

# Hanwha Total PP TF400

Polypropylene

HANWHA TOTAL PETROCHEMICALS Co., Ltd.

Message:

TF400 is a polypropylene terpolymer with ethylene and butene comonomers. TF400 is used for heat seal layer of cast or oriented PP films. This grade is provides a wide range of heat seal temperature and good sealing performance due to homogeneous comonomer distribution.

General Information			
Features	Butene comonomer		
	Workability, good		
	Heat sealable		
	Good strength		
	Terpolymer		
Uses	Packaging		
	Laminate		
	Textile applications		
	cast film		
Forms	Particle		
Processing Method	cast film		
Physical	Nominal Value	Unit	Test Method
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	7.0	g/10 min	ASTM D1238
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	70		ASTM D785
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength <sup>1</sup> (Yield)	27.5	MPa	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	500	%	ASTM D638
Flexural Modulus <sup>3</sup>	735	MPa	ASTM D790
Films	Nominal Value	Unit	Test Method
Film Thickness - Tested	30	µm	
Tensile Strength - MD			ASTM D882
Yield, 30 µm	19.6	MPa	ASTM D882
Break, 30 µm	44.1	MPa	ASTM D882
Tensile Elongation - MD (Break, 30 µm)	500	%	ASTM D882
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C)	39	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (0.45 MPa, Unannealed)	85.0	°C	ASTM D648

Vicat Softening Temperature	120	°C	ASTM D1525 <sup>4</sup>
Melting Temperature	134	°C	DSC
Optical	Nominal Value	Unit	Test Method
Haze (30.0 μm)	1.6	%	ASTM D1003
Additional Information			
Stiffness, SAMSUNG TOTAL: 0.15 g/15min			
NOTE			
1.	50 mm/min		
2.	50 mm/min		
3.	50 mm/min		
4.	压力1 (10N)		

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#### Recommended distributors for this material

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