



CREAMELT® COC

TRANSPARENT 3D PRINTING FILAMENT, WITH GOOD BARRIER PROPERTIES AND EXCELLENT CHEMICAL RESISTANCE

CREAMELT® COC is a transparent filament made from Cyclic Olefin Copolymer (COC), with good barrier properties and excellent chemical resistance, suitable to be used in pharmaceutical or medical environment

COC is typically used for optical applications, medical devices or pharmaceutical packaging. It offers many benefits over other polymers: biocompatibility, transparency, very low water absorption, good barrier properties, excellent resistance to acids and alkalis as well as many sterilization processes. It has very good melt processability and can be printed on standard FFF 3D printer. The amorphous polymer doesn't warp and has an excellent print performance. Printed parts are translucent and have excellent mechanical properties.

FILAMENT SIZE
Ø1.75 mm / Ø2.85 mm

AVAILABLE COLORS



SPECIFICATIONS

RECOMMENDED PRINT PARAMETERS

PRINTING TEMPERATURE	240...250 °C
PLATFORM TEMPERATURE	80...90 °C
PRINT SPEED	40...150mm/s

MECHANICAL PROPERTIES ¹⁾

TENSILE MODULUS	2600 MPa
TENSILE STRENGTH	63 MPa
TENSILE STRAIN AT YIELD	4.5 %
IMPACT STRENGTH ²⁾	20 kJ/m ²
IMPACT STRENGTH ³⁾	2.6 kJ/m ²

PHYSICAL & THERMAL PROPERTIES

DENSITY	1010 kg/m ³
MELTING POINT	190...250 °C
GLASS TRANSITION POINT	78 °C
HEAT DEFLECTION TEMP. ⁴⁾	75 °C
WATER ABSORPTION ⁵⁾	0.01 %
DEG. OF LIGHT ⁶⁾	91 %
TRANSMISSION	

¹⁾ AS MEASURED BY INJECTION MOLDED TENSILE BARS AT 23°C

²⁾ DIN EN ISO 179/1eU CHARPY UNNOTCHED

³⁾ DIN EN ISO 179/1eA CHARPY NOTCHED

⁴⁾ HDT/B (0.45 MPa)

⁵⁾ ISO 62

⁶⁾ ISO 13468-2

(NOTE: VALUES SHOWN ARE BASED ON MATERIAL SUPPLIERS TECHNICAL DATA SHEET. THEY ARE NOT MEASURED ON 3D PRINTED TEST SPECIMENS.)

