

## CPT C-Flex® R70-046 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-R70-046-Clear-Biocompatible-TPE.php](http://www.lookpolymers.com/polymer_CPT-C-Flex-R70-046-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	0.12 g/10 min	0.12 g/10 min	Condition E; ASTM D 1238

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	37	37	1 sec.; ASTM D 2240
Tensile Strength at Break	7.839 MPa	1137 psi	ASTM D 412
Elongation at Break	870 %	870 %	ASTM D 412
100% Modulus	0.000758 GPa	0.110 ksi	ASTM D 412
300% Modulus	0.00152 GPa	0.220 ksi	ASTM D 412
Tear Strength	22.8 kN/m	130 pli	Die C; ASTM D 624
	23.7 kN/m	135 pli	Notched, Die B; ASTM D 624
Taber Abrasion, mg/1000 Cycles	455	455	Federal Test Method Standard, 405
Compression Set	12 %	12 %	23°C; ASTM D 412
	64 %	64 %	ASTM D 412
	@Temperature 70.0 °C	@Temperature 158 °F	
Tensile Set	10 %	10 %	at 300% elongation; ASTM D 412
	36 %	36 %	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	53 %	53 %	ASTM D 1033A
Transmission, Visible	84 %	84 %	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:	Cobalt 60, Ethylene Oxide	Steam/Autoclave not recommended

## Contact Songhan Plastic Technology Co.,Ltd.

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