# Aegis® H73QP

### Polyamide 6

Honeywell

#### Message:

Moisture Content

Aegis® H73QP is a lubricated, low viscosity nylon 6 extrusion grade homopolymer for cast or blown film. It conforms to FDA requirements of 21 CFR 177.1500 as well as EU Directive 2002/72/EC. It possesses the combination of strength, toughness and thermoforming properties associated with nylon 6 as well as excellent heat, chemical, and abrasion resistance.

General Information						
Additive	Nucleating agent					
	Lubricant					
Features	Nucleated					
	Low viscosity					
	Homopolymer					
	Good strength					
	Good wear resistance					
	Good chemical resistance					
	Heat resistance, high					
	Good toughness					
	Lubrication					
Uses	Packaging					
	cast film					
Agency Ratings	FDA 21 CFR 177.1500					
	European 2002/72/EC					
Forms	Particle					
Processing Method	Film extrusion					
	Blow film					
	cast film					
Physical	Nominal Value	Unit	Test Method			
Density	1.13	g/cm³	ASTM D1505			
Melt Mass-Flow Rate (MFR) (235°C/1.0 kg)	4.5	g/10 min	ASTM D1238			
Water Absorption			ASTM D570			
24 hr	1.6	%	ASTM D570			
Saturation	9.5	%	ASTM D570			
Balance	2.7	%	ASTM D570			

Films         Nominal Value         Unit         Test Method           Carbon Dioxide Transmission Rate (23°C)         72.8         cm³/m²/24 hr         ASTM D1434           Nitrogen Transmission Rate (23°C)         14.0         cm³/m²/24 hr         ASTM D1434           Oxygen Transmission Rate (23 µm)         40         cm³/m²/24 hr         ASTM D3985           Thermal         Nominal Value         Unit           Melting Temperature         220         °C           Additional Information         FAV, ASTM D789: 7396% SAV: 3Extractible Content: 0.8 %         SAV: 3Extractible Content: 0.8 %           Extrusion         Nominal Value         Unit           Cylinder Zone 1 Temp.         230 - 260         °C           Cylinder Zone 2 Temp.         230 - 260         °C           Cylinder Zone 3 Temp.         230 - 260         °C           Cylinder Zone 4 Temp.         230 - 260         °C           Cylinder Zone 5 Temp.         230 - 260         °C           Adapter Temperature         260 - 266         °C           Melt Temperature         260 - 270         °C           Die Temperature         260 - 270         °C				
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Cylinder Zone 1 Temp.       230 - 260       °C         Cylinder Zone 2 Temp.       230 - 260       °C         Cylinder Zone 3 Temp.       230 - 260       °C         Cylinder Zone 4 Temp.       230 - 260       °C         Cylinder Zone 5 Temp.       230 - 260       °C         Adapter Temperature       260 - 266       °C         Melt Temperature       260 - 270       °C         Die Temperature       260       °C	FAV, ASTM D789: 7396% SAV: 3Extractible (	Content: 0.8 %		
Cylinder Zone 2 Temp.       230 - 260       °C         Cylinder Zone 3 Temp.       230 - 260       °C         Cylinder Zone 4 Temp.       230 - 260       °C         Cylinder Zone 5 Temp.       230 - 260       °C         Adapter Temperature       260 - 266       °C         Melt Temperature       260 - 270       °C         Die Temperature       260 - 270       °C	Extrusion	Nominal Value	Unit	
Cylinder Zone 3 Temp.       230 - 260       °C         Cylinder Zone 4 Temp.       230 - 260       °C         Cylinder Zone 5 Temp.       230 - 260       °C         Adapter Temperature       260 - 266       °C         Melt Temperature       260 - 270       °C         Die Temperature       260 - 270       °C	Cylinder Zone 1 Temp.	230 - 260	°C	
Cylinder Zone 4 Temp.       230 - 260       °C         Cylinder Zone 5 Temp.       230 - 260       °C         Adapter Temperature       260 - 266       °C         Melt Temperature       260 - 270       °C         Die Temperature       260 - 270       °C	Cylinder Zone 2 Temp.	230 - 260	°C	
Cylinder Zone 5 Temp. 230 - 260 °C Adapter Temperature 260 - 266 °C Melt Temperature 260 - 270 °C Die Temperature 260 °C	Cylinder Zone 3 Temp.	230 - 260	°C	
Adapter Temperature 260 - 266 °C  Melt Temperature 260 - 270 °C  Die Temperature 260 °C	Cylinder Zone 4 Temp.	230 - 260	°C	
Melt Temperature 260 - 270 °C  Die Temperature 260 °C	Cylinder Zone 5 Temp.	230 - 260	°C	
Die Temperature 260 °C	Adapter Temperature	260 - 266	°C	
	Melt Temperature	260 - 270	°C	
Extrusion instructions	Die Temperature	260	°C	
	Extrusion instructions			

The values listed above in Extrusion are for cast film. Typical Barrel Profile for Tubular (Blown) Films:

Barrel Temperature: 246 to 254°C (474 to 490°F)

Adapter Temperature: 260°C (500°F) Die Temperature: 254°C (490°F)

Processing Melt Temperature: 254 to 260°C (490 to 500°F)

Screw Parameters: Metering section: 40%

Transition section: 3 to 4 flights Feed section balance of screw length Compression ratio: 3.5:1 to 4.0:1

L/D ratio: 24:1

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