

Monprene® OM-10240

Teknor Apex Company - Thermoplastic Elastomer

Friday, June 30, 2017

General Information

Product Description

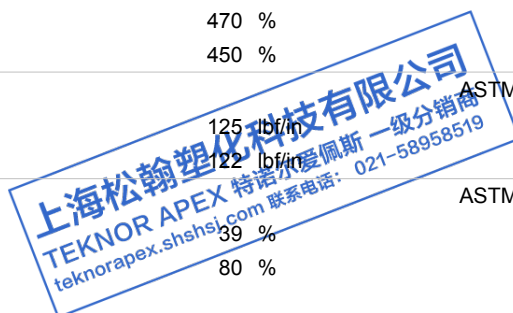
Monprene OM-10240 is a specialty thermoplastic elastomer, available in NAT, BLK, and colors, designed for overmolding applications like grips and anti-skid parts for consumer and industrial products. Monprene OM-10240 is a low hardness, medium density, UV stabilized, opaque grade that exhibits excellent adhesion to PC, ABS, and PC/ABS.

General

| | | | |
|-------------------|---|--|---|
| Material Status | • Commercial: Active | | |
| Availability | • Africa & Middle East • Asia Pacific | • Europe • Latin America | • North America |
| Features | • Good Adhesion • Light Stabilized • Low Flow • Low Hardness | • Lubricated • Medium Density • Slip • Sunlight Resistant | • UV Resistant • Without Fillers |
| Uses | • Appliances • Bonding • Cell Phones • Dental Applications • Flexible Grips | • Handles • Knobs • Overmolding • Power/Other Tools • Rubber Replacement | • Sporting Goods • Toothbrush Handles • Writing Instruments |
| RoHS Compliance | • RoHS Compliant | | |
| Appearance | • Black | • Grey | • Opaque |
| Forms | • Pellets | | |
| Processing Method | • Injection Molding | • Multi Injection Molding | |

ASTM & ISO Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|---|---------------|----------|-------------|
| Specific Gravity | 0.980 | | ASTM D792 |
| Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) | 2.0 | g/10 min | ASTM D1238 |
| Elastomers | Nominal Value | Unit | Test Method |
| Tensile Stress ² | | | ASTM D412 |
| Across Flow : 100% Strain | 214 | psi | |
| Flow : 100% Strain | 233 | psi | |
| Tensile Stress ² | | | ASTM D412 |
| Across Flow : 300% Strain | 459 | psi | |
| Flow : 300% Strain | 495 | psi | |
| Tensile Strength ² | | | ASTM D412 |
| Across Flow : Break | 751 | psi | |
| Flow : Break | 701 | psi | |
| Tensile Elongation ² | | | ASTM D412 |
| Across Flow : Break | 470 | % | |
| Flow : Break | 450 | % | |
| Tear Strength ² | | | ASTM D624 |
| Across Flow | 125 | lb/in | |
| Flow | 122 | lb/in | |
| Compression Set ³ | | | ASTM D395B |
| 73°F, 22 hr | 39 | % | |
| 158°F, 22 hr | 80 | % | |



Revision Date: 6/1/2016

The information and recommendations contained in this bulletin are, to the best of our knowledge, accurate and reliable but no guarantee of their accuracy is made. All products are sold upon condition that purchasers shall make their own tests to determine the suitability of such products for their particular purposes and uses and purchasers assume all risks and liability for the results of use of the products, including use in accordance with seller's recommendations. Nothing in this bulletin constitutes permission or a recommendation to practice or use any invention covered by any patent owned by this company or by others. There is no warranty of merchantability and there are no other warranties for the products described.

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| Hardness | Nominal Value | Unit | Test Method |
|---|---------------|------|-------------|
| Durometer Hardness | | | ASTM D2240 |
| Shore A, 1 sec | 35 | | |
| Shore A, 1 sec, Injection Molded ⁴ | 43 | | |
| Shore A, 5 sec, Injection Molded ⁴ | 40 | | |

| Additional Information | Nominal Value | Unit |
|------------------------|---------------|------|
| Adhesion to ABS | | |
| Adhesion to PC | | |
| Adhesion to PC/ABS | | |

Legal Statement

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Processing Information

| Injection | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature | 140 | °F |
| Drying Time | 2.0 to 4.0 | hr |
| Rear Temperature | 280 to 320 | °F |
| Middle Temperature | 360 to 390 | °F |
| Front Temperature | 360 to 390 | °F |
| Nozzle Temperature | 380 to 410 | °F |
| Processing (Melt) Temp | 350 to 390 | °F |
| Mold Temperature | 40 to 90 | °F |
| Injection Pressure | 200 to 800 | psi |
| Back Pressure | 25.0 to 125 | psi |
| Screw Speed | 50 to 100 | rpm |
| Cushion | 0.150 to 1.00 | in |

Injection Notes

Moisture can degrade the material. Drying is suggested. This can be accomplished by placing the material in a desiccant dryer for 2 to 4 hours at 140°F.

Notes

¹ Typical properties: these are not to be construed as specifications.

² Die C, 20 in/min

³ Type 1

⁴ Aged for 48 hr

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