Versaflex™ TF 5830N

Thermoplastic Elastomer

Key Characteristics

Product Description

Versaflex™ TF 5825N is thermoplastic elastomer target to use as adhesive film. This grade can laminate onto nylon/ polyester fabrics with good peel force.

- Super comfort and soft touch
- Excellent elastic recovery
- Environmentally friendly without plasticizers or solvents

General			
Material Status	• Commercial: Active		
Regional Availability	• Asia Pacific		
Features	• Excellent Elastic Recovery • Good Flexibility	• High Clarity • Soft	
Uses	• Adhesives	• Film	• Textile Bonding
RoHS Compliance	• RoHS Compliant		
Appearance	• Clear/Transparent		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	0.940	0.940	ASTM D792
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress [2, 3] (300% Strain, 73°F (23°C))	370 psi	2.55 MPa	ASTM D412
Tensile Strength [2, 3] (Break, 73°F (23°C))	960 psi	6.62 MPa	ASTM D412
Tensile Elongation [2, 3] (Break, 73°F (23°C))	980 %	980 %	ASTM D412
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Durometer Hardness (Shore A, 10 sec)	33	33	ASTM D2240
Fill Analysis	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Apparent Viscosity			ASTM D3835
338°F (170°C), 1340 sec^-1	72.0 Pa·s	72.0 Pa·s	
338°F (170°C), 11200 sec^-1	14.0 Pa·s	14.0 Pa·s	

Processing Information

Extrusion	Typical Value (English)	Typical Value (SI)
Melt Temperature	356 to 428 °F	180 to 220 °C
Die Temperature	392 to 428 °F	200 to 220 °C

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Extrusion Notes

Color concentrates with polypropylene (PP), or low density polyethylene (LDPE) carriers are most suitable for coloring Versaflex™ TF 5830N. Improved color dispersion can be achieved by using higher melt flow concentrates (with a melt flow from 25 - 40g/10 min). Typical loadings for color concentrates are 1% to 5% by weight. Liquid color can be used, but mineral oil based carriers may have a significant effect on the final hardness value. Concentrates based on PVC should not be used. A high color match consistency can be obtained by using precolored compounds available from GLS. 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) polyethylene (PE) or polypropylene (PP).

Drying is not Required.

Rear Zone = 166-188 C
Center Zone = 177-204 C
Front Zone = 182-216C

Notes

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

[2] Die C

[3] 2 hr

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