

HIGH PERFORMANCE

3D PRINTING FILAMENTS





About us

Nexeo Solutions 3D is a specialized group within Nexeo Solutions that focuses primarily on premium 3D printing filaments for fused filament fabrication (FFF) technology that demonstrate unique material performance in relation to the market's current offerings. Building on the experience in the 3D printing market, **Nexeo Solutions 3D** comes from the distribution of plastics and chemicals. The deep knowledge on base materials as well as the access to world leading thermoplastic producers enables our team to provide the professional assessment to help our customers to make the right material choice.



Application Development Engineers (ADE)

Our **ADE** team can help you to incorporate **3D** printing technology as part of your series production, providing support from the design optimization to the final production part.

Our Services:

- Providing a wide range of filaments using materials from leading producers'
- Guiding customers on material choice, based on application requirements
- Assisting with design optimization
- Printing recommendations
- Samples delivery



Industries

Our aim is to serve a broad crosssection of industries, including automotive, healthcare, electrical/ electronics, packaging or sports and leisure and also high demanding professional consumers looking for improved properties of their 3D printed objects.



Novamid[®] ID1030

Nylon - PA666

· Ideal balance performance-printability

- · Operational temperature up to 125°C Max tensile stress 37 Mpa
- Translucent
- · For material-opened 3D printers

Novamid® ID1030 is our unique premium polyamide meeting the high-service levels requirements in industries such as automotive and electronics. Novamid ID is a very ductile, strong polymer suitable for harsh environments and high temperatures, up to 125°C, offering excellent layer-to-layer adhesion and fast printing processability.

Potential applications: Fluid valve, LED shell

ΕΛSTΜΛΝ

Eastman Amphora™ AM3300

Copolyester – PETG

- Translucent
- Operational temperature up to 85°C
- Easy printing
- · Low-odor and styrene free
- · For material-opened 3D printers

Eastman Amphora™ AM3300

3D polymer is a transparent, lowodor and styrene-free material which enables printing within a wide range of processing temperatures. Amphora AM3300 has good flow properties and exhibits advanced overhang ability, low warping, excellent looks, and a large operational temperature range up to 85 °C. This highly efficient polymer can help speed up processing times.

Potential applications: Thermostat dial, Architectural model, Medical simulation and education models



CYCOLAC[™] AMMG94F ABS

· Ideal balance chemical-

- temperature-impact resistance
- · Good low temperatures performance
- Toughness

· For material-locked 3D printers

CYCOLAC[™] AMMG94F filament is a general purpose ABS based material manufactured from CYCOLAC™ MG94 resin. It provides a balance of properties suitable for a wide variety of applications and it is UL94 HB compliant at 3.0 mm.

Potential applications: Appliances, Automotive trims

Arnitel[®] ID2045 Elastomer - TPC

- · Low temperature build plate
- Operational temperature up to 125°C Shore D34
- 390% elongation at break
- For material-opened 3D printers

Arnitel[®] ID2045 is a highly flexible TPC (thermoplastic copolyester) used in electronics, sports and a wide range of other applications. It is a flexible polymer with very good UVand chemical-resistance compared to other flexible polymers such as TPU (thermoplastic urethane), reaching elongation at break of up to 390%.

Potential applications:

Air Duct, Automotive tooling, Watchband, Shoe sole

Eastman Amphora™ HT5300 Copolyester – PETG HH

- Translucent
- Operational temperature up to 100°C
- Superior durability
- Low-odor and styrene free
- For material-opened 3D printers

Eastman Amphora[™] HT5300

3D polymer is a transparent lowodor, BPA and styrene-free material exhibiting superior durability, dimensional stability and toughness. It is ideal for applications that require temperature resistance of up to 100°C. Due to its superior dimensional stability, HT5300 enables 3D printing to precise dimensions, which is especially important for products with tight tolerances and multi-component parts. Enabled by Eastman Tritan™ copolyester technology.

Potential applications: Lighting cover

general purpose polycarbonate

HF1110 resin. It provides thermal

proper ties above that of general

V-2 compliant at 3.0 mm.

Potential applications:

Electronic components, lighting

product manufactured from LEXAN™

purpose ABS filaments and it is UL94

Novamid[®] ID1070

Nylon - PA6

- Strong and tough Operational temperature up to 150°C
- Max tensile stress 50 Mpa
- · Harsh environments
- · For material-opened 3D printers

Novamid® ID1070 is our unique premium polyamide meeting the high-service levels requirements in industries such as automotive and electronics. Novamid ID is a very ductile, strong polymer suitable for harsh environments and high temperatures, up to 150°C, offering excellent layer-to-layer adhesion, strength and toughness.

Potential applications: Clamp Crank, Drone

NatureWorks

Ingeo General Purpose PLA

PLA

- Easy printing
- Operational temperature up to 60°C
- **Dimensional stability**
- · Low carbon footprint
- · For material-opened 3D printers

Ingeo General Purpose PLA is a

thermoplastic resin derived from naturally advanced materials made from locally abundant and sustainable annually renewable resources. Ingeo General Purpose PLA is a high molecular weight biopolymer grade that processes easily on FFF printers. Ingeo General Purpose PLA offers an excellent cost ratio for concept validation.

Potential applications:

Arnite® ID3040

- Polyester PET
- Chemical resistance
- Operational temperature up to 150°C Max tensile stress 47 Mpa
- Stifness
- · For material-opened 3D printers

Arnite[®] ID3040 is a high quality PET (polyethylene terephthalate) used in high-precision parts in unlimited variety of applications, which meets the highest standards expected in industries such as automotive and consumer products. The material is currently used in safety-critical parts in the automotive industry.

Potential applications:

Shoe last, Windows frames, Electronic pin connectors

Ingeo[™] 3D870 PLA

- Improved impact strength
- Operational temperature up to 60°C
- Dimensional stability
- · Low carbon footprint
- · For material-opened 3D printers

Ingeo™ 3D870 is a grade specifically developed for manufacturing 3D printer monofilament. Engineered to deliver improved heat-resistance and high impact strength, this formulated low-odor grade achieves thermal and mechanical properties similar to ABS while offering an alternative to styrenic-based materials. Ingeo[™] 3D870 provide excellent characteristics such as precise detail, good build plate adhesion and therefore less warping. High compatibility with added value semicrystalline polyesters.

Potential applications: Prototype, Support material

Prototype

LEXAN[™] AM1110F LEXAN[™] EXLAMHI240F ULTEM[™] AM9085F PC PC PFI · High stifness and toughness · High impact strength · Flame resistance · Flame, smoke and toxicity resistance · High temperature resistance · High temperature resistance · For material-locked 3D printers · For material-locked 3D printers LEXAN[™] AM1110F filament is a

LEXAN[™] EXLAMHI240F is a high performance polycarbonate filament that provides high impact strength at room temperature and extreme low temperatures. LEXAN™ EXL AMHI240F combine the high impact with improved UL94 V-0 performance over standard polycarbonate.

Potential applications: Drone, Hockey face mask

Mechanical strength and stifness

- · Long-term heat resistance
- Flame, smoke and toxicity resistance · For material-locked 3D printers

ULTEM™ AM9085F filament is a high performance polyetherimide blend product manufactured from ULTEM[™] 9085 resin. It provides high heat resistance and mechanical strength, it is UL94 V-0 compliant at 1.5 and 3.0 mm and meets FAR 25.853 and OSU 65/65 with low toxicity, smoke, and flame evolution.

Potential applications: Aerospace Tooling





THINK PRINT USE



CONTACT US

Nexeo Solutions 3D - EMEA

Lluís Muntadas, 5 08940 Cornellà de Llobregat - Barcelona Tel: +34 93 480 91 25 Fax: +34 93 473 42 50 www.nexeo3D.com nexeo3Dsolutions@nexeosolutions.com

Nexeo Solutions 3D - US

Nexeo Solutions, LLC 3 Waterway Square PI #1000 The Woodlands, TX 77380, USA <u>www.nexeo3D.com</u> nexeo3Dsolutions@nexeosolutions.com

DIAL-IN NUMBERS

France	. 22 1 /1 10 20 27
France	+33 1 41 19 29 27
Germany	+49 (0) 711880264 33
Ireland	+44 1773 524303
Italy	+39 0225547092
Netherlands	+34 934 80 91 31
Poland	+48 228680210
Portugal	+351 244 819 990
Russia	+7 812 7777 957108
Spain	+34 934 80 91 31
Sweden	+46 (0303) 729512
UK	+44 1773 524303
US	+1.844.396.3693

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