantability or fitness for a particular purpose.