

TECHNICAL DATA TEC355 - Black



Material Overview

TEC355 – Black (Wavelength 355nm) ABS-like resin is a versatile charcoal black SL resin with high precision, outstanding machinability and excellent durability. It provides long-term environmental stability with good impact strength, elongation, and tensile strength. This material is recommended for making conceptual models, master patterns, and functional parts in the shoe, automotive, medical, consumer electronics, etc. industries.

Advantages

- Medium viscosity ensures easier re-coating and cleaning of parts and machines
- Better strength and dimensional retention properties in wet environments
- Long shelf life in the machine
- Excellent surface quality, accuracy, repeatability
- The charcoal black color offers low shrink and good resistance to yellowing

Ideal Applications

- Vacuum casting prototypes
- Functional models need to be tough
- Conceptual models
- Low-volume production models
- Shoe, automotive, medical, consumer electronics, etc. applications

Technical Datasheet

Liquid Properties		Optical Properties	
Appearance	Charcoal black	Dp	0.135-0.155 mm
Viscosity	350-505 cps @ 25 °C	Ec	9-12 mJ/cm ²
Density	1.12-1.14g/cm ³ @ 25 °C	Building layer thickness	0.05-0.12mm

Mechanical Properties		90- minute UV Postcure
Measurement	Test Method	Value
Hardness, Shore D	ASTM D 2240	75-85
Flexural modulus, Mpa	ASTM D 790	2,650-2,750
Flexural strength, Mpa	ASTM D 790	60-75
Tensile modulus, MPa	ASTM D 638	2,150-2,370
Tensile strength, MPa	ASTM D 638	25-30
Elongation at break	ASTM D 638	12-20%
Impact strength, notched Izod, J/m	ASTM D 256	48-60
Heat deflection temperature, °C	ASTM D 648 @66PSI	58-70
Glass transition, Tg, °C	DMA, E"peak	62-75
Density, g/cm³		1.12-1.14

Note: The temperature for TEC355 - Black resin processing and storage should be lower than 25°C, and the temperature recommended is 18°C - 25°C.

The above data are based on our current knowledge and experience, the values of which may vary and depend on individual machine processing and post-curing practices. The safety data given in above is for information purposes only and does not constitute a legally binding MSDS. The relevant MSDS can be obtained upon request from your supplier or you may contact Teccluster A/S directly at "info@teccluster.com"