



**ENHANCING
DAILY LIVES**



**ENHANCING DAILY LIVES
WITH QUALITY PACKAGING**



**DELIVERING TOUGHER
PACKAGING FOR INDUSTRIAL
AND SUPPLY CHAIN**

POLYPROPYLENE RIGID

| Product name | MFR 230°C, 2.16kg (g/10 min) ISO 1133 | Flexural modulus (MPa) ISO 178 | Charpy impact strength, notched 23°C (kJ/m ²) ISO 179/1eA | Charpy impact strength, notched -20°C (kJ/m ²) ISO 179/1eA | Heat Deflection Temperature 0.45 N/mm ² (°C) ISO 75-2 | Features (refer to legend at bottom of the page) | Key performance | Applications and examples |
|-----------------------------|---------------------------------------|--------------------------------|-----------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| PP Homopolymers | | | | | | | | |
| HC205TF | 4 | 1750 | 5 | — | 107 | BNT | Good clarity and stiffness | Thermoforming for glossy trays, cups and containers |
| HD168MO | 10 | 1780 | 3.8 | — | 107 | BNT | Excellent stiffness and impact balance, fast cycle | Houseware and closures |
| HE125MO | 12 | 1550 | 3.5 | — | 88 | — | Good stiffness | Houseware and closures |
| HG385MO | 25 | 1700 | 4 | — | 108 | AS, BNT, SA, CR | Good stiffness-impact balance, fast cycle, excellent gloss and excellent dimensional stability | Coloured closures and hinge caps |
| HJ311MO | 60 | 1750 | 2.2 | — | 108 | AS, BNT | Excellent organoleptics, good stiffness, fast cycle and heat resistance | Takeaway food containers and media packaging |
| HJ333MO | 75 | 1900 | 2 | — | 116 | AS, BNT | Excellent stiffness and impact, fast cycle, excellent dimensional stability, excellent organoleptics | Takeaway food containers and media packaging |
| PP Block Copolymers | | | | | | | | |
| BD265MO | 7 | 1250 | NB* | 9 | 90 | AS, BNT | Very high impact strength even at low temperatures. Suitable for in-mould labelling | Toys and baby care, pails and crates, plastic pallets and furniture |
| BD950MO | 7 | 1450 | 8 | 4 | 100 | AS, BNT, SA | No stress whitening, good stiffness-impact balance, fast cycle and controlled torque | Closures for Carbonated Soft Drinks (CSD), water, juices and teas |
| BE961MO | 12 | 1250 | 14 | 7 | 92 | AS, BNT | Excellent impact strength. Suitable for in-mould labelling | Crates, trays, boxes, pails and luggage |
| BF970MO | 20 | 1450 | 9 | 4.5 | 102 | AS, BNT | Good stiffness, fast cycle and heat resistance. Suitable for in-mould labelling | Parts requiring stacking and creep performance such as crates, trays, boxes, pails and furniture |
| BH975MO | 38 | 1550 | 8 | 4.5 | 105 | AS, BNT | Fast cycle with good stiffness and impact strength. Suitable for in-mould labelling | Thin wall containers, houseware pails, washing machine tubs and appliances |
| BJ368MO | 70 | 1500 | 5.5 | 3.5 | 102 | AS, BNT | Fast cycle with good stiffness and impact strength. Suitable for in-mould labelling | Thin wall containers and long flow length houseware |
| PP Random Copolymers | | | | | | | | |
| RB307MO | 1.5 | 900 | 25PB** | — | 70 | CA | Good clarity, excellent drop impact and good chemical resistance | Cosmetics, household industrial chemicals and highly transparent bottles |
| RE420MO | 13 | 1100 | 6 | — | 75 | AS, CA | Good clarity and no stress whitening. Suitable for in-mould labelling and Injection Stretch Blow Moulding (ISBM) process | Transparent food containers, houseware, sports bottles, baby feeding bottles and hinge caps |
| RG568MO | 30 | 1150 | 6 | — | 75 | AS, BNT, CA | Excellent clarity and colour, fast cycle. Suitable for in-mould labelling | Transparent food saver containers, storage boxes, hinge caps and media packaging |
| RH668MO | 40 | 1050 | 6 | — | 70 | AS, BNT, CA | Improved tint and superior transparency at low processing temperatures | Transparent containers, storage boxes, lids and media packaging |
| RJ766MO | 70 | 1200 | 5 | — | 75 | AS, BNT, CA | Good organoleptics, clarity and fast cycle with good stiffness. Suitable for in-mould labelling | Thin wall transparent houseware, boxes, containers and media cases |
| RJ768MO | 70 | 1200 | 5 | — | 75 | AS, BNT, CA | Good organoleptics, clarity and fast cycle with good stiffness. Suitable for in-mould labelling | Thin wall transparent houseware, boxes, containers and media cases |

POLYPROPYLENE FLEXIBLE

| Product name | MFR 230°C, 2.16kg (g/10 min) ASTM D1238 | Flexural modulus (MPa) ISO 178 | Features | Key performance | Applications and examples |
|-----------------------------|-----------------------------------------|--------------------------------|------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| PP Homopolymers | | | | | |
| HC402BF | 3.2 | — | — | High line speed, clarity and stiffness | Biaxially-oriented Polypropylene (BOPP) film for food and non-food packaging |
| HC116FB | 3.2 | — | — | Easy processability, low water carry-over and good mechanical properties | Slit tape/raffia for woven fabrics, ropes and twines |
| HD601CF | 8 | 1450 | — | High line speed, clarity and stiffness | Cast Polypropylene (CPP) film for metallisable, food and textile packaging |
| HD915CF | 8 | 2100 | BNT | High line speed, clarity and stiffness | Cast Polypropylene (CPP) film for metallisable, food and textile packaging |
| HD631CF | 10 | 1450 | SA, AB | Good optics, good mechanical properties, good processability on FFS packaging line | Tubular quench, lamination film, shrink film, food packaging film, stationary film and textile packaging film |
| PP Random Copolymers | | | | | |
| RB707CF | 1.5 | 900 | CA | Bubble stability, high clarity, stiffness, sealability, retort and sterilisable | Blown film, lamination film, shrink film, Form Fill Seal (FFS) and heat resistant liners |
| RD208CF | 8 | 750 | — | High line speed, clarity and sealability | Cast Polypropylene (CPP) film in metallisable and sealing layers, food and textile packaging, high quality stationery and cast stretch film |
| RD265CF | 8 | 1250 | AB | High line speed, clarity, stiffness, sealability, retort and sterilisable | Cast Polypropylene (CPP) film in metallisable layer, food and textile packaging, and high quality stationery |
| RD239CF | 8 | 800 | ST, SA, AB | High line speed, clarity and sealability | Cast Polypropylene (CPP) sealing layer lamination film, food, textile and medical packaging, and high quality stationery |
| RD368CF | 8 | 850 | AB | High line speed, clarity and sealability | Cast Polypropylene (CPP) film in metallisable sealing layer, food and textile packaging, and high quality stationery |

AS - Antistatic agent

BNT - Borstar® Nucleation Technology

CA - Clarifying agent

CR - Controlled Rheology

SA - Slip Agent

* denotes No Break (NB)

** denotes Partial Break (PB)

ANTEO™ – INGREDIENT FOR COMPLETE SUCCESS

| Product name | MFR 190°C, 2.16kg (g/10 min) ASTM D1238 | Melting Temperature (°C) ISO 11357/03 | Density (kg/m ³) ASTM D792 | Dart Drop (g) ASTM D1709/A | Features (refer to legend at bottom of the page) | Key performance | Applications and examples |
|---------------|-----------------------------------------|---------------------------------------|----------------------------------------|----------------------------|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Anteo™ FK1820 | 1.5 | 122 | 918 | >1000 | PPA | Unparalleled processability, outstanding seal performance, superior puncture resistance and good optics | Lamination, Heavy Duty Shipping Sacks (HDSS), stretch hood, liner, frozen food packaging, Stand-up Pouch (SUP), Form-Fill-Seal (FFS), agriculture film, protection film, transparent film, multilayer packaging film and stretch cling film |
| Anteo™ FK1826 | 1.5 | 122 | 918 | >1000 | PPA, SA, Enhanced AB | Unparalleled processability, outstanding seal performance, superior puncture resistance, good optics, low Coefficient of Friction (COF) and excellent anti-blocking benefits | Lamination, Form Fill Seal (FFS), food packaging, liquid packaging, frozen food packaging, Stand-up Pouch (SUP), agriculture film, lamitube shrink film, multilayer packaging film and stretch hood |
| Anteo™ FK1828 | 1.5 | 122 | 918 | >1000 | PPA, SA, AB | Unparalleled processability, outstanding seal performance, superior puncture resistance, good optics and low Coefficient of Friction (COF) | Lamination, Form Fill Seal (FFS), food packaging, liquid packaging, frozen food packaging, Stand-up Pouch (SUP), agriculture film, lamitube shrink film, multilayer packaging film and stretch hood |
| Anteo™ FK2715 | 1.3 | 125 | 927 | >200 | PPA | Unparalleled processability, very good stiffness and optical properties | Collation shrink film, high stiffness lamination film, lamitubes, Stand-up Pouch (SUP), multilayer packaging films |

ANBIQ™ – SOLUTION OF CHOICE FOR FLEXIBLE PACKAGING

| Product name | MFR 190°C, 2.16kg (g/10 min) ASTM D1238 | Melting Temperature (°C) ISO 11357/03 | Density (kg/m ³) ASTM D792 | Dart Drop (g) ASTM D1709/A | Features | Key performance | Applications and examples |
|---------------|-----------------------------------------|---------------------------------------|----------------------------------------|----------------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Anbiq™ FM1810 | 1.1 | 122 | 918 | >200 | PPA | Excellent balance dart impact performance, good optical properties in practice and easy processability | Lamination film, frozen food packaging, agriculture film, multilayer packaging, impact modifier for bags applications |
| Anbiq™ FM1818 | 1.1 | 122 | 918 | >200 | PPA, SA, AB | Excellent balance dart impact performance, good optical properties in practice and easy processability, low Coefficient of Friction (COF), very good sealing performance | Lamination film, Form Fill Seal (FFS), food packaging, liquid packaging, frozen food, multilayer packaging, mulch films |

BORSTAR® ENHANCED POLYETHYLENE

| Product name | MFR 190°C, 2.16kg (g/10 min) ASTM D1238 | MFR 190°C, 21.6kg (g/10 min) ASTM D1238 | Density (kg/m ³) ASTM D792 | Dart Drop (g) ASTM D1709/A | Features | Key performance | Applications and examples |
|--------------|-----------------------------------------|-----------------------------------------|----------------------------------------|----------------------------|----------|-----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FB1200 | 0.17 | 16 | 921 | >1000 | — | Unique matt surface, high output, bubble stability, toughness and superior melt strength | Agriculture films |
| FB2230 | 0.25 | 22 | 923 | 600 | — | Unique matt surface, high output, bubble stability, toughness and high melt strength | Lamination film, food packaging and courier bags. Suitable for Form Fill Seal (FFS), Heavy Duty Shipping Sacks (HDSS) and industrial liners |
| FB1350 | 0.15 | 15 | 935 | 400 | — | Unique matt surface, impact/stiffness modifiers, high output, bubble stability, stiffness, toughness and high melt strength | Lamination, Form Fill Seal (FFS), food packaging, liquid packaging, frozen food packaging, Stand-up Pouch (SUP), agriculture film, lamitube shrink film, multilayer packaging film and stretch hood |
| FB5600 | 0.7 | 42 | 960 | — | — | Excellent balance of stiffness, barrier properties and good processability for multilayer blown film structures | Lamination film, food packaging film, lamitubes, Heavy Duty Shipping Sacks (HDSS), shrink film and Stand-up Pouch (SUP) |

BORPURE™ MULTIMODAL HIGH DENSITY POLYETHYLENE

| Product name | MFR 190°C, 2.16kg (g/10 min) ISO 1133 | Flexural modulus (MPa) ISO 527-2 | Density (kg/m ³) ISO 1183 | ESCR, Igepal 10%, F ₅₀ (h) ASTM D 1693-B | Features | Key performance | Applications and examples |
|-----------------|---------------------------------------|----------------------------------|---------------------------------------|-----------------------------------------------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| BorPure™ MB7581 | 4 ^{***} | 1100 | 958 | 40 | — | Excellent flowability and stiffness. Suitable for high speed injection, compression moulding and good Environmental Stress Crack Resistance (ESCR) | Organoleptic closures for water, juices, teas and closures for industrial application |
| BorPure™ MB5568 | 0.8 [#] | 1000 | 956 | 750 | — | Superior Environmental Stress Crack Resistance (ESCR) and stiffness | Lightweight organoleptic closures for mineral water, juices and teas |
| BorPure™ MB5569 | 0.8 [#] | 1000 | 956 | 750 | SA | Superior Environmental Stress Crack Resistance (ESCR) and stiffness | Lightweight organoleptic closures for Carbonated Soft Drinks (CSD), juices and sparkling beverages |
| BorPure™ MB6561 | 1.5 ^{##} | 900 | 955 | 400 | — | Excellent Environmental Stress Crack Resistance (ESCR) | Organoleptic closures for mineral water, juices and teas |
| BorPure™ MB6562 | 1.5 ^{##} | 900 | 955 | 400 | SA | Excellent Environmental Stress Crack Resistance (ESCR) | Organoleptic closures for Carbonated Soft Drinks (CSD), juices and sparkling beverages |

BOROUGE LOW DENSITY POLYETHYLENE

| Product name | MFR 190°C, 2.16kg (g/10 min) ASTM D1238 | Density (kg/m ³) ASTM D792 | Features | Key performance | Applications and examples |
|--------------|-----------------------------------------|----------------------------------------|------------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| FT5230 | 0.75 | 923 | — | High output, melt strength and bubble stability | Lamination film, food packaging, aluminum composite panel, shrink film and industrial packaging film. |
| FT6230 | 2 | 923 | — | High output, bubble stability and clarity | Lamination film, food packaging, industrial foaming, bubble wraps, general high clarity film and surface protection film |
| FT6236 | 2 | 923 | SA, AB, AO | High output, bubble stability and clarity | Lamination film, food packaging, high gloss grocery bags and pouches, and general purpose film. Suitable for Form Fill Seal (FFS) |
| FT6237 | 2 | 923 | — | High output, bubble stability and clarity | Non food applications, construction film, foam, carrier bags, textile bags, laundry bags |
| FT6238 | 2 | 923 | SA, AB, AO | High output, bubble stability and clarity | Non food applications, construction film, foam, carrier bags, textile bags, laundry bags |

AB - Antiblock AO - Antioxidants PPA - Processing Aid SA - Slip Agent

*** Borstar® multimodal MFR 4 resin has similar flowability to a MFR 10 unimodal resin
 # Borstar® multimodal MFR 0.8 resin has similar flowability to a MFR 2 unimodal resin
 ## Borstar® multimodal MFR 1.5 resin has similar flowability to a MFR 4-5 unimodal resin

About Borouge

Borouge, listed on the Abu Dhabi Securities Exchange (ADX symbol “BOROUGE” / ISIN “AEE01072B225”), is a leading petrochemical company that provides innovative and differentiated polyolefin solutions for the energy, infrastructure, mobility, advanced packaging, healthcare and agriculture industries. ADNOC owns a majority 54% stake and Borealis holds a 36% stake in Borouge.

Learn more at [Borouge.com](https://www.borouge.com)

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