

PolyOne Dynaflex™ G2711-1000-00 Thermoplastic Elastomer (TPE)

Category : Polymer , Thermoplastic , Elastomer, TPE

Material Notes:

Dynaflex™ G2711-1000-00 is an easy process compound designed for injection molding and extrusion applications that require FDA compliance. - Excellent Colorability - Good Ozone and UV Stability - Overmold Adhesion to Polypropylene - Rubbery Feel - Soft Touch
 Dynaflex™ G2711-1000-00 can be recycled as a filler or impact modifier for polyolefins, or can be recycled by grinding and reintroduction to the molding process. Similar to PP or PE recycling process, if separated appropriately, it can be recycled many times. Municipality waste stream recycle code is 7 which is designated for Other. Please contact GLS Thermoplastic Elastomers for a copy of our Recyclability Compliance letter. Color concentrates with polypropylene (PP), ethylene vinyl acetate (EVA), or polyethylene (PE) carrier are most suitable for coloring Dynaflex™ G2711-1000-00. Improved color dispersion can be achieved by using higher melt flow concentrates (with a melt flow from 25 - 40 g/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). Regrind levels up to 20% can be used with Dynaflex™ G2711-1000-00 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. Dynaflex™ G2711-1000-00 has excellent 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: 1 to 5 in/sec 1st Stage - Boost Pressure: 400 to 1000 psi 2nd Stage - Hold Pressure: 30% of Boost Hold Time (Thick Part): 3 to 10 sec Hold Time (Thin Part): 1 to 3 sec
 Information provided by PolyOne

Order this product through the following link:

http://www.lookpolymers.com/polymer_PolyOne-Dynaflex-G2711-1000-00-Thermoplastic-Elastomer-TPE.php

| Physical Properties | Metric | English | Comments |
|-----------------------------|---|---|------------|
| Specific Gravity | 0.888 g/cc | 0.888 g/cc | ASTM D792 |
| Viscosity | 12400 cP | 12400 cP | ASTM D3835 |
| | @Shear Rate 11200 1/s, Temperature 200 °C | @Shear Rate 11200 1/s, Temperature 392 °F | |
| Linear Mold Shrinkage, Flow | 0.014 - 0.021 cm/cm | 0.014 - 0.021 in/in | ASTM D955 |
| Melt Flow | 4.0 g/10 min | 4.0 g/10 min | ASTM D1238 |
| | @Load 2.16 kg, Temperature 190 °C | @Load 4.76 lb, Temperature 374 °F | |
| | 24 g/10 min | 24 g/10 min | ASTM D1238 |
| | @Load 5.00 kg, Temperature 200 °C | @Load 11.0 lb, Temperature 392 °F | |

| Mechanical Properties | Metric | English | Comments |
|-----------------------|--------|---------|----------|
|-----------------------|--------|---------|----------|

| Mechanical Properties | Metric | English | Comments |
|---------------------------|---|--|----------------------|
| Tensile Strength at Break | 5.36 MPa @Temperature 23.0 °C | 777 psi @Temperature 73.4 °F | Die C2 hr; ASTM D412 |
| Tensile Stress | 1.24 MPa @Strain 100 %, Temperature 23.0 °C | 180 psi @Strain 100 %, Temperature 73.4 °F | Die C2 hr; ASTM D412 |
| | 2.55 MPa @Strain 300 %, Temperature 23.0 °C | 370 psi @Strain 300 %, Temperature 73.4 °F | Die C2 hr; ASTM D412 |
| Elongation at Break | 640 % @Temperature 23.0 °C | 640 % @Temperature 73.4 °F | Die C2 hr; ASTM D412 |
| Tear Strength | 22.8 kN/m | 130 pli | ASTM D624 |
| Compression Set | 14 % @Temperature 23.0 °C, Time 79200 sec | 14 % @Temperature 73.4 °F, Time 22.0 hour | ASTM D395B |

| Processing Properties | Metric | English | Comments |
|---------------------------|-------------------|-----------------|----------|
| Rear Barrel Temperature | 149 - 188 °C | 300 - 370 °F | |
| Middle Barrel Temperature | 182 - 193 °C | 360 - 379 °F | |
| Front Barrel Temperature | 188 - 227 °C | 370 - 441 °F | |
| Nozzle Temperature | 188 - 227 °C | 370 - 441 °F | |
| Mold Temperature | 15.6 - 37.8 °C | 60.1 - 100 °F | |
| Back Pressure | 0.000 - 0.827 MPa | 0.000 - 120 psi | |
| Screw Speed | 25 - 75 rpm | 25 - 75 rpm | |

| Descriptive Properties | Value | Comments |
|------------------------|---------------------|--|
| Agency Ratings | EU 10/2011 | Please contact GLS Thermoplastic Elastomers for a copy of the EU compliance letter. |
| | FDA 21 CFR 177.1210 | Please contact GLS Thermoplastic Elastomers for a copy of the FDA compliance letter. |
| | ISO 10993 Part 4 | |
| | ISO 10993 Part 5 | |
| | USP Class VI | |

| Descriptive Properties | Value | Comments |
|--------------------------------|--|-----------------|
| Features | Good Colorability | |
| | Good UV Resistance | |
| | Ozone Resistant | |
| | Recyclable Material | |
| Forms | Pellets | |
| Generic Material | TPE | |
| Generic Name | Thermoplastic Elastomer (TPE) | |
| Manufacturer / Supplier | GLS Thermoplastic Elastomers | |
| Processing Method | Extrusion | |
| | Injection Molding | |
| Regional Availability | Africa & Middle East | |
| | Asia Pacific | |
| | Europe | |
| | North America | |
| | South America | |
| RoHS Compliance | RoHS Compliant | |
| Suggested Max Regrind | 20% | |
| Uses | Consumer Applications | |
| | Medical/Healthcare Applications | |
| | Overmolding | |
| | Personal Care | |
| | Soft Touch Applications | |

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215, Fengxian District, Shanghai City, China