



# TECHNICAL DATA SHEET

## DURAPRO ASA CF

### 1. DESCRIPTION

DuraPro ASA CF is a weatherproof and UV-resistant copolymer for industrial applications and is characterised by high process reliability. The material is reinforced with carbon fibres, making it ideal for mechanically highly stressed components. DuraPro ASA CF is optimised for good layer adhesion, thermal stability, better flow properties and lower warping. The raw material is approved according to REACH and RoHS standards

### 2. FEATURES

- Carbon composite material for performance applications
- UV and weather resistant
- Matte surface
- High rigidity
- Good heat distortion resistance
- Low warping

### 3. PROPERTIES

TEST	METHOD	UNIT	VALUE	PRINT SETTINGS
Flexural modulus (E-Modulus)	ASTM D790	MPa	4500	Nozzle 240-260°C
Flexural strength	ASTM D790	MPa	78	Heatbed 110°C
Tensile modulus (E-Modulus)	ASTM D638	MPa	2500	Adhesive recommended
Tensile strength	ASTM D638	MPa	49	Speed 20-200mm/s
Notched impact strength	ASTM D256	kJ/m <sup>2</sup>	100 @ 23°C	Cooling 0-30%
Unnotched impact strength	ASTM D256	kJ/m <sup>2</sup>	20 @ -30°C	Enclosed Space yes
VICAT A (VST)	ASTM D1525	°C	101*	Hardened Nozzle yes
Melting temperature	ISO 3146-C	°C	210-250	Max. Volumetric Speed 12 mm <sup>3</sup> /s
MFR	ASTM D1238	g/cm <sup>3</sup>	9	Recommended settings for printers with a 0.5mm Nozzle. Max. 50% layerheight. Optimal print settings may vary between different printers and also depend on environmental factors.
HDT/B	ASTM D648	°C	96	
Shrinking	ASTM D955	%	0.3	
Density	ASTM D792	g/cm <sup>3</sup>	1.14	
Hardness Rockwell	ASTM D785	R-Skala	105	
Flammability	UL94	HB	1,5 mm	
Carbon fiber content	ASTM D785	%vol	12	

\*Temperature resistance tested at a minimum wall thickness of 4 mm.

### 4. CERTIFICATIONS & ADDITIONAL INFORMATION



Certifications depend on colors in final product. More info in the additional information sheet.

### 5. STORAGE AND SHELF LIFE

Store in a dry room at room temperature (18-27°C / 65-80°F). Keep out of direct heat and sunlight. When stored correctly, this material has a shelf life of 2 years. Additional info in our regulatory, additional information and chemical resistance data sheets.