





## **Material Overview**

KSPA12BK is a black nylon powder featuring a D50 particle size of approximately 50 microns, showcasing a narrow and uniform distribution. It can be sintered using fiber or carbon dioxide lasers, exhibiting high sphericity and exceptional fluidity. With a reusability rate approaching 100%, the 3D printed parts retain outstanding mechanical properties and a flawless surface finish.

## Advantage

**%** Sinterable with fiber or carbon dioxide laser.

Powder particle size (D50) is around 50 microns,
with a narrow and uniform distribution, high sphericity,
and exceptional fluidity.

 Retains excellent mechanical properties and achieves a flawless surface finish even with close to 100% powder reuse rate.

## **Ideal Application**

- **※ Functional structures**
- ※ Concept prototypes
- Automotive, aerospace, architectural, and electronic applications

Techn	ical	Data	sheet
i c c i i i	i cu	Duco	Sheet

Mechanical Properties	Value	Unit	Test Standard
Tensile Modulus	1600	Мра	ISO 527
Tensile Strength	46	Мра	ISO 527
Strain at break	20	%	ISO 527
Charpy impact strength	38	KJ/m²	ISO 179
Charpy notched impact strength	7.5	KJ/m²	ISO 179
Flexural modulus	1400	Мра	ISO 178
Flexural Strength	50	Мра	ISO 178
Other properties	Value	Unit	Test Standard
Powder Melting temperature (10°C/min)	187	°C	ISO 11357
Vicat softening temperature (50°C/h50N)	100	°C	ISO 306
Density (Laser Sintered)	0.94	g/cm <sup>3</sup>	Own method
Density (Powder)	0.52	g/cm <sup>3</sup>	Own method
Particle Size (D50)	50	μm	Laser Diffraction

These values may vary and depend on individual machine processing and post-curing practices.

## Email: info@additivematerial.com

Add:Building B, No. 1895 Xinkai Road, Zhongdai Street, Pinghu City, Jiaxing City, Zhejiang ProvinceVisit us online at www.additivematerial.comZhejiang Additive Material Co. Ltd