EMNANDI BIOPLASTICS
BEYOND NET ZERO

# Technical Data Sheet

## BIOMAT BIOPBS C313A

BIOMAT BIOPBS C313A is a bio-based polybutylene succinate (PBS) produced from polymerisation of bio-based succinic acid and 1,4-butanediol. Alike LDPE, BIOMAT BIOPBS C313A is soft and flexible semi-crystalline polyester with excellent properties suitable for injection moulding articles for general purpose.

| Applications | Features |
|---|---|
| General Purpose | Semi Crystalline |
| | High Heat Resistance |
| | Short Cycle Time |
| | Soft and Flexible |
| | Dimensional Stability |
| | Renewable Resource Content |
| | Good Processability |
| | Food Contact Acceptable |

| Sustainability | |
|---|---|
| Bio-Based Content | 51% |
| Compostability | Industrially Compostable |

| Physical Properties | | | | |
|---|---|---|---|---|
| Density | 1.26 | g/cm³ | ISO 1183 | |
| Melt Mass Flow Rate | 22 | g/10min | ISO 1133 | (190°C/2.16 kg) |

| Mechanical Properties | | | | |
|---|---|---|---|---|
| Flexural Modulus | 630 | MPa | ISO 178 | |
| Flexural Strength | 40 | MPa | ISO 178 | |
| Notched Izod Impact Strength' | 7 | kJ/m² | ISO 180 | |
| Shrinkage | 1.4 | % | | Flow |
| Tensile Strain at Break | 170 | % | ISO 527-2 | |
| Tensile Stress at Break | 30 | MPa | ISO 527-2 | |
| Tensile Stress at Yield | 40 | MPa | ISO 527-2 | |

| Thermal Properties | | | | |
|---|---|---|---|---|
| Glass Transition Temperature | 28 | °C | | |
| Heat Distortion Temperture | 95 | °C | ISO 75-1 | (0.45 Mpa) |
| Melt Temperature | 115 | °C | ISO 3146 | |

| Processing Methods |
|---|
| Injection Moulding |

| Injection Parameters | |
|---|---|
| Front Temperature | 200 °C |
| Hopper Temperature | 60 °C |
| Middle Temperature | 190 °C |
| Mould Temperature | 25 - 40 °C |
| Nozzle Temperature | 190 °C |
| Rear Temperature | 180 °C |

**Forms**

Pellets

**Appearance**

Clear/Transparent

**Notes**

**Estimated Properties**

Properties identified as 'Estimated**' have been estimated from the generic equivalent. These are provided for comparative purposes and are not reflective of the actual grade as the relevant data is not available.

**Storage Recommendations**

Keep dry at ambient temperature. Store indoors avoiding a humid environment, heat and direct sunlight. Use material within 6 months after delivery date, in order to prevent possible material quality deterioration.