III. SLS Printing Technology

i. sPro12W (Nylon 12 White)

Nylon 12 is the most commonly used material in the laser sintering process. The sPro12W offers strength, durability and chemical resistance. It can produce strong, durable and end-use prototypes with less noticeable build lines. The characteristics of sPro12W are as follows:

- Good chemical resistance
- Excellent surface resolution and feature details
- Low moisture absorption
- Produce durable production parts without tooling

IDENTIFICATION	
Product Name	sPro12W
Material Name	Nylon 12 (PA12)
Application	- Packing material - Bag in pharmaceutical - Housings parts - Oil tube, connector - Sport and leisure goods
SPECIFICATIONS	
Color	White
Density	0.96 g/cm³
Packing Density	0.43 g/cm³
MECHANICAL PROPERTIES	
Tensile Strength (Mpa)	49
Tensile Modulus (Mpa)	1593
Elongation	11 %
Flexural Strength (Mpa)	82
Flexural Modulus (Mpa)	1623
Impact (KJ/m2)	2.6
THERMAL PROPERTIES	
Melt Temperature	175°C
Operation Temperature	70 °C