# TECHNICAL DATA SHEET PA-12

 PA-12 - combines mechanical strength, flexibility and chemical resistance (oils, greases, gasoline), great impact resistance, flexibility and dimensional stability. Finish of this filament is quite smooth which gives it low friction properties (large sliding).

HARDNESS					$\supset$
ELASTICITY		$\bigcirc$	$\bigcirc$	$\bigcirc$ (	$\bigcirc$
IMPACT STRENGTH			$\bigcirc$	$\bigcirc$ (	$\supset$
TENSILE STRENGTH				$\bigcirc$ (	$\bigcirc$

## PHYSICAL PROPERTIES

	VALUE	UNIT	TEST METHOD
Density	1,02	g/cm^3	ISO 1183
Water Absorption	1,5	%	ISO 62



## MECHANICAL PROPERTIES

	VALUE	UNIT	TEST METHOD
Tensile strength	45	MPa	ISO 527-2
Charpy impact strength 23°C	7	kJ/m2	ISO 179-1eA
Charpy impact strength 40°C	7	kJ/m2	ISO 179-1eA

## THERMAL PROPERTIES

	VALUE	UNIT	TEST METHOD
Heat Deflection Temperature 0,45 MPa	110	°C	ISO 75-2
Heat Deflection Temperature 1,8 MPa	50	°C	ISO 75-2
VICAT Softening Temperature	138	°C	ISO 306B
Flammability class	HB	-	UL 94

## ELECTRICAL PROPERTIES

	VALUE	UNIT	TEST METHOD
Resistivity	>1018	Ω/cm2	IEC 60093

## RECOMMENDED PRINTING PARAMETERS









50°C



**Print Speed** 30-80mm/s



Nozzle temperature

240-260°C

Bed temperature

80-120°C

The information contained in this document, such as data, statements, representative values etc. is provided solely for the convenience of the customer. They do not constitute a guarantee as to the safety or properties of the material. The content of this document will have no binding effect, especially representative values that are presented for reference and are not minimum values that have a binding effect. Users must perform and verify all necessary tests and analyzes to confirm the safety and compliance of final products that have been created or changed using OMNI3D products. Data and values contained in this document are subject to change due to product quality improvement without prior notice