

Technical Data Sheet XYRON™3D-FILAMENT GRADE: JXG70(EXPERIMENT) PPE/PS(reinforced) series Version 1.0

Material Property

June. 2024

DESCRIPTION

This compound is Glass fiber reinforced PPE/PS (polystyrene) filament which is amorphous resin alloys designed to provide better strength and modulus for use in Fused <u>Filament</u> Fabrication (FFF).

Recommended Print Settings

Parameter	Range	UNIT	
Drying Temperature	100	°C	
Drying Time	3~5	hr	
Nozzle Temperature	290~310	°C	
Bed Temperature	100~130	°C	
Chamber Temperature	70~90	°C	
Printing speed	20~100	mm/sec	
MECHANICAL PROPERTIES*1	VALUE	UNIT	TEST STANDARD
Tensile Strength	-	MPa	ISO 527
Flexural Strength	142	MPa	ISO 178
Flexural Modulus	6200	MPa	ISO 178
Charpy Notched	11	kJ/m²	ISO 179
THERMAL PROPERTIES*2	VALUE	UNIT	TEST STANDARD
Deflection Temperature at 1.8 MPa	134	°C	ISO 75-2

Always review the SDS prior to using any of our products. The Safety Data Sheet for this product is available either by contacting Asahi Kasei Plastics NA Inc. or by visiting www.akplastics.com/3dp/. This technical data sheet is a summary of known information at the time of publication. The data in the physical properties table were obtained in our company by applying the prescribed test methods to test specimens made with a 3D printer. The data contained herein are preliminary and may be subject to revision. The data in the physical properties table vary depending on the model of 3D printer used and the modeling conditions. It is the responsibility of the customer to independently determine the suitability of a particular material for the intended use. Asahi Kasei Plastics NA Inc. makes no warranties, express or implied, concerning the suitability or fitness of its products for any particular use or accepts any liability in connection with this information. Asahi Kasei Plastics NA Inc. products does not be used for 3D printing items that include and are similar to: objects with sharp tips, objects that come in contact with people's mouths, children's toys, objects that come in contact with water, and tableware and objects that are weapon such as firearms and swords. For additional information, general guidelines, safe handling, processing and drying protocols please check out our processing guides (online link) or call (800) 444-4408.

^{*1,*2} Printing direction for Test specimen is XY direction.