



MATERIAL

Invicta Digital PA55

High impact resistance. Strong and flexible.



Formulated and manufactured by DWS

Invicta series

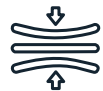
Invicta serie includes all those rigid and tough materials that must respond to high performance in both aesthetic and mechanical terms.

PRODUCT DESCRIPTION

Invicta Digital PA55 is specially designed to resist impact. It is suitable for the manufacture of high-stress elements such as parts used in the sports industry or products that require strength and flexibility. Its technical characteristics can be compared to traditional PA6.



High toughness



Flexibility



Impact resistance



Respect of dimension

Industry

- Automation
- Fashion
- Footwear
- Educational
- Manufacturing





Available colors

Name

Invicta Digital PA55 Clear

Invicta Digital PA55 Black

Technical specs of the liquid material

Viscosity	2500 mPa•s at 25°C
Density	1,1 g/cm ³
Environmental values for use	22°C - 27°C - max, RH 40% - 60%

Technical specs after UV curing

Invicta Digital PA55	Technical Specs	Method
Flexural strength (MPa)	65	ASTM D790
Flexural modulus (MPa)	1320	ASTM D790
Tensile strength (MPa)	27	ASTM D638
Tensile modulus (MPa)	960	ASTM D638
Elongation (%)	62	ASTM D638
Surface hardness (Shore D)	81	ASTM D2240
Impact strength(J/m)	32	ASTM D256
HDT_0.46MPa (°C)	58	ISO 75
HDT_1.8MPa (°C)	46	ISO 75
Water absorption 24h (%)	1.0	ASTM D570

Technical specifications are subject to change without notice. TDS_EN_PA55 / Rev.01 / 02-2026