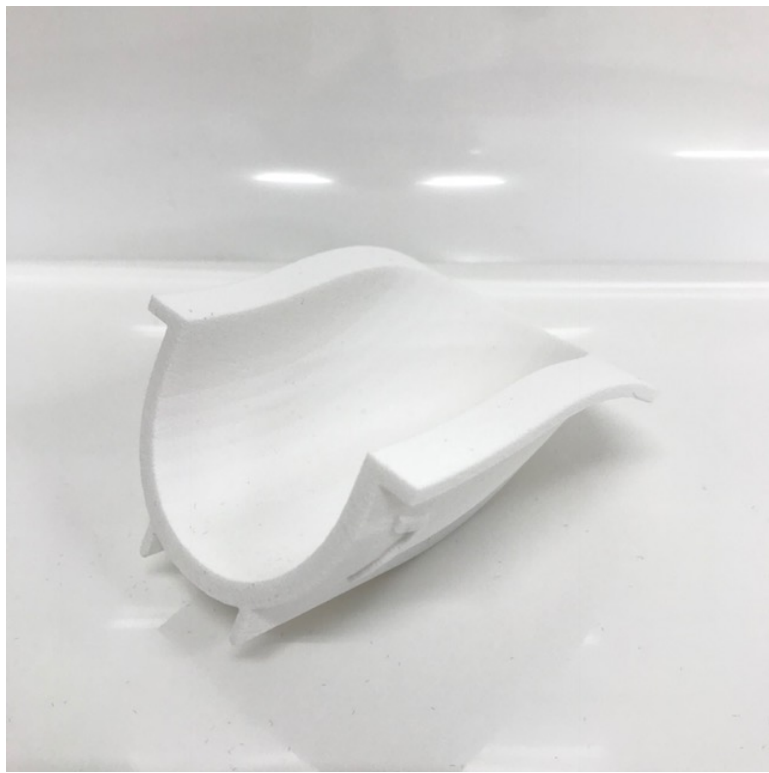


# Flame-Retardant Nylon 12

# ASPEX-PA2FR

A flame-retardant nylon 12 powder material.

It has received Japan's first V-0 flame-retardant certification\* and is applicable to final products.



## ● Key Characteristics

ASPEX-PA2FR has excellent strength, surface quality, and flame retardancy, and it self-extinguishes upon ignition, making it suitable for aerospace, defense, automotive, home appliances, and industrial equipment applications.

**Flame retardancy / Self-extinguishing / High toughness**

## ● Material properties

	Property values	Applicable standards
Maximum tensile stress	<b>45MPa</b>	<b>JIS K7161</b>
Tensile modulus	<b>2706MPa</b>	<b>JIS K7161</b>
Elongation at break	<b>4.1%</b>	<b>JIS K7161</b>

The listed data is subject to change without prior notice.

## ● Main Applications

Defense industry components, Aerospace components, Automotive parts, Digital spares, etc.



**RaFaEl II 300-HT**

Work size (mm)	300×300×440
Laser type	CO <sup>2</sup> 100w
Beam size	Φ0.32mm
Max scan speed	15m/sec

## ● Flame retardant certification conditions

Machine : RaFaEl II 300-HT  
AM-E<sup>3</sup> 550-HT

Layer pitch : 0.1mm

Material : ASPEX-PA2FR virgin 80%\*

Shape thickness and UL classification :

**V-0** thickness 3.0mm or above

**V-2** thickness 2.0mm or above

**HB** thickness 1.5mm or above



**AM-E<sup>3</sup> 550C-HT**

Work size (mm)	550×550×540
Laser type	CO <sup>2</sup> 100w
Beam size	Φ0.48mm
Max scan speed	20m/sec

\* Certification is granted only when the above conditions are met.  
\* There should be no materials other than ASPEX-PA2FR.