

## SABIC® PP 518P

POLYPROPYLENE HOMOPOLYMER

### DESCRIPTION

SABIC® PP 518P is a PP homopolymer grade with broad molecular weight distribution intended for fiber extrusion applications.

SABIC® PP 518P has the following features: Consistent processability; Good thread line stability; Good gas fading resistance.

### TYPICAL APPLICATIONS

SABIC® PP 518P is particularly suitable for producing bulk continuous filament (BCF), continuous filament (CF) and staple fiber yarns for carpet pile and upholstery.

### TYPICAL PROPERTY VALUES

Revision 20201211

| PROPERTIES                                         | TYPICAL VALUES | UNITS    | TEST METHODS |
|----------------------------------------------------|----------------|----------|--------------|
| <strong>POLYMER PROPERTIES</strong>                |                |          |              |
| <strong>Melt Flow Rate (MFR)</strong>              |                |          |              |
| at 230°C and 2.16kg                                | 25             | g/10 min | ASTM D1238   |
| <strong>Density</strong>                           |                |          |              |
| at 23°C                                            | 905            | kg/m³    | ASTM D792    |
| <strong>MECHANICAL PROPERTIES</strong>             |                |          |              |
| <strong>Flexural Modulus (1% Secant)</strong>      | 1550           | MPa      | ASTM D790 A  |
| <strong>Izod Impact Strength</strong>              |                |          |              |
| notched, at 23°C                                   | 30             | J/m      | ASTM D256    |
| <strong>Rockwell Hardness, R-Scale</strong>        | 100            | -        | ASTM D785    |
| <strong>FILM PROPERTIES</strong>                   |                |          |              |
| <strong>Tensile Properties <sup>(1)</sup></strong> |                |          |              |
| stress at yield                                    | 32             | MPa      | ASTM D638    |
| strain at yield                                    | 12             | %        | ASTM D638    |
| <strong>THERMAL PROPERTIES</strong>                |                |          |              |
| <strong>Vicat Softening Temperature</strong>       | 152            | °C       | ASTM D1525   |
| <strong>Heat deflection temperature</strong>       |                |          |              |
| at 455kPa                                          | 118            | °C       | ASTM D648    |

(1) Based on injection molded specimens.

### PROCESSING CONDITIONS

Typical processing conditions for 518P are:

Average extrusion temperature range may be kept at 210 - 250°C.

Lower processing temperature are possible with this material and will result in better long term heat aging.

### STORAGE AND HANDLING

Polypropylene resin should be stored in a manner to prevent a direct exposure to sunlight and/or heat. The storage area should also be dry and preferably do not exceed 50°C. SABIC would not give warranty to bad storage conditions which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is advisable to process PP resin within 6 months after delivery.

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