

# Nicosin Extrusion, Inc.

## 3D Printing Filament Properties

### HIPS Filament

<b>Physical</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Specific Gravity	1.04	ASTM D792
Melt Mass-Flow Rate (MFR) (200° C/5.0 kg)	3.0 g/ 10 min	ASTM D1238

<b>Mechanical</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Tensile Strength (Yield)	3400 psi	ASTM D638
Tensile Elongation Break	65%	ASTM D638
Flexural Modulus	240000 psi	ASTM D790

<b>Impact</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Notched Izod Impact (73°F)	2.0 ft·lb/in	ASTM D256

<b>Thermal</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Deflection Temperature Under Load 264 psi. Unannealed	185° F	ASTM D648

All Properties Are Tested Properties Of The Raw Materials  
Actual Properties Of Printed Items Should be tested By The Customer