

# BNM Group / BNM Petroleum

## Technical Reference Sheet

|                    |              |                  |                           |
|--------------------|--------------|------------------|---------------------------|
| Material           | PP Copolymer | Document ID      | TR-BOROUGE-PPCOPO-BC245MO |
| Grade              | BC245MO      | Date Generated   | 2026-09-11                |
| Reference Producer | Borouge      | Producer Country | United Arab Emirates      |

### 1. Reference Scope

This Technical Reference Sheet provides technical properties for **PP Copolymer**, grade/designation **BC245MO**, as referenced from the official producer source cited below. It is intended for commercial pre-qualification and technical comparison only.

**Reference Producer:** Borouge | **Producer Grade:** BC245MO

### 2. Application

A high-stiffness, high-impact polypropylene heterophasic (impact) copolymer intended for injection moulding, combining stiffness and creep resistance with high impact strength at low temperatures.

### 3. Technical Properties

| Property                        | Value | Unit    | Test Method   | Condition     | Source Page         |
|---------------------------------|-------|---------|---------------|---------------|---------------------|
| Density                         | 905   | kg/m3   | ISO 1183-1    | —             | 1 (single-page PDS) |
| Melt flow rate                  | 3.5   | g/10min | ISO 1133-1    | 230°C/2.16 kg | 1 (single-page PDS) |
| Flexural modulus                | 1250  | MPa     | ISO 178       | —             | 1 (single-page PDS) |
| Tensile modulus                 | 1350  | MPa     | ISO 527-2     | 1 mm/min      | 1 (single-page PDS) |
| Tensile stress at yield         | 25    | MPa     | ISO 527-2     | —             | 1 (single-page PDS) |
| Tensile strain at yield         | 6     | %       | ISO 527-2     | —             | 1 (single-page PDS) |
| Charpy impact strength, notched | 15    | kJ/m2   | ISO 179-1/1eA | 23°C          | 1 (single-page PDS) |
| Charpy impact strength, notched | 6.5   | kJ/m2   | ISO 179-1/1eA | -20°C         | 1 (single-page PDS) |
| Heat deflection temperature B   | 85    | °C      | ISO 75-2      | —             | 1 (single-page PDS) |

### 4. Processing / Handling Notes

| Parameter         | Value               | Unit | Notes                                               | Source Page         |
|-------------------|---------------------|------|-----------------------------------------------------|---------------------|
| Melt temperature  | 230-260             | °C   | —                                                   | 1 (single-page PDS) |
| Holding pressure  | 200-500             | bar  | —                                                   | 1 (single-page PDS) |
| Mould temperature | 10-30               | °C   | —                                                   | 1 (single-page PDS) |
| Injection speed   | As high as possible | -    | stated qualitatively on source, not a numeric value | 1 (single-page PDS) |
| Shrinkage         | 1-2                 | %    | —                                                   | 1 (single-page PDS) |

## 5. Commercial / Technical Notes

- Datasheet states product should be stored in dry conditions at temperatures below 50°C and protected from UV-light.
- Producer describes typical characteristics as: good stiffness, high melt stability, good impact strength, very good processability, good stress crack resistance.
- exact\_grade\_match set false: BNM's catalogue need is family-level PP Copolymer across applications, while BC245MO is a single grade for injection moulding of a high-impact/high-stiffness variant only.

## 6. Restrictions / Source Notes

- **Not intended to be used for medical, pharmaceutical or healthcare applications.**

## 7. Source Attribution

|                       |                                                                                                                                                                                                                                                                   |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Official Source URL   | <a href="https://www.borealisgroup.com/storage/Datasheets/BC245MO-PDS-REG_WORLD-EN-V11-PDS-WORLD-24421-PDS_BC245MO_11_25042025.pdf">https://www.borealisgroup.com/storage/Datasheets/BC245MO-PDS-REG_WORLD-EN-V11-PDS-WORLD-24421-PDS_BC245MO_11_25042025.pdf</a> |
| Source Document Title | BC245MO - Product Data Sheet                                                                                                                                                                                                                                      |
| Source Revision       | Ed.11                                                                                                                                                                                                                                                             |
| Source Document Date  | 25.04.2025                                                                                                                                                                                                                                                        |
| Source Document Type  | Product Data Sheet (PDS)                                                                                                                                                                                                                                          |
| Source Verified       | Yes                                                                                                                                                                                                                                                               |
| Exact Grade Match     | No                                                                                                                                                                                                                                                                |

Producer data is cited solely as technical reference information. BNM does not claim manufacturer, agency, distributorship, or endorsement status unless separately stated in a signed commercial agreement.

## 8. BNM Disclaimer

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