

ChronoSil® 55D

(TPU+SI)

AdvanSource Biomaterials

Product Texts

Thermoplastic silicone polycarbonate elastomer (with 5% silicone).

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Melt Flow Index, MFI	14	g/10min	ASTM D 1238
Temperature	205	°C	-
Load	3.26	kg	-

Mechanical properties	Value	Unit	Test Standard
ASTM Data			
Tensile Strength	51.7	MPa	ASTM D 638
Elongation at Break	450	%	ASTM D 638
Shore D Hardness	55	-	ASTM D 2240

Other properties	Value	Unit	Test Standard
Water Absorption, Equilibrium	0.6	%	ASTM D 570

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	71.1 - 93.3	°C	-
Pre-drying - Time	3 - 4	h	-
Processing humidity	≤0.05	%	-
Melt temperature	193 - 216	°C	-
Zone 1	177 - 199	°C	-
Zone 2	182 - 204	°C	-
Zone 3	204 - 227	°C	-
Nozzle temperature	199 - 221	°C	-

Processing Recommendation Extrusion	Value	Unit	Test Standard
Pre-drying - Temperature	71.1 - 93.3	°C	-
Pre-drying - Time	3 - 4	h	-
Processing humidity	≤0.05	%	-
Melt temperature	193 - 216	°C	-
Zone 1	177 - 199	°C	-
Zone 2	182 - 204	°C	-
Zone 3	204 - 227	°C	-
Nozzle temperature	199 - 221	°C	-

Characteristics**Processing**

Injection Molding, Other Extrusion

Delivery form

Pellets

Chemical Resistance

General Chemical Resistance, Environmental Stress Crack Resistance

Certifications

Contains renewable resources, Medical Grade, Biocompatibility ISO 10993, US Pharmacopeia Class VI Approved

Applications

Medical

Regional Availability

North America