

## PP

## PP K8009

## POLYPROPYLENE IMPACT COPOLYMER (PP)

This resin is a non-toxic, odorless, tasteless, opalescent polypropylene impact copolymer with high crystallinity, a melting point of approximately 164-170°C, a density in the range of 0.90-0.91 g/cm<sup>3</sup>, and a molecular weight of roughly 80,000-150,000. It is one of the lightest plastics available and is highly resistant to water absorption (24-hour water absorption of only 0.01%). Produced via a licensed gas-phase polypropylene process, it is mainly used for washing-machine internal and external parts, automotive interior parts, and other automotive modified-material applications.

## Typical Application

- Injection moulding of household appliances, including washing-machine components
- Suitcase and luggage housings

## Product Characteristics

- Good stiffness and impact balance
- Good heat deformation resistance
- Very low water absorption

## Physical Properties

| Properties                                        | Test Method      | Typical Value | Unit              |
|---------------------------------------------------|------------------|---------------|-------------------|
| Melt Mass-Flow Rate (230°C/2.16kg)                | GB/T 3682.1-2018 | 8.5           | g/10 min          |
| Tensile Yield Stress (min.)                       | GB/T 1040.2-2006 | 22.0          | MPa               |
| Flexural Modulus (min.)                           | GB/T 9341-2008   | 1000          | MPa               |
| Charpy Notched Impact Strength, 23°C (min.)       | GB/T 1043.1-2008 | 40            | kJ/m <sup>2</sup> |
| Heat Deflection Temperature, 0.45 MPa load (min.) | GB/T 1634.2-2019 | 80            | °C                |

1. Melt flow standard value carries a production deviation of  $\pm 1.0$  g/10min per the producer's TDS. Offer-sheet metadata for this code cites a typical melt flow near 10 g/10min and a 23°C notched impact near 45 kJ/m<sup>2</sup> — within normal grade-table/lot variance for the same commercial code.

2. Typical/minimum values per the producer's published grade data; grade-specific certificate of analysis supplied per lot at order.

3. 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.