

## Technical Data Sheet

### Typical Applications

- BOPP films produced at high speed for packaging
- Used for metallizable film, both as monolayer and in co-extruded structure
- Engaged for the production of solid phase thermoforming
- Suitable for raffia application and automotive compounding

### Key Characteristics

- Easy processing, good optical characteristics
- Does not contain any slip or anti-blocking agents
- Calcium stearate free
- Low water carry-over (LWCO)
- Very good film profile
- Food contact approval for specific applications (refer to *NATPET*)

### Processing Methods

- Extrusion and Co-Extrusion
- Thermoforming

Property	Conditions	Method	Value	Unit
Density	23°C	ISO 1183	0.900	g/cm <sup>3</sup>
Melt Flow Rate (MFR)	230°C/2.16 kg	ASTM D 1238-13	3.0	g/10-min
<b>Mechanical</b>				
Flexural Modulus		ISO 178	1,500	MPa
Tensile Stress at Break	50-mm/min	ISO 527	23	MPa
Tensile Stress at Yield	50-mm/min	ISO 527	35	MPa
Tensile Strain at Break	50-mm/min	ISO 527	> 50	%
Tensile Strain at Yield	50-mm/min	ISO 527	12	%
Izod <small>Notched</small>	23°C	ISO 180	5.9	kJ/m <sup>2</sup>
<b>Thermal</b>				
Heat Deflection Temperature	0.45 MPa Un-annealed	ISO 75B	85	°C
Vicat Softening Temperature	A50 (50°C/h 10N)	ISO 306	156	°C
<b>Optical</b>				
Haze	20µm	ASTM D 1003	0.7	%
<b>Additional</b>				
Tensile Modulus	1-mm/min	ISO 527	1,450	MPa

Note: The above are typical data representing the product; not to be construed as analysis certificate or specifications.

DS v3.1

For further details about *NATPET* and its products, please visit the website at [www.natpet.com](http://www.natpet.com)

*NATPET*® products, marketed under the trade name Teldene®, are intended for the use by those customers and/or any other consumers, who undertake to become responsible to independently establish on their own the appropriateness of the product for its intended use, covering all safety and legally enacted requirements at the location of its projected use and the legal disposal practices thereof. The description of the product as given in this sheet shall under no circumstances be construed as warranty, express or implied including a warranty of merchantize fitness for a particular purpose. On behalf of *NATPET*, no one is authorized to make any such warranties, or take up on their own to assume such a liability. In case of product related claims, the sole and maximum remedy will be the physical substitution of the product or reimbursement of the purchase value, as per *NATPET*'s options. Further claims based on consequential, secondary, castigatory, or extraordinary damages will in no way entertained by *NATPET*. *NATPET* would like to advise its customers and other users that unless specifically stated the supplied products should not be used for applications in medical and/or pharmaceutical sectors.

## **Technical Data Sheet**

### **Special Features**

- Biaxially oriented polypropylene (BOPP)
  - Tested on Brückner Maschinebau GmbH BOPP machine
  - Reached 0.8% haze
  - Recommended for high speed BOPP machines
- Raffia
  - Tested on Starlinger machine Starex 1500ES
  - Recommended for high speed Raffia machines
- Shows broad processing window while providing good mechanical properties
- Tested for VDA 270 compliance (refer RCPD)

### **Processing Conditions**

Average extruder temperature range may be kept between 240 - 260°C.

### **Food Regulation**

This product is defined as a preparation under specific food contact regulation. Detailed information will be provided in a relevant document "Regulatory Compliances Product Declaration" upon request.

### **Storage and Handling**

Polypropylene resin should be stored to prevent a direct exposure to sunlight and heat. The Product estimated shelf life is one year starting from production date, adequate humidity below 80%, and temperature below 40°C. Customers might not fully follow the optimal storage condition, hence the shelf life recommended at customer site is six months only as received. Please refer to "Material Safety Datasheet" (MSDS) for handling and storage information.

### **Documents**

Specific documents MSDS and RCPD are available on request. Please send your request to the following e-mail: [pa@natpet.com](mailto:pa@natpet.com) or visit our website : [WWW.natpet.com](http://WWW.natpet.com)