GLS AC5-686A BLACK

Thermoplastic Elastomer

Key Characteristics

Product Description

GLS AC5-686A BLACK is specifically designed to bond to a variety of standard and modified nylon materials, including those which are glass-filled, heat stabilized and/or impact modified.

- Exceptional Colorability
- Outstanding Adhesion in Both Two-Shot and Insert Molding Processes
- Soft, Rubbery Grip
- Very Easy to Process

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Latin America • North America	
Features	• Good Adhesion	• Good Colorability	• Good Processability
Uses	• Consumer Applications • Electrical/Electronic Applications • Flexible Grips	• Handles • Lawn & Garden Equipment • Overmolding	• Power/Other Tools
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.10	1.10	ASTM D792
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress [2, 3] (300% Strain, 73°F (23°C))	400 psi	2.76 MPa	ASTM D412
Tensile Strength [2, 3] (Break, 73°F (23°C))	500 psi	3.45 MPa	ASTM D412
Tensile Elongation [2, 3] (Break, 73°F (23°C))	700 %	700 %	ASTM D412
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Durometer Hardness (Shore A, 10 sec)	60	60	Shell Cup 1
Fill Analysis	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Apparent Viscosity			ASTM D3835
392°F (200°C), 11200 sec^-1	24.3 Pa·s	24.3 Pa·s	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Suggested Max Regrind	20 %	20 %
Rear Temperature	360 to 400 °F	182 to 204 °C
Middle Temperature	470 to 510 °F	243 to 266 °C
Front Temperature	480 to 520 °F	249 to 271 °C
Nozzle Temperature	490 to 530 °F	254 to 277 °C
Processing (Melt) Temp	480 to 520 °F	249 to 271 °C

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Injection	Typical Value (English)	Typical Value (SI)
Mold Temperature	55 to 85 °F	13 to 29 °C
Back Pressure	0.00 to 80.0 psi	0.00 to 0.552 MPa
Screw Speed	80 to 120 rpm	80 to 120 rpm

Injection Notes

Purge thoroughly before and after use of this product with a low flow (0.5 - 2.5 MFR) polyethylene (PE) or polypropylene (PP).

Regrind levels up to 20% can be used with GLS AC5-686A BLACK with minimal property loss, provided that the regrind is free of contamination. To minimize losses during molding, the melt temperature should remain as low as possible. The final determination of regrind effectiveness should be determined by the customer.

GLS AC5-686A BLACK has good melt stability. Maximum residence times may vary, depending on the size of the barrel. Generally, the barrel should be emptied if it is idle for periods of 8 - 10 minutes or longer.

Drying is not Required

Injection Speed: 3 to 6 in/sec
1st Stage - Boost Pressure: 300 to 800 psi
2nd Stage - Hold Pressure: 0% of Boost
Hold Time (Thick Part): 0 to 4 sec
Hold Time (Thin Part): 0 to 3 sec

Notes

[1] Typical values are not to be construed as specifications.

[2] Die C

[3] 2 hr

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