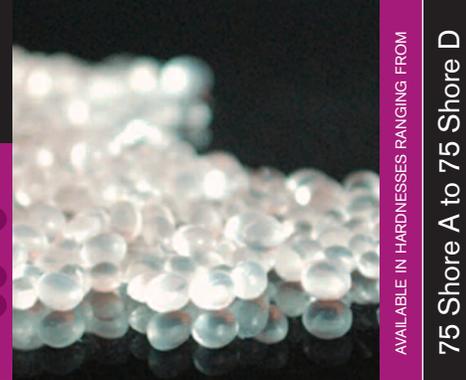


ChronoSil®



AVAILABLE IN HARDNESSES RANGING FROM

75 Shore A to 75 Shore D

Strong yet Supple: The power of polycarbonate meets the softness of silicone.

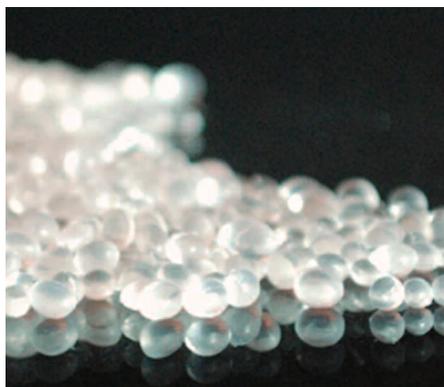
Description

ChronoSil is a family of polycarbonate based silicone elastomers.

These biocompatible materials maintain the inherent benefits of polycarbonate-based urethanes, including high pressure resistance, tensile-strength and superior chemical resistance combined with silicone's industry-recognized advantages such as heightened elongation, superior elasticity and a low coefficient of friction.

Consistent with other polycarbonate-based materials, ChronoSil can be synthesized to provide targeted mechanical properties and is resistant to Environmental Stress Cracking (ESC).

These products are adaptable to most standard manufacturing processes and are available in hardnesses ranging from 75 Shore A to 75 Shore D.



CHRONOSIL IN PELLET FORM

The ASB Advantage

AdvanSource Biomaterials synthesizes and manufactures medical grade materials offering the ability to tailor physical and mechanical characteristics to support and enhance your end product design.

These characteristic's, critical to the design and development of medical devices, can incorporate a wide range of physical and chemical properties. While maintaining core characteristics such as biocompatibility, specialized characteristics such as the addition of colorant technologies and antimicrobial properties can be added to the formulation such as to provide a homogenous material and limit secondary processing steps.

In addition, radiopaque agents may also be incorporated to the formula to provide additional product enhancements and may contain up to 40%, by weight, of a radiopaque agent thus allowing varied-scale visibility options.

With an expanding range of secondary operations including custom solution development and prototype coating services, ASB's expert team of chemists, scientists, engineers and industry professionals assist in every stage of our customers' projects, from concept initiation through full-scale manufacture.

An ASB product

EUROPEAN COUNCIL DECISION - 1999/534/EC -COMPLIANT

ESC RESISTANT

BIODURABLE

HIGH PRESSURE RESISTANCE

SUPERIOR TENSILE-STRENGTH

RELIABLE PERFORMANCE

HEIGHTENED ELONGATION

LOW COEFFICIENT OF FRICTION

SUPERIOR ELASTICITY

INHERENT MATERIAL STRENGTH

BIOCOMPATIBLE



Creating Technology. Enabling Success.



TYPICAL MECHANICAL CHARACTERISTIC RANGES

ChronoSil 80A*

PHYSICAL PROPERTIES

CS 80A*

ASTM Standard
(ASB)

Durometer Range Available	75 Shore A – 75 Shore D	
Silicone Content Available	5% - 20%	
Water Absorption	0.59 - 0.62%	D570
Melt Flow	2 – 26 g/10 min 205° C/3.26 kg	D1238

MECHANICAL PROPERTIES

Durometer	80A	
% Silicone	5%	
Ultimate Tensile Strength (psi)	3300 - 7000	D638
Tensile (psi)		
@ 50% elongation;	350 - 500	D638
@ 100% elongation;	500 - 700	D638
@ 300% elongation;	1600 - 2100	D638
Ultimate Elongation (%)	450 - 650	D638

* Mechanical characteristics can be synthesized to provide end-product specific mechanical properties.

Biological Durability

This product does not contain or come in contact with DEHP (Di (2-ethylhexyl) phthalate).

Independent laboratory results have shown ChronoSil to be non-cytotoxic and meets the requirements of the MEM Elution and AGAR Overlay Testing as defined by ISO 10993-5 guidelines.

The ChronoSil product family meets the current standards for compliance with the European Council Decision 1999/534 EC.

FDA Master Files

It is the responsibility of the user to establish safety with the FDA for their specific medical device.

DISCLAIMER: The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made to its accuracy, suitability for particular applications or to the results to be obtained. The information does not necessarily indicate end product performance. Because of variations in methods, conditions and equipment used in processing these materials, no warranties or guarantees either expressed or implied are made to the suitability or fitness of the materials for any particular purpose. Full-scale testing and end product performance are the responsibility of the user. AdvanSource Biomaterials Corporation shall not be liable for and the customer assumes all risk and liability of any use, sale or handling of any material beyond AdvanSource Biomaterials' direct control. Nothing contained herein is to be considered as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.