

# Technical Data Sheet



## Product name: ABSpro™ Flame Retardant

Version: v3

ABSpro - Flame Retardant is a professional, halogen free, self-extinguishing filament which is engineered to meet the UL 94 V-0 flammability standards, meaning that the vertical burning of the filament, or 3D printed object, stops within 10 seconds.

The mixture used for our ABSpro - Flame Retardant Black compound contains a high percentage of PolyCarbonate, ABS and added halogen-free flame retardant modifiers. Even though the compound contains a high percentage of PolyCarbonate, the flame retardant modifiers allows the filament to be printed at relatively low temperatures.

Properties	Typical value	Test Method	Test condition
<b>Physical</b>			
Specific gravity	1.18 g/cc	ISO 1183	-
Melt flow rate	50 g/min	ISO 1133	260° C/5Kg
Water absorption	-	-	-
Moisture absorption	-	-	-
<b>Mechanical</b>			
Impact strength	12,5 KJ/m <sup>2</sup>	ISO 180/A	Izod Notched @23° C (73° F)
Tensile strength	65.1 Mpa	ISO 527	@Yield 50mm/min (2 inch/min)
Tensile modulus	2440 Mpa	ISO 527	1mm/min
Elongation at break	6.6%	ISO 527	@ Break 50mm/min (2 inch/min)
Flexural strength	-	-	-
Flexural modulus	-	-	-
Hardness	-	-	-
<b>Thermal</b>			
Print temperature	± 240 - 260° C	-	-
Melting temperature	-	-	-
Viscat softening temp.	± 110° C	ISO 306	VST/A/50 (50° C/h, 10N)
<b>Optical</b>			
Haze	-	-	-
Transmittance	-	-	-
Gloss	-	-	-

Product details, certifications and compliance	Diameter	Tolerance	Roundness
HS Code	1.75mm	± 0.05mm	≥ 95%
REACH compliant	2.85mm	± 0.10mm	≥ 95%
RoHS certified			

Formfutura BV	CoC: 69099502	Tel: +31 (0)85 002 0881
Groenestraat 215	VAT: NL857733709B01	Email: info@formfutura.com
6531 HH Nijmegen	EORI: NL857733709	Website: www.formfutura.com
The Netherlands		

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