



TECHNICAL DATA SHEET

A83GD-001D

(Thermo Plastic Vulcanizate)

General Characteristics

Description : A83GD-001D NAT is a Colorable Thermoplastic Vulcanized Elastomer compound.**Feature :** Good physical properties and chemical resistance, versatile.**Applications :** Extrusion, Co Extrusion and Injection Molding**Applications :** Automotive, Industrial, Seals and Gaskets, General purpose**Available Color(s) :** Colorable Natural, Black

Technical Information

PHYSICAL	Typical Value ¹	Unit	
Form		Pellet	
Specific Gravity (± 0.03)	0.96		ASTM D792 / ISO 1181
Hardness (Shore 'A', ± 5 , 15 sec)	84		ASTM D2240 / ISO 8506
MECHANICAL			
Tensile Strength	9.6 MPa		ASTM D412 / ISO 37
100% Modulus	5.3 MPa		
Ultimate Elongation	450 %		
Tear Strenth	24 kN/m		ASTM D624 / ISO 3495
Compression set			
after 22 hours at 70 °C (158°F)	41 %		ASTM D395 / ISO 8150
Thermal			
Brittleness	Less than -60 ° C		ASTM D746 / ISO 9079

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 Re grind	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
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
Cylinder Zone 1 Temp.	356 to 392 ° F	180 to 200 °C
Cylinder Zone 2 Temp.	374 to 410 ° F	190 to 210 °C
Cylinder Zone 3 Temp.	374 to 446 ° F	190 to 230 °C

Cylinder Zone 4 Temp.	374 to 446 ° F	190 to 230 °C
Melt Temp.	374 to 446 ° F	190 to 230 °C
Die Temp.	374 to 446 ° F	190 to 230 °C
Take-Off Roll	68 to 122 ° F	20 to 50 °C
Mesh	20 to 60	20 to 60

REGULATORY

N/A

Additional Information

Where applicable, test results based 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

This is a material under development.

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