

# Technical Data Sheet & Processing Guide

**Product Name:** ENMAT PHBV powder  
**Product Code:** Y1000

**Revision date:** 2022/9/17

## **ENMAT™ Thermoplastics Resin Y1000**

ENMAT Y1000 is a thermoplastics that can be used as a primary composition in the following applications:

- Injection molding
- Thermoforming
- Blown films
- Extrusions

## **Typical Material Properties**

| Item                             | Data      | Test Standard                          |
|----------------------------------|-----------|--|
| Specific Gravity                 | 1.25      | ISO 1183-3:1999                        |
| Melt Flow Index                  | 1-5       | ISO 1133:1997, g/10 min, 190°C, 2.16kg |
| Yield Stress ( MPa)              | 31-36     | ISO 527-1:1993                         |
| Tensile Strength (MPa)           | 36-39     | ISO 527-1:1993                         |
| Elongation at Break (%)          | 1-3       | ISO 527-1:1993                         |
| Young's Modulus(MPa)             | 1600-2100 | ISO 527-1:1993                         |
| Flexural Modulus (MPa)           | 800-1100  | ISO 178:1993                           |
| Vicat Softening Temperature (°C) | 166       | ISO 306:1994                           |
| Izod Impact (J/m)                | 55-60     | ISO 180:2000                           |
| Heat Deflection Temperature (°C) | 157-165   | ISO 75-2:2003                          |
| DSC Melting Point (°C)           | 175-180   | ISO 11357-3:1999                       |

Note: The mechanical properties are tested based on turning the PHBV powder in to bar