

# CERTENE® PHS-1

Polypropylene Homopolymer  
Muehlstein

Message:

PHS-1 is a certified prime grade Polypropylene specially designed for EXTRUSION of Water-Quench Cast Film for Slit Tape applications. PHS-1 combines excellent processability, very good thermal stability, and high degree of purity with Low Water Carry-over and good balance of tape strength and orientation properties. PST-1 applications include stretched tapes for textile Tape & Raffia uses, such as strapping tape, woven industrial sacks, carpet backing, tarpaulins and geotextiles. Recommended processing temperatures of PHS-1 are: 1) tape - 210° to 220°C in barrel and 230-250°C in head, and 2) multifilament - 210° to 230°C. PHS-1 complies with FDA regulation 21CFR 177.1520 and with most international regulations concerning the use of Polypropylene in contact with food articles.

General Information	
Features	Food Contact Acceptable
	Good Processability
	Good Strength
	Good Thermal Stability
	High Purity
	Homopolymer
	Low Water Carryover
Uses	Carpet Backing
	Cast Film
	Monofilaments
	Rope
	Strapping
	Tape
	Textile Applications
	Twine
Agency Ratings	FDA 21 CFR 177.1520
Forms	Pellets
Processing Method	Cast Film
	Extrusion

Physical	Nominal Value	Unit	Test Method
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	1.3	g/10 min	ASTM D1238
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale, Injection Molded)	101		ASTM D785
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength <sup>1</sup> (Yield, Injection Molded)	33.1	MPa	ASTM D638

Tensile Elongation <sup>2</sup> (Yield, Injection Molded)	11	%	ASTM D638
Flexural Modulus - 1% Secant <sup>3</sup> (Injection Molded)	1280	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (-5°C, 81.3 mm, Injection Molded)	27	J/m	ASTM D256A
Additional Information	Nominal Value	Unit	
Processing Temperature			
Multifilaments	210 to 230	°C	
Tape <sup>4</sup>	210 to 220	°C	
Tape <sup>5</sup>	230 to 250	°C	
NOTE			
1.	50 mm/min		
2.	50 mm/min		
3.	1.3 mm/min		
4.	Barrel		
5.	Head		

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

