Dynaflex™ D3226-1000-03

Thermoplastic Elastomer

Key Characteristics

Product Description

Dynaflex™ D3226-1000-03 is an easy processing TPE designed for general purpose applications. It is suitable for injection molding, extrusion, blow molding and thermoforming processes.

- Dry Feel
- Easy Processing
- Good Melt Strength
- Soft Touch

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • North America	• South America
Features	• Good Melt Strength	• Good Processability	
Uses	• Consumer Applications	• General Purpose	• Toys
Agency Ratings	• FDA Unspecified Rating		
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	0.990	0.988 g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR)			ASTM D1238
190°C/2.16 kg	26 g/10 min	26 g/10 min	
200°C/5.0 kg	82 g/10 min	82 g/10 min	
Molding Shrinkage - Flow	0.0020 to 0.0060 in/in	0.20 to 0.60 %	ASTM D955
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress [2, 3] (100% Strain, 73°F (23°C))	430 psi	2.96 MPa	ASTM D412
Tensile Strength [2, 3] (Break, 73°F (23°C))	580 psi	4.00 MPa	ASTM D412
Tensile Elongation [2, 3] (Break, 73°F (23°C))	270 %	270 %	ASTM D412
Tear Strength	90.0 lbf/in	15.8 kN/m	ASTM D624
Compression Set (73°F (23°C), 22.0 hr)	15 %	15 %	ASTM D395B
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Durometer Hardness (Shore A, 10 sec)	40	40	ASTM D2240

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Rear Temperature	310 to 380 °F	154 to 193 °C
Middle Temperature	320 to 390 °F	160 to 199 °C
Front Temperature	330 to 400 °F	166 to 204 °C
Nozzle Temperature	330 to 400 °F	166 to 204 °C
Mold Temperature	70.0 to 90.0 °F	21.1 to 32.2 °C
Back Pressure	50.0 to 150 psi	0.345 to 1.03 MPa
Screw Speed	25 to 75 rpm	25 to 75 rpm

Injection Notes

Color concentrates ethylene vinyl acetate (EVA) carriers are most suitable for coloring Dynaflex™ D3226-1000-03. Improved color dispersion can be achieved by using higher melt flow concentrates (with a melt flow rate of 25 - 40 g/10 min). Typical loadings for color concentrates are 1% to 5% by weight. A high color match consistency may be obtained by using precolored compounds available from GLS. Concentrates based on PVC should not be used. The final determination of color concentrate suitability should be determined by customer trials.

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

Dynaflex™ D3226-1000-03 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 5 - 8 minutes or longer.

Drying is not Required

Injection Speed: 1 to 5 in/sec
1st Stage - Boost Pressure: 200 to 600 psi
2nd Stage - Hold Pressure: 70% of Boost
Hold Time (Thick Part): 4 to 10 sec
Hold Time (Thin Part): 1 to 3 sec

Notes

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

[2] Die C

[3] 2 hr

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