

3D PRINTER FILAMENT MANUFACTURER – VALIDATION TEST REPORT

Manufacturer:	3R3D Technology Materials
Address:	C/Donosti 25 Local 9 20280 Hondarribia (Guipuzcoa) Productive location: C/Burniola 17 A 20305 Irún (Guipuzcoa) Basque Country Spain Europe
Product Description:	ELIX ABS-3D GP
Filament Description:	1.75mm and 2.85mm diameter
Color:	Natural color
Processing Temperature:	Processing Temperature: 170-190°C Die Head Temperature: 160-170°C
Inspection Date:	01/04/2017

Results Summary:

Filament	ELIX ABS-3D GP - 1.75mm and 2.85mm diameter	
Test	Specifications	Result
Physical Appearance	--	Correct
Diameter Accuracy	Filament 1.75 mm (+-0,04 mm) Filament 2.85 mm (+-0,05 mm)	Correct Correct
<i>Comparison analysis: processed material (filament) vs virgin resin</i>		
Color	Color difference DE<1	Natural color (N/A)
Infrared Spectroscopy (IR)	Correspondence >90% No additional peaks detected	Correct Correct
Thermogravimetry (TGA)	Correspondence Thermal Stability No additional residue detected	Correct Correct
Differential Scanning Calorimetry (DSC)	Correspondence Tg & Softening point	Correct
Process degradability (GC)	Total monomers increase < 50% Specific monomer increase (ACN/BUT) No additional monomers detected	Correct Correct Correct
Migration/Extractable Test (GC)	Extractables increase < 20% No additional peaks detected	Correct Correct

Result of the validation: SATISFACTORY

Results – Detailed Information:



