

## POLYMERS

# SABIC<sup>®</sup> HDPE PIPE P6006N

## PRODUCT DESCRIPTION

P6006N is a grade which has a high density (class MRS 10) and a bimodal distribution of the molecular mass. An universal grade for pipe extrusion which, due to a keen combination of properties. It can be used for telecommunication, corrugated and spiral pipes.

## TYPICAL APPLICATIONS

P6006N is a natural High Density Polyethylene (HDPE) resin specifically designed for Pipe Extrusion. It provides excellent stress crack resistance properties (ESCR) combined with very good long term hydrostatic strength.

## TYPICAL DATA

| PROPERTIES                                       | Unit              | Value <sup>(1)</sup> | Test Method  |
|--|-------------------|----------------------|--------------|
| Melt Flow Rate                                   |                   |                      |              |
| @ 190°C & 5 kg load                              | g/10 min          | 0.23                 | ISO 1133     |
| @ 190°C & 21.6 kg load                           |                   | 6.2                  |              |
| Density @ 23°C                                   | Kg/m <sup>3</sup> | 949                  | ISO 1183     |
| <b>MECHANICAL PROPERTIES <sup>(2)</sup></b>      |                   |                      |              |
| Tensile Strength @ Yield <sup>(3)</sup>          | MPa               | 23                   | ISO 527-2    |
| Tensile Elongation @ Yield <sup>(3)</sup>        | %                 | 10                   |              |
| Tensile Modulus <sup>(3)</sup>                   | MPa               | 850                  |              |
| Charpy Impact Notched at 23°C                    | kJ/m <sup>2</sup> | 25                   | ISO 179      |
| Flexural creep modulus<br>(4 point, 1 min-value) | MPa               | 1050                 | DIN 19537-2  |
| Hardness (Shore D)                               | -                 | 64                   | ISO 868      |
| <b>THERMAL PROPERTIES</b>                        |                   |                      |              |
| Vicat Softening Temperature                      | °C                | 74                   | ISO 306      |
| Brittleness Temperature                          | °C                | <-80                 | ASTM D746-72 |
| OIT (210 C)                                      | Min               | > 20                 | EN 728       |