

# SAFETY DATA SHEET

According to Work Health and Safety Regulations 2011 and National Model Code of Practice for the preparation of Safety Data Sheets for Hazardous Chemicals

Version 1.0

Issue date: 18/09/2020

Revision date: 18/09/2020

SDS Record Number: CSSS-TCO-100-200918

## 1. Identification of the material and supplier

**Material name:** PolyTerra™ PLA  
**Other Names:** -  
**Recommended use:** 3D Printing Filament  
**Manufacturer:**  
**Supplier(Manufacturer):** JF Polymers (Suzhou) Co., Ltd.  
**Address:** Building 6&7&11, No.2, Hai Cheng Road, Chang Shu Economic & Technological Development Zone, 215513, People's Republic of China  
**Contact person(E-mail):** zhenggang.cai@polymaker.com  
**Telephone:** 0086-512-52058005  
**Fax:** -  
**Emergency number:** 0086-512-52058005  
**Importer :**  
**Company name:**  
**Address:**  
**Contact person(E-mail):**  
**Telephone:**  
**Fax:**  
**Emergency number:**

## 2. Hazards identification

**GHS classification:**  
**Physical hazards:** Not classified  
**Health hazards:** Not classified  
**Environmental hazards:** Not classified  
**GHS label elements:**  
**Hazard Pictograms :** No hazard pictogram is used.  
**Signal word:** No signal word is used.  
**Hazard statement:** Not applicable.  
**Precautionary statement:**  
**Prevention:** Not applicable.  
**Response:** Not applicable.  
**Storage:** Not applicable.  
**Disposal:** Not applicable.  
**Specific hazards:** Not applicable.

## 3. Composition/information on ingredients

| Components        | CAS No.    | Percent |
|-------------------|------------|---------|
| Poly(lactic acid) | 26100-51-6 | > 60%   |

## 4. First aid measures

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|                            |  |
|----------------------------|--|
| <b>Inhalation:</b>         | Remove to fresh air. Get medical attention for any breathing difficulty.   |
| <b>Skin:</b>               | Wash off with soap and plenty of water.  |
| <b>Eye:</b>                | Immediately flush eyes with plenty of water, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists. |
| <b>Ingestion:</b>          | If large amounts were swallowed, get medical advice.   |
| <b>Notes to physician:</b> | Treat symptomatically.   |

## 5. Fire-fighting measures

|   |   |
|---|---|
| <b>Suitable extinguishing media:</b>                                  | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.   |
| <b>Extinguishing media which must not be used for safety reasons:</b> | Not available.  |
| <b>Specific hazards arising from the chemical:</b>                    | No specific fire or explosion hazard.   |
| <b>Fire Fighting:</b>   | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |
| <b>HAZCHEM code</b>   | None.   |

## 6. Accidental release measures

|                                 |  |
|---------------------------------|--|
| <b>Personal precautions:</b>    | Avoid dust formation.  |
| <b>Containment procedures:</b>  | Do not let product enter drains.   |
| <b>Methods for cleaning up:</b> | Sweep up and shovel. Keep in suitable, closed and properly labelled containers for disposal. |

## 7. Handling and storage

|                                       |   |
|---------------------------------------|---|
| <b>Precautions for safe handling:</b> | Provide appropriate exhaust ventilation at places where dust is formed. |
| <b>Storage:</b>                       | Keep container closed in a cool, dry place.                             |

## 8. Exposure controls/personal protection

|  |   |
|--|---|
| <b>Control parameters</b>                | Follow standard monitoring procedures   |
| <b>Occupational exposure limits</b>      | No exposure limits noted for ingredient(s).   |
| <b>Biological limit values:</b>          | No biological exposure limits noted for the ingredient(s).  |
| <b>Exposure guidelines</b>               | No exposure standards allocated.  |
| <b>Appropriate engineering controls:</b> | Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. |
| <b>Personal protective equipment:</b>    |   |
| <b>Eye/face protection:</b>              | Safety goggles.   |
| <b>Skin protection:</b>                  | Wear protective clothing.   |
| <b>Respiratory protection:</b>           | Use with adequate ventilation. In case of insufficient local exhaust ventilation, wear protective mask.   |
| <b>Hand protection:</b>                  | Wear protective gloves.   |

## 9. Physical and chemical properties

|                         |               |
|-------------------------|---------------|
| <b>Appearance:</b>      |               |
| <b>Physical state:</b>  | Solid         |
| <b>Form:</b>            | Solid         |
| <b>Color:</b>           | Various       |
| <b>Odor:</b>            | Not available |
| <b>Odour threshold:</b> | Not available |

|  |                        |
|--|------------------------|
| <b>PH:</b>   | Not available          |
| <b>Melting point/Freezing point:</b>                 | 170°C                  |
| <b>Initial boiling point and boiling range:</b>      | Not available          |
| <b>Flash point:</b>                                  | Not available          |
| <b>Evaporation rate:</b>                             | Not available          |
| <b>Flammability (solid, gas) :</b>                   | Not available          |
| <b>Upper/lower flammability or explosive limits:</b> | Not available          |
| <b>Vapor pressure:</b>                               | Not available          |
| <b>Vapor density:</b>                                | Not available          |
| <b>Density:</b>                                      | 1.32 g/cm <sup>3</sup> |
| <b>Solubility (H<sub>2</sub>O) :</b>                 | Insoluble              |
| <b>Partition coefficient (n-octanol/water) :</b>     | Not available          |
| <b>Auto-ignition temperature:</b>                    | Not available          |
| <b>Decomposition temperature:</b>                    | Not available          |
| <b>Viscosity, dynamic:</b>                           | Not available          |
| <b>Organic solvents:</b>                             | Not available          |
| <b>Water:</b>  | Not available          |
| <b>VOC (EC) :</b>                                    | Not available          |
| <b>Solids contents:</b>                              | Not available          |
| <b>Molecular Formula:</b>                            | Not available          |
| <b>Molecular Weight:</b>                             | Not available          |

## 10. Stability and reactivity

|  |   |
|--|---|
| <b>Reactivity:</b>                         | The substance is stable under normal storage and handling conditions.                         |
| <b>Chemical stability:</b>                 | Stable at room temperature in closed containers under normal storage and handling conditions. |
| <b>Possibility of hazardous reactions:</b> | No dangerous reactions known.   |
| <b>Conditions to avoid:</b>                | Incompatible materials.   |
| <b>Incompatible materials:</b>             | Strong oxidizing agents   |
| <b>Hazardous decomposition products:</b>   | Carbon oxides.  |

## 11. Toxicological information

|   |   |
|---|---|
| <b>Toxicological data:</b>                |   |
| <b>Acute toxicity:</b>                    |   |
| LD50(Oral, Rat):                          | Not available   |
| LD50(Dermal, Rabbit):                     | Not available   |
| LC50(Inhalation, Rat):                    | Not available   |
| <b>Skin corrosion/Irritation:</b>         | No data available.  |
| <b>Serious eye damage/irritation:</b>     | No data available.  |
| <b>Respiratory or skin sensitization:</b> | No data available.  |
| <b>Germ cell mutagenicity:</b>            | No data available.  |
| <b>Carcinogenicity:</b>                   | No data available.  |
| <b>Reproductive toxicity:</b>             | No data available.  |
| <b>STOT- single exposure:</b>             | No data available.  |
| <b>STOT-repeated exposure:</b>            | No data available.  |
| <b>Aspiration hazard:</b>                 | No data available.  |
| <b>Other information</b>                  | This product has no known adverse effect on human health. |

## 12. Ecological information

## Toxicity:

| Acute toxicity |     | Time | Species | Method   | Evaluation | Remarks |
|----------------|-----|------|---------|----------|------------|---------|
| LC50           | N/A | 96h  | Fish    | OECD 203 | N/A        | N/A     |
| EC50           | N/A | 48h  | Daphnia | OECD 202 | N/A        | N/A     |
| EC50           | N/A | 72h  | Algae   | OECD 201 | N/A        | N/A     |

|                                       |   |
|---------------------------------------|---|
| <b>Persistence and degradability:</b> | Not available.  |
| <b>Bioaccumulative potential:</b>     | Not available.  |
| <b>Mobility in soil:</b>              | Not available.  |
| <b>Other adverse effects:</b>         | No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component. |

## 13. Disposal considerations

|   |  |
|---|--|
| <b>Disposal methods:</b>                    | Collect and reclaim or dispose in sealed containers at licensed waste disposal site.   |
| <b>Waste from residues/unused products:</b> | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). |
| <b>Contaminated packaging:</b>              | Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.       |

## 14. Transport information

### ADG

|                             |   |
|-----------------------------|---|
| <b>UN number</b>            | Not regulated   |
| <b>Proper shipping name</b> | Not regulated   |
| <b>Hazard class</b>         | Not regulated   |
| <b>Packing group</b>        | Not regulated   |
| <b>Labels required</b>      | Not regulated   |
| <b>Special precautions</b>  | Read safety instructions, SDS and emergency procedures before handling. |

### IATA

|                             |   |
|-----------------------------|---|
| <b>UN number</b>            | Not regulated   |
| <b>Proper shipping name</b> | Not regulated   |
| <b>Hazard class</b>         | Not regulated   |
| <b>Packing group</b>        | Not regulated   |
| <b>Special precautions</b>  | Read safety instructions, SDS and emergency procedures before handling. |

### IMDG

|                              |   |
|------------------------------|---|
| <b>UN number</b>             | Not regulated   |
| <b>Proper shipping name</b>  | Not regulated   |
| <b>Hazard class</b>          | Not regulated   |
| <b>Packing group</b>         | Not regulated   |
| <b>Environmental hazards</b> |   |
| <b>Marine pollutant</b>      | No  |
| <b>Special precautions</b>   | Read safety instructions, SDS and emergency procedures before handling. |

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** Not regulated

## 15. Regulatory information

### Safety, health and environmental regulations

**National regulations** This Safety Data Sheet was prepared in accordance with Australia Model Code of Practice for

the preparation of Safety Data Sheets for Hazardous Chemicals (23/12/2011). Additional information is given in the Safety Data Sheet.

**Australia Medicines & Poisons Appendix A/B/D-K / Australia Medicines & Poisons Schedule 2/3/5-10**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Schedule 4**

Poly(lactic acid) (CAS 26100-51-6)

**High Volume Industrial Chemicals (HVIC)**

Not listed.

**Importation of Ozone Depleting Substances (Customs(Prohibited imports) Regulations 1956, Schedule 10)**

Not listed.

**National Pollutant Inventory (NPI) substance reporting list**

Not listed.

**Prohibited Carcinogenic Substances**

Not regulated.

**Prohibited Substances (National Model Regulation for the control of Workplace Hazardous Substances, Schedule 2**

**NOHSC:1005 (1994) as amended)**

Not listed.

**Restricted Importation of Organochlorine Chemicals (Customs(Prohibited Imports) Regulations 1956, Schedule 9)**

Not listed.

**Restricted Carcinogenic Substances**

Not regulated.

**International regulations**

**Stockholm Convention**

Not applicable

**Rotterdam Convention**

Not applicable.

**Kyoto protocol**

Not applicable.

**Montreal Protocol**

Not applicable.

**Basel Convention**

Not applicable.

**Inventory status:**

| <b>Country(s) or region</b> | <b>Inventory name</b>   | <b>On inventory (yes/no)*</b> |
|-----------------------------|---|-------------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)  | Not available                 |
| Canada                      | Domestic /Non-Domestic Substances List (DSL) /(NDSL)  | Not available                 |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)                                  | Not available                 |
| Europe                      | European Inventory of Existing Commercial/ Notified Chemical Substances (EINECS) / (ELINCS) | Not available                 |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)                                    | Not available                 |
| Korea                       | Existing Chemicals List (ECL)   | Not available                 |
| New Zealand                 | New Zealand Inventory   | Not available                 |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)                           | Not available                 |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory   | Not available                 |

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information

**Indication of changes:** Version 1.0

Material name: PolyTerra™ PLA  
Version #: 1.0 Issue date: 18-09-2020. Revision date: 18-09-2020.

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**Training instructions:**

Not applicable.

**Further information:**

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

**Declare to reader:**

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. This shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.