Rubber3Dprinting

Be your own flexible filament "rubber" 3D printing professional...

Material info for PI-ETPU 95-250 Carbon Black the conductive and flexible

3D printing filament

(Typical values shown, print method influences the values)

Diameter ø	1,75±0,05or2.85±0,05	mm	Measure before use for best results / Mät före användning för bäst resultat
Abrasion resistance / Slitstyrka		–	Excellent / Utmärkt
Heat aging / Värmeåldring			Good resistance / Bra motstånd

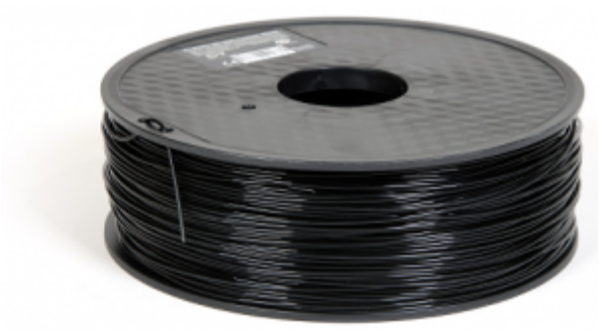
Chemical Resistance / Kemisk motståndskraft			–	Excellent performance for greases, lubricants and some oils but is soluble in organic solvents and during hydrolysis / Utmärkt prestanda för tex fetter, smörjmedel och vissa oljor, dock upplöses den i organiska lösningsmedel och under hydrolys
Microbial resistance / Mikrobiell resistens				Can be vulnerable to damage from fungi and bacteria when for instance used in contact with soil in either hot or humid environments / Kan vara känslig för skador från svampar och bakterier när den

			till exempel används i kontakt med jord i antingen varma eller fuktiga miljöer
Adhesion strength / Vidhäftningsförmåga		–	Good / Bra
Low temperature flexibility / Lågtemperaturflexibilitet		–	Acceptable / Acceptabel
Density / Densitet	1,3	g/cm³	
Tensile Strength / Draghållfasthet	15	MPa	ISO 527, ASTM D-638, 10x4mm solid part
Yield Strength / Sträckgräns	15	MPa	ISO 527, ASTM D-638, 10x4mm solid part
Tensile modulus / Dragmodul	12	MPa	ISO 527, ASTM D-638, 10x4mm solid part
Elongation at Break / Brottöjning	250	%	ISO 527, ASTM D-638, 10x4mm solid part
Elongation at yield / Förlängning vid flytning	225	%	ISO 527
Volume resistivity / Volymresistivitet	<300	Ωcm	PRE021, 10x4mm solid

			part
Surface resistance / Ytresistans	<200.000	Ωcm	IEC 61340-2-3, ANSI/ESD STM 11.11, 400µm thick sheet / 400µm tjock platta
Hardness / Hårdhet	95	Shore A	ISO 868 / D-2240, 10x4mm solid part (±4 Shore A)
Color / Färg	Black / Svart		
Recomended Temperature range / Rekomenderat temperaturområde	200-230	°C	Depending on 3D printer and print speed / Beroende på 3D Printer och utskriftshastighet
Decomposition temperature / Sönderfallstemperatur	250	°C	
Self-ignition Temperature / Självantändningstemperatur	>340	°C	
Pre-drying / Förtorkning	90°C	1 h	Only needed for optimal performance / Endast för optimalt resultat

The filament is made from a special thermoplastic polyurethane (TPU) compound material with a carbon black filler witch is bound in the base polymer. The information in this data sheet represents typical values for the original standardized sample and should not be regarded as a fixed specification for all filaments. 3D-printing will affect these values. PI-ETPU 95-250 Carbon Black is a product under development and Palmiga Innovation reserve the right to change the properties at any time without notice.

Safety data sheet (MSDS) Swedish MSDS – Säkerhetsdatablad REACH COMPLIENCE DECLARATION RoHS COMPLIANCE DECLARATION



MADE IN SWEDEN CE RoHS COMPLIANT

"It prints really really well. In fact I like it more than ninjaflex in a lot of ways."

– Andrew Troy Stott "Disrupt It Yourself" https://instagram.com/disruptityourself

"We've been using the conductive TPU filament, and it works great! We used the conductive TPU filament to prototype injection molded designs

involving overmolded conductive silicone. It worked flawlessly, and was easy to use in our FlashForge Creator Pro."

– Steve Trambert, Mechanical Engineer at http://pavlok.com

"We use the Palmiga Innovation conductive TPU filament to demo the ZYYX 3D Printers capabilities in printing flexible materials. In addition to the very useful conductivity property, it also gives excellent printing results!"

– Mats Moosberg, CEO, ZYYX 3D Printer http://www.zyyx3dprinter.com

Worried if your printer can handle this material? See some advice/info here
http://rubber3dprinting.com/how-to-print/