

CPT C-Flex® R70-050 Clear Biocompatible TPE

Category : Polymer , Thermoplastic , Elastomer, TPE , Thermoplastic Elastomer, Melt-Processible Rubber

Material Notes:

C-Flex® is a family of patented thermoplastic elastomers which range in hardness from 5 shore A to 95 shore A. C-Flex® TPE's are biocompatible polymer blends which meet or exceed the current United States Pharmacopoeia Class VI test requirements. C-Flex® does not contain latex rubber, polyvinyl chloride, silicone rubber, or polyurethane. Information provided by Consolidated Polymer Technologies.

Order this product through the following link:

http://www.lookpolymers.com/polymer_CPT-C-Flex-R70-050-Clear-Biocompatible-TPE.php

| Physical Properties | Metric | English | Comments |
|-----------------------|---------------------|---------------------|--------------------------|
| Specific Gravity | 0.900 g/cc | 0.900 g/cc | ASTM D 792 |
| Linear Mold Shrinkage | 0.018 - 0.020 cm/cm | 0.018 - 0.020 in/in | |
| Melt Flow | 0.42 g/10 min | 0.42 g/10 min | Condition E; ASTM D 1238 |

| Mechanical Properties | Metric | English | Comments |
|--------------------------------|----------------------|---------------------|-----------------------------------|
| Hardness, Shore A | 48 | 48 | 1 sec.; ASTM D 2240 |
| Tensile Strength at Break | 7.901 MPa | 1146 psi | ASTM D 412 |
| Elongation at Break | 828 % | 828 % | ASTM D 412 |
| 100% Modulus | 0.00117 GPa | 0.170 ksi | ASTM D 412 |
| 300% Modulus | 0.00200 GPa | 0.290 ksi | ASTM D 412 |
| Tear Strength | 17.5 kN/m | 100 pli | Notched, Die B; ASTM D 624 |
| | 21.0 kN/m | 120 pli | Die C; ASTM D 624 |
| Taber Abrasion, mg/1000 Cycles | 101 | 101 | Federal Test Method Standard, 405 |
| Compression Set | 18 % | 18 % | 23°C; ASTM D 412 |
| | 53 % | 53 % | ASTM D 412 |
| | @Temperature 70.0 °C | @Temperature 158 °F | |
| Tensile Set | 20 % | 20 % | at 300% elongation; ASTM D 412 |
| | 73 % | 73 % | at break; ASTM D 412 |

| Thermal Properties | Metric | English | Comments |
|-------------------------|----------|----------|------------|
| Brittleness Temperature | -66.1 °C | -87.0 °F | ASTM D 746 |

| Optical Properties | Metric | English | Comments |
|-----------------------|--------|---------|--------------|
| Haze | 33 % | 33 % | ASTM D 1033A |
| Transmission, Visible | 89 % | 89 % | ASTM D 1033A |

| Processing Properties | Metric | English | Comments |
|---------------------------|-----------------|----------------|--|
| Processing Temperature | 163 - 204 °C | 325 - 400 °F | Extrusion Temperature |
| Middle Barrel Temperature | 149 - 218 °C | 300 - 425 °F | Injection molding cylinder temperature |
| Drying Temperature | 65.6 - 93.3 °C | 150 - 200 °F | Desiccant type |
| Injection Pressure | 2.07 - 6.89 MPa | 300 - 1000 psi | |

| Descriptive Properties | Value | Comments |
|------------------------|--|----------|
| Sterilization methods: | Steam/Autoclave, Cobalt 60, Ethylene Oxide | |

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