

# SABIC® PP 524P

Polypropylene Homopolymer

Saudi Basic Industries Corporation (SABIC)

## Message:

SABIC® PP 524P is particularly developed for (biaxially) oriented PP film extrusion with a very specific molecular structure providing the ultimate properties required for the stretching process.

SABIC® PP 524P is typically used in mono layer or coextruded (B)OPP film. SABIC® PP 524P is known for its excellent metallisation behaviour.

SABIC® PP 524P is a low mfi material typically used in extrusion applications like sheet and thermoforming.

SABIC® PP 524P is typically used in dairy, flower pots, yellow fats and disposables plates and cups. However, customers use this grade also in combination with fillers like Talc and CaCO<sub>3</sub>.

The product mentioned herein is in particular not tested and therefore not validated for use in pharmaceutical/medical applications.

| General Information                       |                                    |                   |                      |
|---|------------------------------------|-------------------|----------------------|
| UL YellowCard                             | E111275-306884                     |                   |                      |
| Features                                  | Homopolymer                        |                   |                      |
|   | Medium Isotactic                   |                   |                      |
|   | Metallizable                       |                   |                      |
|   | Wide Molecular Weight Distribution |                   |                      |
| Uses                                      | Bi-axially Oriented Film           |                   |                      |
|   | Cups                               |                   |                      |
|   | Disposable Drinkware               |                   |                      |
|   | Film                               |                   |                      |
|   | Sheet                              |                   |                      |
|   | Thermoforming Applications         |                   |                      |
| UL File Number                            | E111275                            |                   |                      |
| Forms                                     | Pellets                            |                   |                      |
| Processing Method                         | Bi-axially Oriented Film           |                   |                      |
|   | Coextrusion                        |                   |                      |
|   | Extrusion                          |                   |                      |
|   | Sheet Extrusion                    |                   |                      |
|   | Thermoforming                      |                   |                      |
| Physical                                  | Nominal Value                      | Unit              | Test Method          |
| Specific Gravity                          | 0.905                              | g/cm <sup>3</sup> | ASTM D792, ISO 1183  |
| Melt Mass-Flow Rate (MFR) (230°C/2.16 kg) | 2.0                                | g/10 min          | ASTM D1238, ISO 1133 |
| Mechanical                                | Nominal Value                      | Unit              | Test Method          |
| Tensile Modulus                           |                                    |                   |                      |
| 1% Secant <sup>1</sup>                    | 1500                               | MPa               | ASTM D638            |
| --  | 1500                               | MPa               | ISO 527-2/1A/1       |

|                                       |                                    |                   |   |
|---------------------------------------|------------------------------------|-------------------|---|
| Tensile Strength                      |                                    |                   |   |
| Yield <sup>2</sup>                    | 36.0                               | MPa               | ASTM D638                               |
| Yield                                 | 37.0                               | MPa               | ISO 527-2/1A/50                         |
| Tensile Elongation                    |                                    |                   |   |
| Yield <sup>3</sup>                    | 10                                 | %                 | ASTM D638                               |
| Yield                                 | 10                                 | %                 | ISO 527-2/1A/50                         |
| Impact                                | Nominal Value                      | Unit              | Test Method                             |
| Charpy Notched Impact Strength (23°C) | 4.5                                | kJ/m <sup>2</sup> | ISO 179/1eA                             |
| Notched Izod Impact                   |                                    |                   |   |
| 23°C                                  | 40                                 | J/m               | ASTM D256A                              |
| 23°C                                  | 3.5                                | kJ/m <sup>2</sup> | ISO 180/1A                              |
| Thermal                               | Nominal Value                      | Unit              | Test Method                             |
| Deflection Temperature Under Load     |                                    |                   |   |
| 0.45 MPa, Unannealed                  | 90.0                               | °C                | ASTM D648                               |
| 0.45 MPa, Unannealed <sup>4</sup>     | 85.0                               | °C                | ISO 75-2/Bf                             |
| 1.8 MPa, Unannealed                   | 60.0                               | °C                | ASTM D648                               |
| 1.8 MPa, Unannealed <sup>5</sup>      | 55.0                               | °C                | ISO 75-2/Af                             |
| Vicat Softening Temperature           |                                    |                   |   |
| --                                    | 152                                | °C                | ASTM D1525, ISO 306/A120 6 <sup>6</sup> |
| --                                    | 88.0                               | °C                | ASTM D1525, ISO 306/B120 7 <sup>7</sup> |
| NOTE                                  |                                    |                   |   |
| 1.                                    | 1.0 mm/min                         |                   |   |
| 2.                                    | 50 mm/min                          |                   |   |
| 3.                                    | 50 mm/min                          |                   |   |
| 4.                                    | testbar 80*10*4mm                  |                   |   |
| 5.                                    | testbar 80*10*4mm                  |                   |   |
| 6.                                    | Rate B (120°C/h), Loading 1 (10 N) |                   |   |
| 7.                                    | Rate B (120°C/h), Loading 2 (50 N) |                   |   |

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China



WECHAT