

## PP

## PP M17

## POLYPROPYLENE HOMOPOLYMER (PP)

A polypropylene homopolymer with higher crystallinity, high rigidity, high tensile strength, high modulus, and good resistance to thermal distortion. The resin is characterized by high gloss and low odor, is suitable for microwave-safe articles, and is used across injection moulding applications including toys, household appliances, medical instrument components, and transportation and chemical containers.

## Typical Application

- Injection moulding of toys and household appliances
- Medical instrument components
- Transportation pipes and chemical containers
- Food-contact and microwave-safe articles

## Product Characteristics

- Higher crystallinity with high rigidity, tensile strength, and modulus
- Good resistance to thermal distortion
- High gloss and low odor, suitable for visible parts

## Physical Properties

| Properties                          | Test Method | Typical Value | Unit              |
|-------------------------------------|-------------|---------------|-------------------|
| Melt Flow Index (230°C/2.16kg)      | ISO 1133    | 16            | g/10 min          |
| Density                             | ISO 1183    | 0.90          | g/cm <sup>3</sup> |
| Tensile Strength at Yield           | ISO 527     | 35.3          | MPa               |
| Elongation at Break                 | ISO 527     | 500           | %                 |
| Flexural Modulus                    | ISO 178     | 1569          | MPa               |
| Notched Izod Impact Strength (23°C) | ISO 180     | 28.4          | J/m               |
| Heat Deflection Temperature         | ISO 75      | 94            | °C                |
| Vicat Softening Point               | ISO 306     | 154           | °C                |
| Rockwell Hardness (R-scale)         | ISO 2039    | 95            |                   |
| Melting Point                       | DSC         | 165           | °C                |

1. The nominal properties reported herein are typical of the product and do not reflect normal testing variance; they should not be used for specification purposes.

2. Tensile strength and flexural modulus were converted from the source's kgf/cm<sup>2</sup> values (360 kgf/cm<sup>2</sup> and 16,000 kgf/cm<sup>2</sup> respectively) and notched Izod impact strength was converted from kgf·cm/cm-notch (2.9) to J/m using standard unit conversion factors.

3. The producer's own catalog lists a closely related grade code (V30G) that it states shares the same published typical-value table as this grade, with melt flow index 16.0 g/10 min and tensile stress at yield 31.4 MPa — consistent within normal batch variance with the values reported here.