RIKEN AMERICAS

TECHNICAL DATA SHEET

Actymer G GA-1090A-US BLK

(Thermo Plastic Vulcanizate)

General Characteristics

Description: GA-1090A-US BLK is a Thermoplastic Vulcanizated compound.

Feature : Low compression set and ease of processing.

Process: Injection Molding, Coextrusion, Multi Injection Molding

Applications : Automotive, Industrial, Seals and Gaskets, General purpose

Available Color(s): Black only.

Technical Information				
PHYSICAL	Typical Value ¹ Unit			
Form		Pellet		
Specific Gravity (± 0.03)		0.96	ISO 1183	
Hardness (Shore 'A', ± 5, 15 sec)		87	ISO 868	
MECHANICAL				
Tensile Strength		13.1 MPa	ISO 37	
100% Modulus		5.2 MPa		
Ultimate Elongation		400 %		
Compression set				
after 22 hours at 70 °C (158°F)		49 %	ISO 815	
after 22 hours at 120 °C (248°F)		64 %		
after 70 hours at 125 °C (257°F)		75 %		
Thermal				
Brittleness		Less than -60 °C (-76°F)	ISO 974	
Aging				
Chang in Tensile Strength in Air			ISO 188	
150°C (302°F), 168hr		-3 %		
Chang in Ultimate elongation in Air				
150°C (302°F), 168hr		-11 %		
Chang in Durometer Hardness in Air				
150°C (302°F), 168hr		1.0		
Volume Swell (120°C, (248°F) 24 hr, in IRM 90	3 Oil)	61 %	ISO 1817	
PROCESSING				
Injection	Typical Value (English)	Typical Value (SI)		
Drying Teemperature	180 °F	80 °C		
Drying Time	3.0 hr	3.0 hr		
Suggested Max Moisture	0.05 %	0.05 %		
Suggested Max Regrind	20 %	20 %		
Rear Temperature	320 to 392 °F	160 to 200 °C		
Middle Temperature	374 to 446 °F	190 to 230 °C		
Front Temperature	374 to 446 °F	190 to 230 °C		
Nozzle Temperature	392 to 446 °F	200 to 230 °C		



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Processing(Melt) Temp	374 to 446 °F	190 to 230 °C	
Mold Temperature	86 to 122 °F	30 to 50 °C	
Injection Rate	Fast	Fast	
Back Pressure	50 to 100 psi	0.3 to 0.7 MPa	
Screw Speed	100 to 200 rpm	100 to 200 rpm	
Extrusion			
Drying Teemperature	180 °F	80 °C	
Drying Time	3.0 hr	3.0 hr	
Melt Temperature	374 to 446 °F	190 to 230 °C	
Die Temperature	374 to 446 °F	190 to 230 °C	

REGULATORY

Additional Information

Where applicable, test results besed on film gated, 2.0mm injection molded plaques. Tehnsile strength, elongation and tensile stress are measured across the flow direction. Compression set at 25% deflection.

Notes

¹ Typical Values: These are not construed as specifications; values may vary depending on colors.



IMPORTANT: These suggestions and data are based on information we believe to be reliable. They are offered in good faith without guarantee or warranty, as conditions and methods of use of our products are beyond our control. We strongly urge that the prospective user determine the suitability of our materials and suggestions before adopting them on a commercial scale. User assumes all risks and liabilities in connection with use of this product.

N/A