

Introduction

Crestaform® 3D Tough Grey is an ABS-like material with lower crack propagation unlocking the potential of next generation high resolution LCD and DLP 3D printers. Crestaform® 3D Tough Grey combines strength, stiffness and resilience with high resolution, making it perfect for functional / engineering parts, as well as in applications such as modelling and prototyping. The product is optimised for 385 nm and 405 nm wavelengths.

General Properties	Test	Typical Values	
Viscosity @ 25°C	Cone & Plate, 0-5P	6.5 Ps	
Liquid Density @ 23°C	Anton Paar	1.13 g/cm³	
Tensile Properties*	Test	Typical Values	
		Green	Cured
		Tensile Modulus	ISO 527-2
		670 MPa	2400 MPa
		Tensile Strength	ISO 527-2
Flexural Properties*	Test	Typical Values	
		18.5 MPa	59 MPa
		Elongation at Break	ISO 527-2
Other Properties	Test	Typical Values	
		50.2 %	13 %
		Heat Deflection Temperature*	ISO 75-2, Method A (1.8 MPa)
Other Properties	Test	Typical Values	
		51°C	
		Izod Impact Strength**	ASTM D256 (notched)
Other Properties	Test	Typical Values	
		25.12 J/m	
		Shore D Hardness	ISO 868
Other Properties	Test	Typical Values	
		81 D	

* Testing specimens Type 5A printed edgewise at 50° orientation and UV post cured for 16 mins @ 60°C using 405nm Formlabs Formcure

** Testing specimens printed edgewise at 0° orientation and UV post cured for 16 mins using 405nm Formlabs Formcure

*** Testing specimens printed flatwise, and UV post cured for 16 mins @ 60 deg C using 405nm Formlabs Formcure

Printing Performance

Quality of the printed parts are impacted by combination of 3D printer and material used. More information about printing parameters as well as Usage, Storage, Packaging and Health and Safety can be found in the relevant product guideline