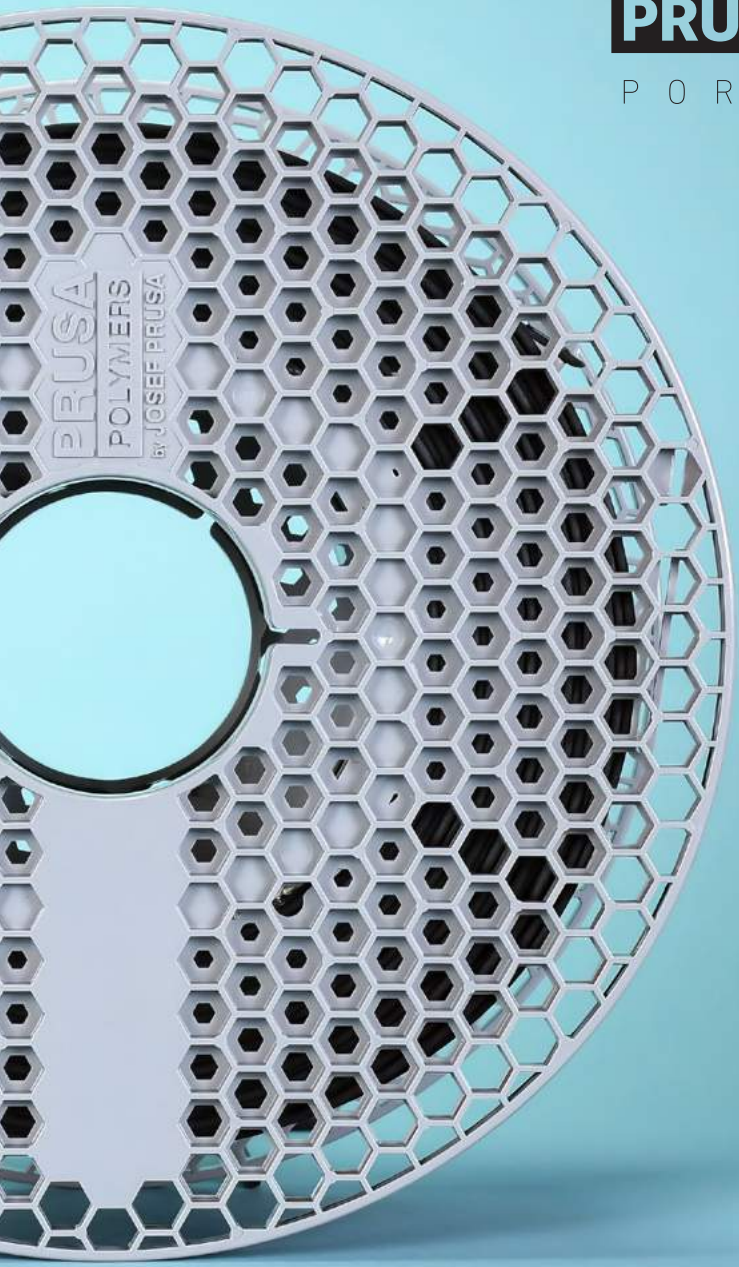
PRUSAMENT

PORTFOLIO



PRUSAMENT.COM

ABOUT **PRUSAMENT**

We introduced our own in-house brand of filament, Prusament, back in 2018. The main reason is that we wanted to have control over all the factors that lead to a succesful print - and the quality of filament is a very important factor, almost as important as the 3D printer itself.

We bought a number of filament manufacturing lines and did something what's very common here - we took them apart and started modifying them because right from the start, we wanted to achieve a consistent diameter, perfect winding and color consistency of our product. We were the very first 3D printer manufacturer with its own filament production lines! In this detailed portfolio you'll find all of our filaments and resins, so you can choose the one that best suits your next printing project.

Josef Prusa

MANUFACTURED IN EUROPEAN UNION, PRAGUE, CZECH REPUBLIC

We were not satisfied with the quality of the filaments on the market. So we decided to make our own! As an award-winning 3D printer manufacturer, Prusa Research meets high manufacturing standards and guarantees the highest quality of its filaments and resins.

±0.02 MM MANUFACTURING PRECISION FOR MOST MATERIALS

We believe the industry standard of 0.05 mm isn't sufficient. We guarantee ±0.02mm precision for the vast majority of materials and highly consistent colors.

PREMIUM-GRADE MATERIALS AND THOROUGH TESTING

The whole manufacturing process is closely monitored and tested – string diameter, color consistency, and mechanical properties – to ensure that every spool is perfect.

BIRTH CERTIFICATE FOR EVERY SPOOL AND BOTTLE

We are the only manufacturer that allows customers to fully inspect the parameters of every filament spool. Just scan a QR code on the spool to see all the details online.

PERFECT WINDING & COLOR CONSISTENCY

During the manufacturing process, an automatic system constantly monitors consistent color tone and ensures a perfect winding of each filament spool.

PRUSAMENT

PLA

EASIEST MATERIAL TO PRINT

It is inexpensive and suitable for beginners and advanced users alike. It is capable of printing detailed models, figures, and quick prototypes that don't require increased mechanical, chemical, or temperature resistance. PLA is the most widely used filament, known for its great looks and ease of printing. It is an excellent choice for large objects because of its low thermal expansion, which results in minimal warping. At the same time, its low melting temperature makes it suitable for small parts as well. While PLA may not be as tough or durable as some advanced materials, its versatility makes it ideal for a range of applications, including large objects, miniatures, concept models, and prototypes that don't need to be extremely durable.

- Easy to print
- Suitable for prints of any size
- Hard
- Low warping

- Brittle
- Poor high-temperature resistance
- Difficult to sand (hard material, melts easily)

Heatbed: 50 ± 10 °C

Nozzle: 215 ± 10 °C

PRUSAMENT | PLA

PRISTINE WHITE

1 KG

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

PLA BLEND | PRUSAMENT

PEARL WHITE

SILK 970 G

PRUSAMENT | PLA

VANILLA WHITE

1 KG

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

PLA | PRUSAMENT

PINEAPPLE YELLOW

1 KG

PRUSAMENT | PLA BLEND

OH MY GOLD

970 G | SILK

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

PLA BLEND | PRUSAMENT

VIVA LA BRONZE

SILK | 970 G

PRUSAMENT | PLA

PRUSA ORANGE

1 KG

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

PLA | PRUSAMENT

LIPSTICK RED

1 KG

PRUSAMENT | PLA BLEND

MS. PINK

970 G | SILK

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

PLA | PRUSAMENT

GALAXY PURPLE

GLITTER | 1 KG

PRUSAMENT | PLA BLEND

ROYAL BLUE

970 G | SILK

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

PLA | PRUSAMENT

AZURE BLUE

1 KG

PRUSAMENT | PLA BLEND

LIME GREEN

970 G | SILK

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

PLA | PRUSAMENT

SIMPLY GREEN

1 KG

PRUSAMENT | PLA

OPAL GREEN

1 KG | GLITTER

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

PLA | PRUSAMENT

GALAXY GREEN

GLITTER | 1 KG

PRUSAMENT | PLA

ARMY GREEN

1 KG

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

PLA | PRUSAMENT

MYSTIC GREEN

POLYCHROMATIC 1 KG

PRUSAMENT | PLA

GENTLEMAN'S GREY

1 KG

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

PLA | PRUSAMENT

MARBLE GREY

GLITTER | 1 KG

PRUSAMENT | PLA

GRAVITY GREY

1 KG

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

PLA | PRUSAMENT

GALAXY SILVER

GLITTER 1 KG

PRUSAMENT | PLA BLEND

MY SILVERNESS

970 G | SILK

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

PLA | PRUSAMENT

PEARL MOUSE

1 KG

PRUSAMENT | PLA

MYSTIC BROWN

1 KG | POLYCHROMATIC

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

PLA | PRUSAMENT

PRUSA GALAXY BLACK

GLITTER | REFILL | 1 KG | 2 KG

PRUSAMENT | PLA

JET BLACK

1 KG

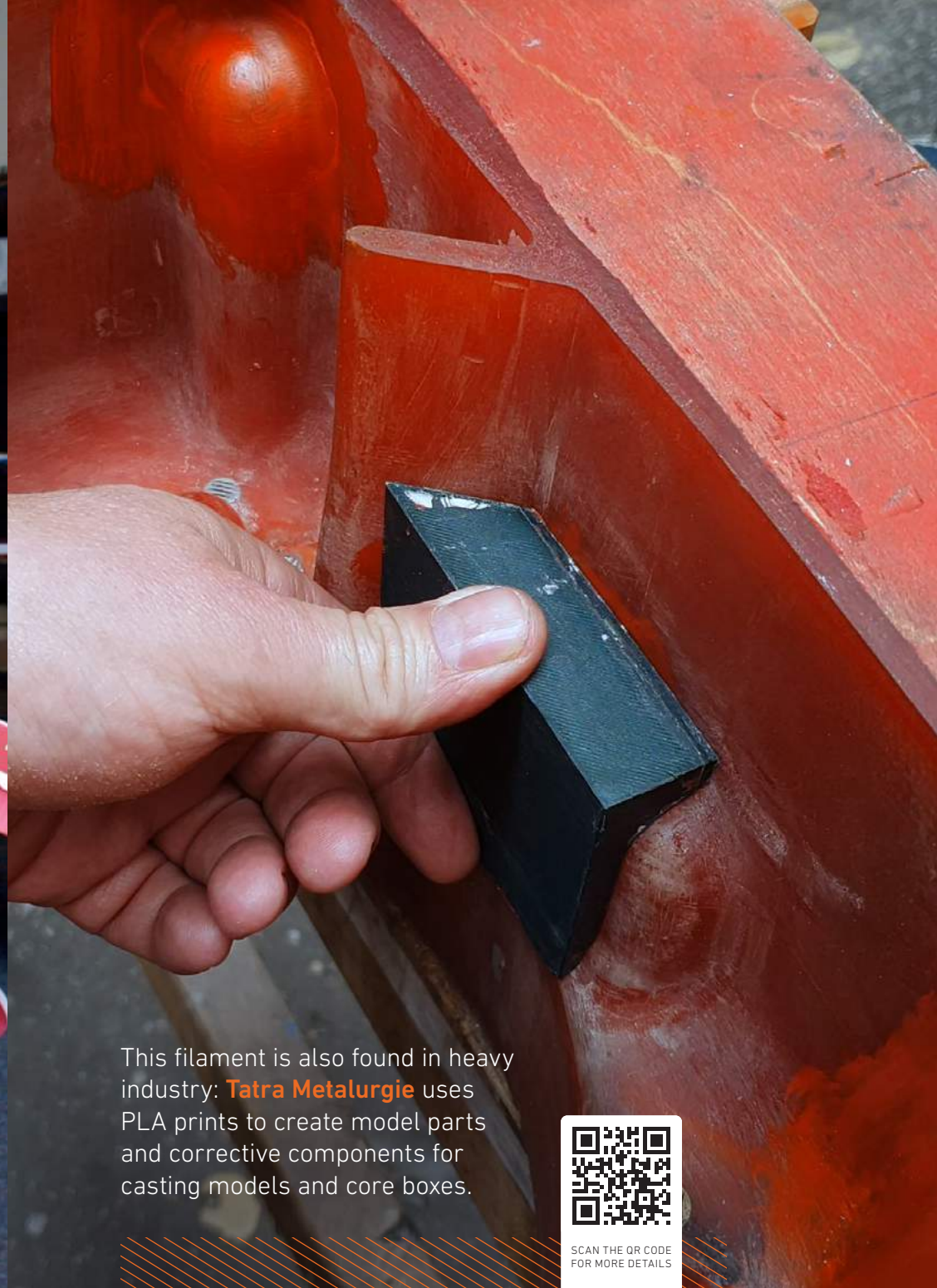
SCAN THE QR CODE FOR MORE DETAILS

PRINT REFILL REPEAT

REUSE PRUSAMENT SPOOL SIDES
OVER AND OVER TO INFINITY!
∞

Prusament PLA is perfect for large-scale RC aircraft models, such as those made by **3DLabPrint**. With PLA, models can be easily and quickly printed in full detail, regardless of size.

SCAN THE QR CODE FOR MORE DETAILS



This filament is also found in heavy industry: **Tatra Metalurgie** uses PLA prints to create model parts and corrective components for casting models and core boxes.

SCAN THE QR CODE FOR MORE DETAILS

PRUSAMENT

PLA RECYCLED

MADE OF 100% RECYCLED MATERIAL

Prusament PLA Recycled is our own in-house filament with ±0.05mm manufacturing tolerance. 100 % of the material consists of recycled Prusament PLA materials, so every batch has a different color. PLA is the easiest material to print. It is inexpensive and suitable (not only) for beginners. It is capable of printing detailed models, figures, and quick prototypes that don't require high mechanical, chemical, or temperature resistance. PLA is the most widely used filament, known for its great looks and ease of printing. It is an excellent choice for large objects because of its low thermal expansion, which results in minimal warping. At the same time, its low melting temperature makes it suitable for small parts as well. While PLA may not be as tough or durable as some advanced materials, its versatility makes it ideal for a range of applications, including large objects, miniatures, concept models, and prototypes that don't need to be extremely durable.

- Easy to print
- Suitable for prints of any size
- Hard
- Low warping

- Different color with every batch
- Brittle
- Low-temperature resistance
- Difficult to sand (hard material, melts easily)

Heatbed: 50 ± 10 °C

Nozzle: 215 ± 10 °C

SCAN THE QR CODE FOR MORE DETAILS

PRUSAMENT

rPLA NATURAL PIGMENTS

Prusament rPLA Natural Pigments is our own in-house recycled PLA filament with ±0.03mm manufacturing tolerance and natural pigment additives. The filament is made of PLA parts manufacturing waste provided by our external supplier. No artificial pigment is added, the coloring of this Prusament comes from processed organic waste, such as red algae. The organic additives create a noticeable scent during printing. The Prusament rPLA Natural Pigments has mechanical properties similar to regular PLA, but it is slightly more brittle and hygroscopic. In general, PLA is used for various aesthetic models, prototypes, and other visual parts. With Prusament rPLA Natural Pigments, these parts can be made with significantly lower ecological impact. Last but not least, the natural pigments give rPLA pleasant subtle colors, perfectly suitable for various home decor and other aesthetic purposes.

- Easy to print
- Suitable for prints of any size
- Unique, pleasant subtle colors
- No artificial pigments added
- Low warping
- Eco-friendly

- Brittle
- Low-temperature resistance
- Color may vary slightly depending on natural pigments
- Slightly hygroscopic (absorbs moisture)
- Noticeable (but non-toxic) smell

Heatbed: 50 ± 10 °C

Nozzle: 205 ± 10 °C

ALGAE PIGMENT

1 KG

SCAN THE QR CODE FOR MORE DETAILS

WINE PIGMENT

1 KG

SCAN THE QR CODE FOR MORE DETAILS

CORN PIGMENT

1 KG

SCAN THE QR CODE FOR MORE DETAILS

RISSOTO PIGMENT

1 KG

SCAN THE QR CODE FOR MORE DETAILS

PRUSAMENT

PETG

DURABLE, YET EASY TO PRINT

PETG is one of the most commonly used filaments. Its strength and durability make it an excellent choice for printing various mechanically-stressed parts, such as various holders, or clamps, for example. Due to its excellent layer-to-layer adhesion, PETG prints are ideal for indoor and outdoor waterproof applications. Furthermore, PETG is a tough material with good high-temperature resistance. The G in the acronym stands for a glycol-modified substance that is present during the manufacturing process. It modifies the properties of PET, so that it's easier to print, less brittle, and clearer when printing with semi-transparent variants. PETG has a low thermal expansion, so even when printing big objects, and without an enclosure, it rarely lifts from the bed and warps. In addition to that, PETG is tougher and less brittle than PLA. It has a healthy amount of flex which can prevent parts from breaking under pressure. We use PETG to print parts for our printers!

- Good high-temperature resistance
- Easy to print
- Low shrinking and warping
- High strength and durability
- Easier to sand than PLA (softer, less melting)

- Worse details than PLA, for example
- Possibility of stringing
- Poor bridging characteristics

Heatbed: 80 ± 10 °C

Nozzle: 250 ± 10 °C

PRUSAMENT | PETG

CLEAR

1 KG | TRANSPARENT

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

PETG | PRUSAMENT

SIGNAL WHITE

1 KG

PRUSAMENT | PETG

URBAN GREY

1 KG

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

PETG | PRUSAMENT

MANGO YELLOW

1 KG

PRUSAMENT | PETG

YELLOW GOLD

1 KG | GLITTER

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

PETG | PRUSAMENT

PRUSA ORANGE

1 KG | 2 KG

PRUSAMENT | PETG

PRUSA ORANGE TRANSPARENT

1 KG | TRANSPARENT

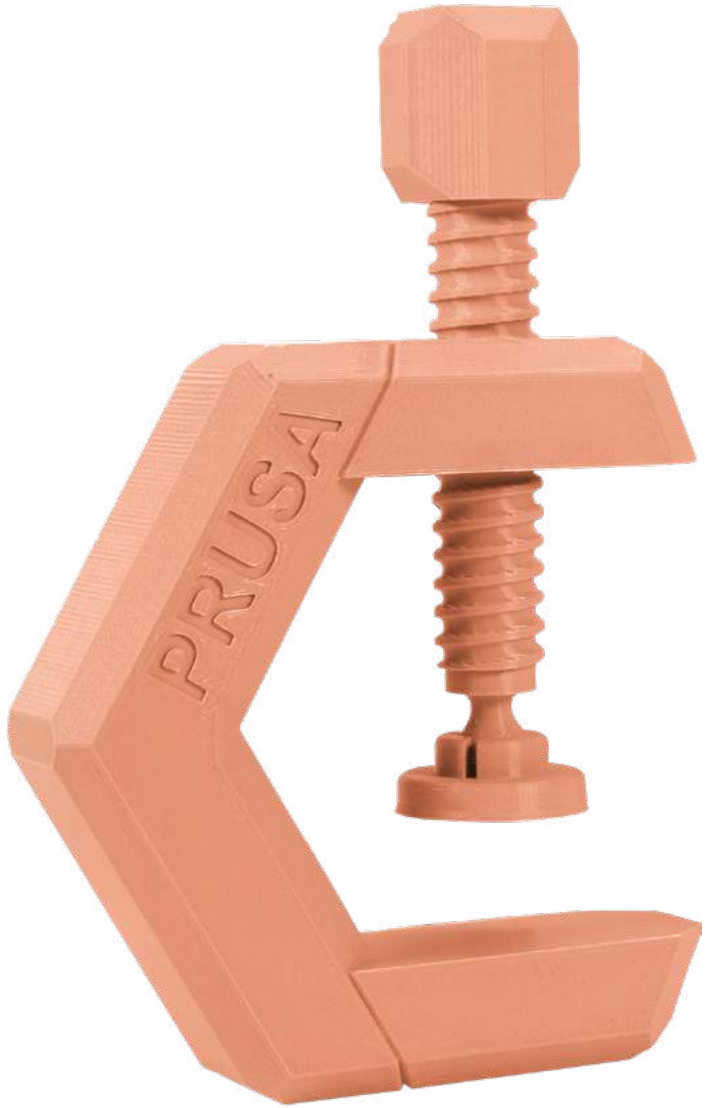
SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

PETG | PRUSAMENT

TERRACOTTA LIGHT

1 KG

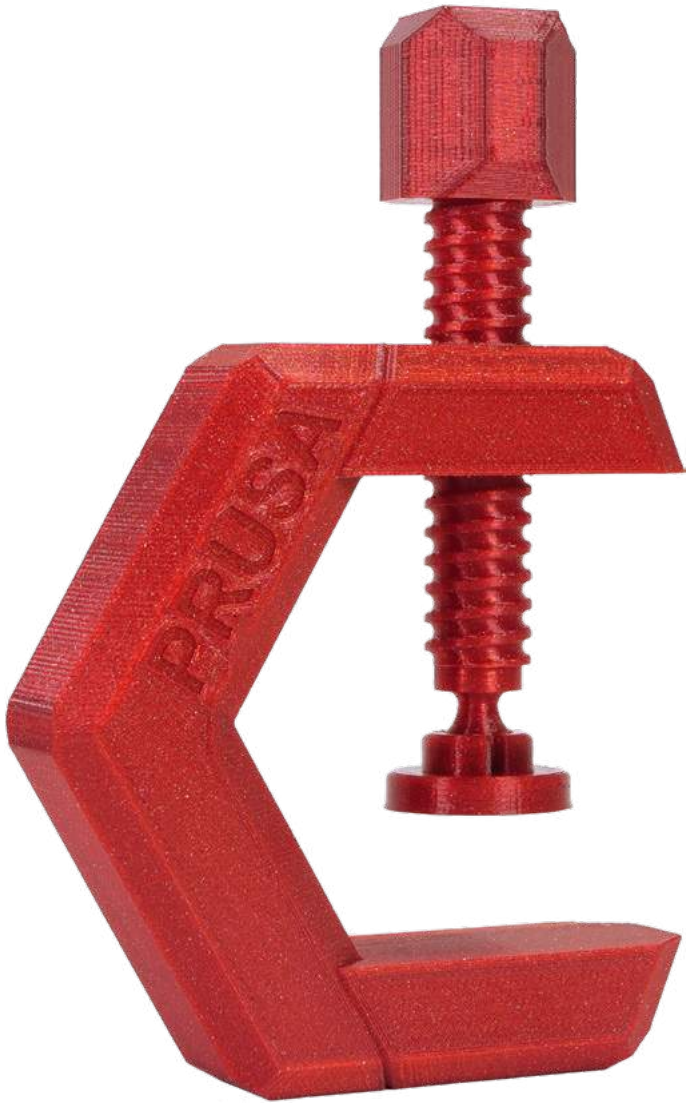


PRUSAMENT | PETG

CARMINE RED

1 KG | TRANSPARENT | GLITTER

SCAN THE QR CODE FOR MORE DETAILS



SCAN THE QR CODE FOR MORE DETAILS

PETG | PRUSAMENT

LIPSTICK RED

1 KG

PRUSAMENT | PETG

ULTRAMARINE BLUE

1 KG | TRANSPARENT

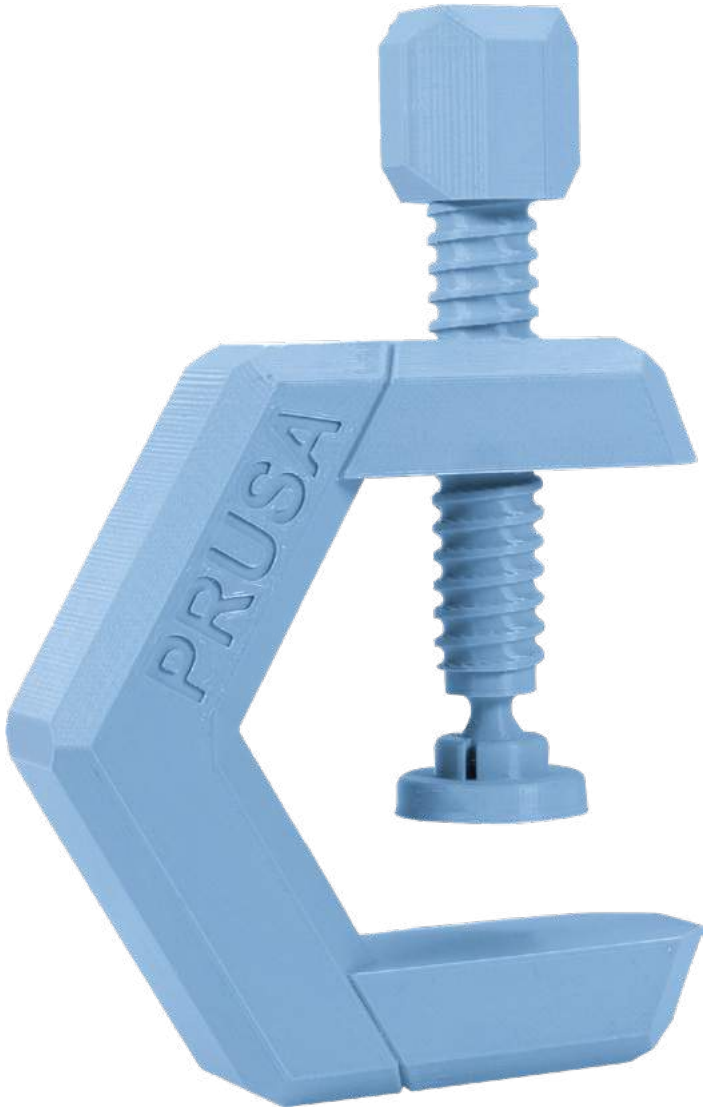
SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

PETG | PRUSAMENT

CHALKY BLUE

1 KG



PRUSAMENT | PETG

OCEAN BLUE

1 KG

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

PETG | PRUSAMENT

JUNGLE GREEN

1 KG

PRUSAMENT | PETG

PISTACHIO GREEN

1 KG

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

PETG | PRUSAMENT

NEON GREEN

TRANSPARENT 1 KG

PRUSAMENT | PETG

ANTHRACITE GREY

1 KG

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

PETG | PRUSAMENT

MATTE BLACK

1 KG

PRUSAMENT | PETG

PRUSA GALAXY BLACK

1 KG | GLITTER

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

PETG | PRUSAMENT

JET BLACK

REFILL | 1 KG | 2 KG

Renowned creator Ladislav Ječmínek and his wife Margaret use 3D printing to create custom-made travel vans and electric motorbikes made with 3D printed components. They use Prusament PETG to create durable accessories and body parts for their motorbikes.

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

More than 10 % of **Lyotrade**'s freeze-drying machine parts are 3D printed, many of which are made from PETG. This allows them to make changes in design and production quickly.

SCAN THE QR CODE
FOR MORE DETAILS

PRUSAMENT

PETG RECYCLED

MADE OF 100% RECYCLED PETG

Prusament PETG Recycled is our own in-house filament with ±0.05mm manufacturing tolerance. 100% of the material consists of shredded Prusament PLA filaments that didn't pass our strict control, so every batch has a different color. Due to its excellent layer-to-layer adhesion, PETG prints are ideal for indoor and outdoor waterproof applications. Furthermore, PETG is a tough material with good high-temperature resistance. The G in the acronym stands for a glycol-modified substance that is present during the manufacturing process. It modifies the properties of PET, so that it's easier to print, less brittle, and clearer when printing with semi-transparent variants. PETG has a low thermal expansion, so even when printing big objects, and without an enclosure, it rarely lifts from the bed and warps. In addition to that, PETG is ductile. It has a healthy amount of flex which can prevent parts from breaking under pressure. We use PETG to print parts for our printers!

- Good high-temperature resistance
- Easy to print
- Low shrinking and warping
- High strength and durability
- Easier to sand than PLA (softer, less melting)

- Different color with every batch
- Worse details than PLA, for example
- Possibility of stringing
- Poor bridging characteristics

Heatbed: 80 ± 10 °C

Nozzle: 250 ± 10 °C

PRUSAMENT

PETG
CARBON FIBER

REINFORCED CARBON FIBER COMPOSITE

Prusament PETG Carbon Fiber is our classic Prusament PETG filament reinforced with carbon fiber, which improves some of its mechanical properties and gives it an attractive look. Compared to regular Prusament PETG, this material has better dimensional stability, better temperature resistance, higher modulus of elasticity, and is less prone to stringing. With Prusament PETG Carbon Fiber, you get very durable, professional-looking prints. The carbon fibers inside the filament are obtained by recycling industrial waste from the production process or carbon composites at the end of their life.

- High strength and durability
- Improved temperature resistance
- Improved dimensional stability during printing
- Higher resistance to being deformed elastically
- Low stringing
- Highly attractive matt black surface
- Easy to print
- Almost odorless when printing

- Lower toughness compared to Prusament PETG
- Requires a hardened nozzle
- Worse details than PLA, for example

Heatbed: 90 ± 10 °C

Nozzle: 265 ± 10°C

SCAN THE QR CODE FOR MORE DETAILS

CARBON FIBER BLACK

FILLED | 1 KG

PRUSAMENT

PETG TUNGSTEN

MADE FOR RADIATION SHIELDING

Prusament PETG Tungsten 75% is a highly specialized filament **designed mainly for radiation shielding purposes**. Tungsten (also known as wolfram) powder inside the PETG filament is a heavy metal that does not react with water and is resistant to oxidation at room temperature. Unlike lead, tungsten is **hypoallergenic and non-toxic**. This makes it perfectly suitable for creating complex X-ray and gamma-ray radiation-shielding components (not only for medical applications) in an easier and faster way compared to conventional methods.

- Radiation shielding material
- Good chemical resistance
- Non-reactive
- Non-toxic
- Hypoallergenic
- Highly attractive metallic grey surface
- Easy to print
- Easy postprocessing (can be polished as other metal-filled materials)

- Requires a hardened nozzle
- Lower toughness compared to Prusament PETG
- High-density material (less meters of filament per 1 kg)
- Higher price
- Not suitable for sintering

Heatbed: 80 ± 10 °C

Nozzle: 260 ± 10°C

SCAN THE QR CODE FOR MORE DETAILS

TUNGSTEN 75%

FILLED | 1 KG

PRUSAMENT

PETG V0

BLUE CARD FOR PETG V0

CERTIFIED SELF-EXTINGUISHING MATERIAL

PETG V0 is a unique UL-certified self-extinguishing PETG filament. Similar to the regular Prusament PETG, it is a tough material with good thermal resistance. It has universal use, but is especially suitable for housings and insulating parts in electronics, due to its self-extinguishing properties. PETG V0 is not prone to warping, so printing large objects isn't a problem. When our Prusament PETG V0 starts burning, it creates a carbonized crust on the surface that prevents the oxygen from getting in and fueling the flame and eventually extinguishes the fire. We asked the UL to test the flammability of the Prusament PETG V0. The test method was made according to the IEC 60695-11-10 standard and resulted in a class UL94 V0 (for both our colors).

- A unique UL-certified self-extinguishing filament
- Perfect for plastic parts in electronic appliances
- Good high-temperature resistance
- Good chemical resistance
- Low shrinking and warping
- High strength and durability
- Halogen-free (less harmful fumes when burning)
- Easy to print

- Hygroscopic material (needs drying before printing)
- Prone to stringing and oozing
- Poor bridging characteristics
- Worse details than PLA, for example
- The UL certification applies only for printing with Original Prusa MK3S+, MK4, and XL and approved profiles in PrusaSlicer

Heatbed: 80 ± 10 °C

Nozzle: 230 ± 10°C

PRUSAMENT | PETG

V0 NATURAL

1 KG

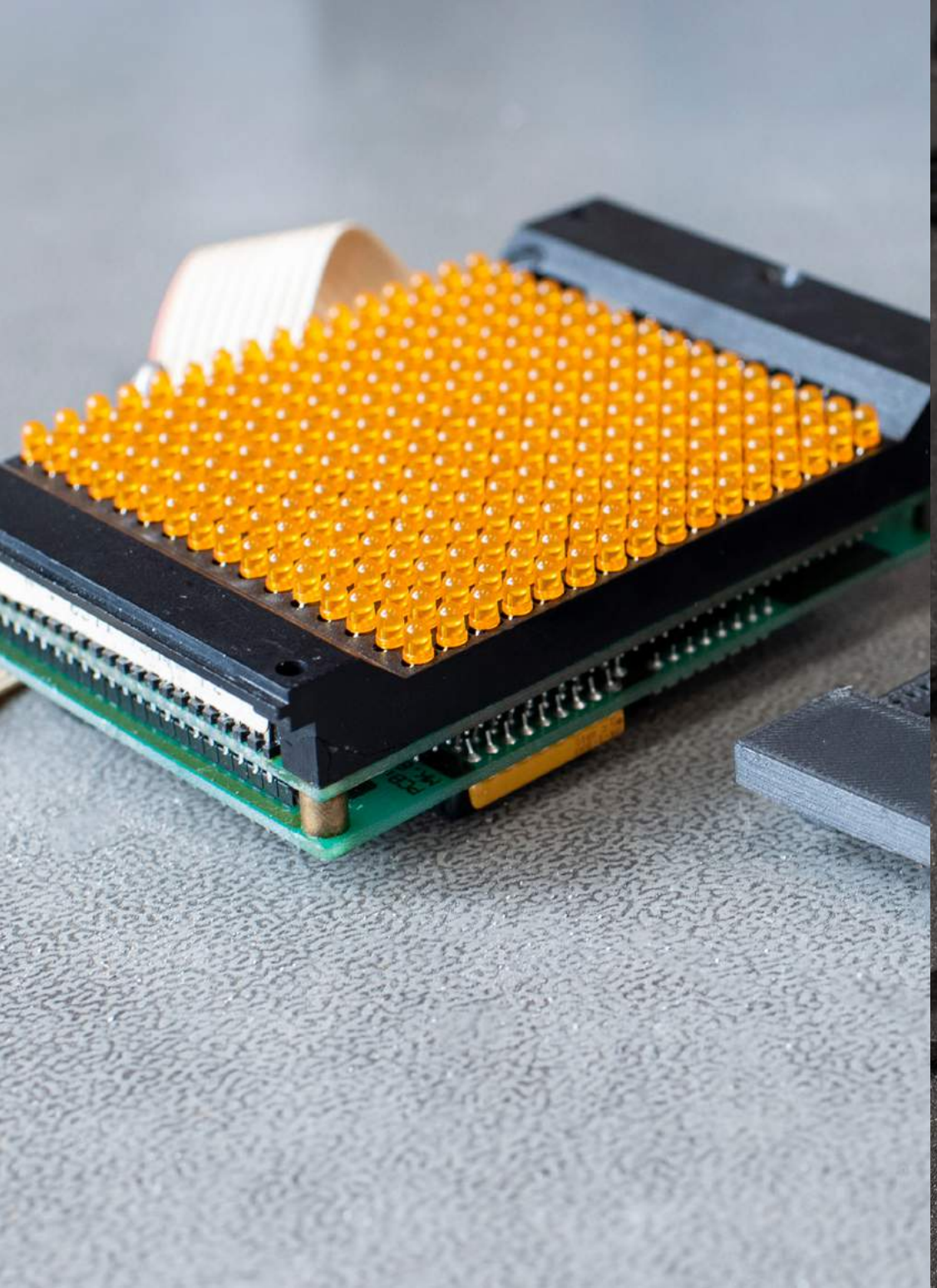
SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

PETG | PRUSAMENT

V0 JET BLACK

1 KG



SCAN THE QR CODE
FOR MORE DETAILS

Knorr-Bremse Rail System Denmark repairs trains, often designing and manufacturing new parts. For this purpose, the company uses Prusament PETG V0. It's a tough material with good thermal resistance which is also self-extinguishing, so it meets all the criteria of the necessary certification procedures. This makes it ideal for making mounts and covers for various electronic devices.

PRUSAMENT

PVB

EASY SMOOTHING FOR GLASS-LIKE FINISH

Polyvinyl butyral (PVB) is a design material suitable mostly for visual purposes. Thanks to its translucency and easy smoothing with isopropyl alcohol, PVB is great for printing visual models such as unconventional vases, jewelry, lampshades, and other design elements. Its most notable benefit is its easy solubility (in isopropyl alcohol), which allows users to create models with a glass-like finish. Combining translucency and easy smoothing expands the field of use. Movie props, costume parts, and other unusual models are just some of the many options. Additionally, due to its low warping PVB is suitable for printing large models. Print settings of PVB are similar to PLA, and mechanical properties are slightly better (similar to CPE or PETG).

- Easy to print (similar to PLA)
- Ideal for design parts, vases, lamp shades etc.
- IPA chemical smoothing
- Great surface adhesion
- Good mechanical properties (similar to CPE/PETG)
- Low warping (lower than PLA)

- Poor high-temperature resistance
- Hygroscopic filament (absorbs moisture)
- Poor layer-to-layer adhesion (slightly worse than PLA)

Heatbed: 75 °C

Nozzle: 215 ± 10 °C

PRUSAMENT | PVB

NATURAL

500 G | TRANSPARENT

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

PVB | PRUSAMENT

LIGHT YELLOW

TRANSPARENT | 500 G

PRUSAMENT | PVB

PRUSA ORANGE

500 G | TRANSPARENT

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

PVB | PRUSAMENT

DARK BLUE

TRANSPARENT | 500 G

PRUSAMENT | PVB

BRIGHT GREEN

500 G | TRANSPARENT

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

PVB | PRUSAMENT

SMOKY BLACK

TRANSPARENT | 500 G

PRUSAMENT

ASA

DESIGNED FOR OUTDOOR USE

ASA is a technical material with properties similar to ABS but better in several ways. Compared to ABS, it's UV stable, it doesn't suffer from shrinking so badly and the fumes produced are much less noticeable. ASA 3D prints are durable, tough and suitable for a wide range of applications. ASA comes with much better high-temperature resistance than other common materials, such as PLA or PETG. It shows no signs of deformation up to temperatures near 93 °C. Thanks to all these properties, ASA is especially suitable for printing objects meant for long-time outside use.

- Great for outside use – UV stable
- Good high-temperature resistance
- Detailed prints without a stringing effect
- Can be smoothed with acetone vapors
- Can be easily sanded / post-processed
- Good mechanical resistance

- Large models tend to warp (enclosure recommended)
- Produces a slight odor of burned plastic during printing (less than ABS)
- Contains styrene (potentially harmful fumes)
- Hygroscopic (absorbs moisture)

Heatbed: 110 ± 5 °C

Nozzle: 260 ± 5 °C

SCAN THE QR CODE FOR MORE DETAILS

SIGNAL WHITE

850 G

PRUSAMENT | ASA

NATURAL

850 G

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

ASA | PRUSAMENT

PRUSA ORANGE

850 G

PRUSAMENT | ASA

LIPSTICK RED

850 G

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

ASA | PRUSAMENT

SAPPHIRE BLUE

850 G

PRUSAMENT | ASA

PRUSA GALAXY BLACK

850 G | GLITTER

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

ASA | PRUSAMENT

JET BLACK

850 G

SCAN THE QR CODE
FOR MORE DETAILS

When restoring vintage Volvos from the ‘60s and ‘70s, **Amazon Cars** often uses 3D printing to replace parts that can no longer be obtained. For example, they made perfect replicas of these windshield clips using ASA to withstand the pressure and weather conditions.

For the same reason, **Anitra** System uses GPS tracking loggers for animals 3D printed out of Prusament ASA because the material is tough, resistant, and lightweight.

SCAN THE QR CODE
FOR MORE DETAILS

PRUSAMENT

PC BLEND

FOR HEAT-STRESSED MACHINE PARTS

Because of its strength and toughness, PC Blend is perfect for durable, functional 3D prints. Plus, the PC Blend has high-temperature resistance up to 113 °C / 235 °F. It is an excellent choice for printing mechanically or heat-stressed parts. Thanks to excellent mechanical resistance and good resistance to creep (cold flow), the prints can be used not just as prototypes, but directly as functional parts in production machinery. PC Blend is recommended for experienced 3D printer owners looking for a tough, durable material for the production of prototypes and functional parts, thermally and mechanically stressed components.

- Great high-temperature resistance (up to 113°C)
- High impact and wear resistance (very strong and rigid material)
- Good dimensional stability in comparison with other PC filaments
- Prints don't deform under pressure over time
- Good electrical insulating properties
- Styrene-free (non-toxic compared to ASA)
- Very low moisture absorption

- Large models have a tendency to warp
- Requires high heatbed and nozzle temperatures
- Produces noticeable odor during printing

Heatbed: 110 ± 10 °C

Nozzle: 275 ± 10 °C

PRUSAMENT | PC BLEND

NATURAL

970 G

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

PC BLEND | PRUSAMENT

URBAN GREY

970 G

PRUSAMENT | PC BLEND

PRUSA ORANGE

970 G

SCAN THE QR CODE FOR MORE DETAILS

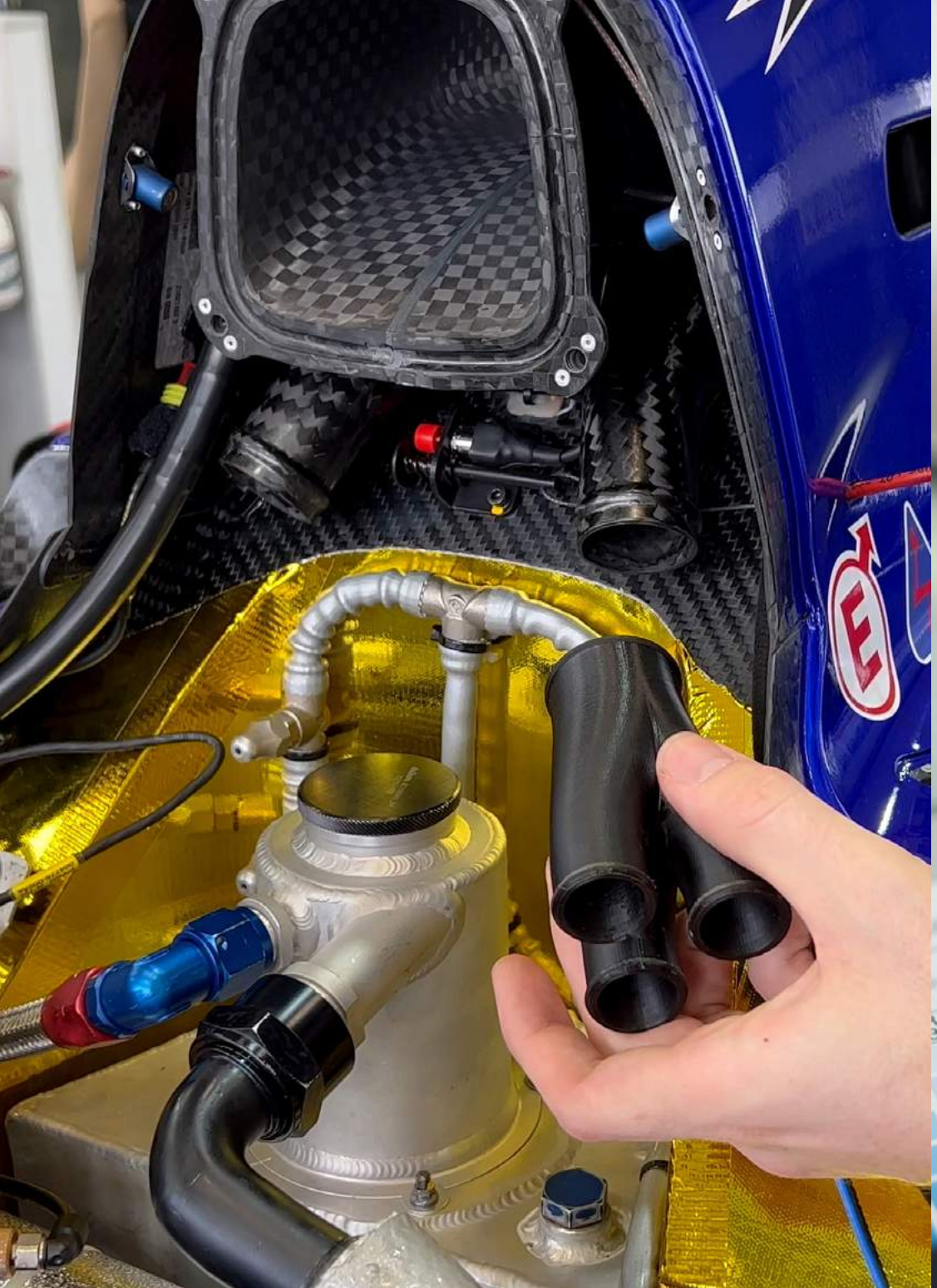
SCAN THE QR CODE FOR MORE DETAILS

PC BLEND | PRUSAMENT

JET BLACK

970 G

Formula racing team **PHM AIX Racing**'s engineers use Prusament PC-Blend to make various functional parts, prototypes, and tools to gain an edge in international racing competitions.



PRUSAMENT

PC BLEND CARBON FIBER

INCREDIBLY DURABLE

Prusament PC Blend Carbon Fiber (PCCF) is a PC Blend filled with carbon fibers to improve its strength, toughness, and temperature resistance. Unlike the unmodified PC Blend, PCCF comes with great dimensional stability, good resistance to UV light and common chemicals, better tensile strength, but most importantly with high-temperature resistance and easier printing. It is optimal for printing technical components requiring great strength and high-temperature tolerance. The possibility of printing large models without using an enclosure is a great advantage when compared to pure PC Blend. Printing with PCCF requires a hardened steel nozzle.

- High impact and wear resistance (very strong and rigid material)
- Great high-temperature resistance (up to 114°C)
- Possibility of annealing (improving resistance up to 130 °C)
- Good UV stability and resistance to common chemicals
- Great dimensional stability – possible to print large models without an enclosure
- No need for drying prior to printing
- Highly attractive matt black surface
- Uses recycled carbon fibers from the manufacturing process

- Requires hardened nozzle
- More brittle than Prusament PC Blend
- Lower thickness precision (0.04 mm) caused by carbon fibers inside

Heatbed: 110 ± 10 °C

Nozzle: 285 ± 10 °C

SCAN THE QR CODE FOR MORE DETAILS

Students in **Volkswagen Academy** Emden use Prusament PC-Blend CF to make parts, tools, and proofs-of-concept to complete various training challenges of their educational process.

SCAN THE QR CODE
FOR MORE DETAILS

PRUSAMENT

PA11 (NYLON) CARBON FIBER

TEMPERATURE & CHEMICAL RESISTANCE

Prusament PA11 (Nylon) Carbon Fiber is an ideal filament for prototypes in the automotive, aerospace, and hobby industries, given its excellent resistance to heat, chemicals, and mechanical stress. Among the Prusament filaments, PA11-CF has by far the best temperature and chemical resistance. 3D-printed parts withstand up to 190 °C (depending on stress) and have increased resistance to many solvents (NaOH, Methanol, Ethanol, Toluene, Acetone, motor oils, benzene, diesel, etc.). PA11-CF is a material made from castor oil, the carbon fibers used for this material are recycled, the same as for the Prusament PC Blend Carbon Fiber. The best use of the PA11-CF is for making special chemically, mechanically, and heat-stressed parts, such as car engine components.

- Excellent high-temperature resistance (up to 190 °C)
- Great chemical resistance
- High impact and wear resistance (very strong and rigid material)
- Low friction coefficient
- Noticeably less hygroscopic compared to other polyamides
- Highly attractive matt black surface
- Great dimensional stability – possible to print large models without an enclosure
- Uses recycled carbon fibers from the manufacturing process

- A special print sheet (or separation layer) is required
- Requires hardened nozzle
- Lower layer-to-layer adhesion compared to pure PA11
- Slightly hygroscopic (absorbs moisture)
- Emits odors during printing

Heatbed: 110 ± 10 °C

Nozzle: 285 ± 10 °C

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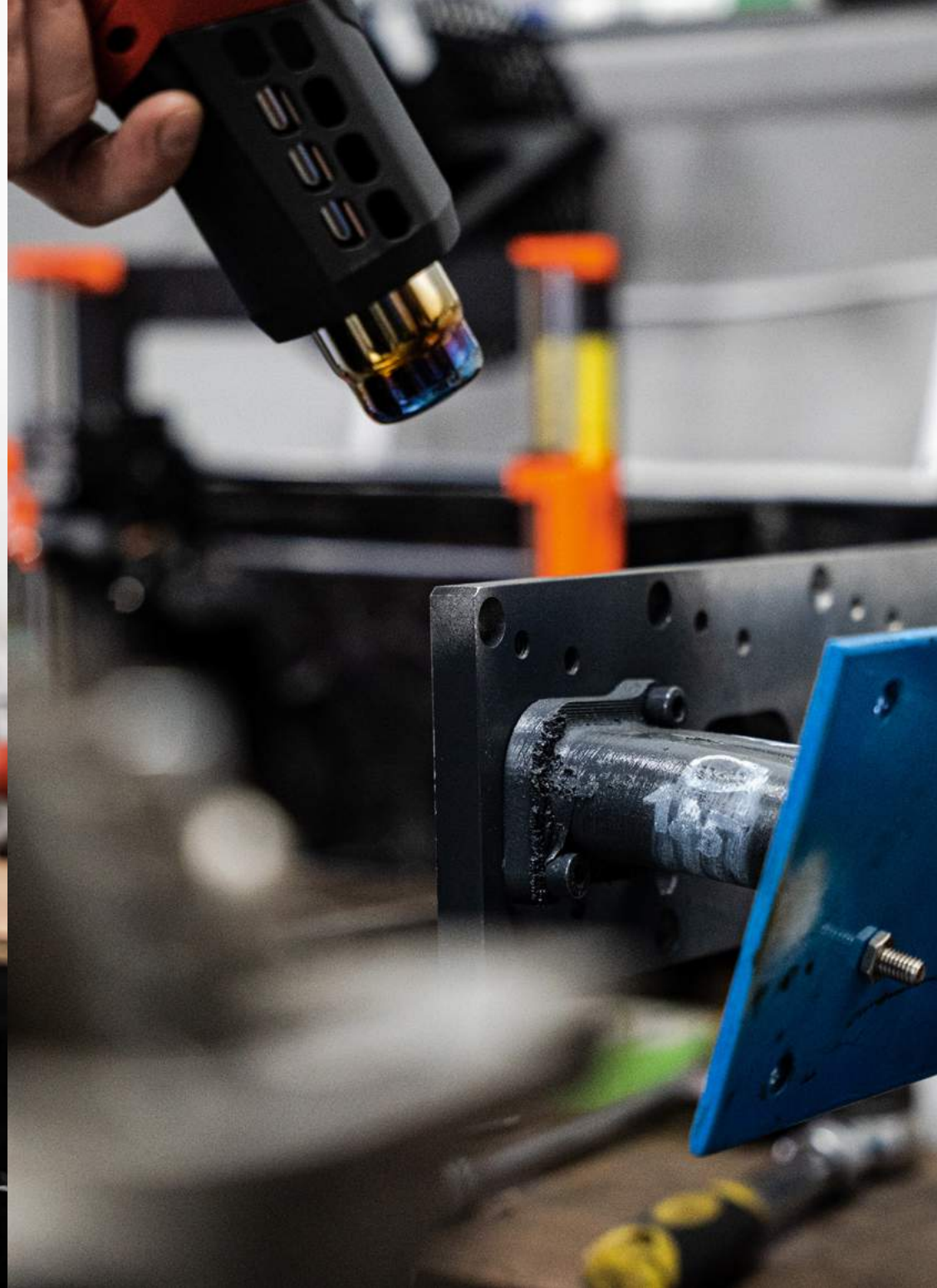
Due to its thermal and mechanical resistance, Prusament PA11 is ideal for prototyping parts of machines that emit heat, such as this intake manifold for a vintage Cosworth engine, which is commercially no longer available. Also, in a unique Mercedes 190E renovation, printed parts made from PA11 allowed proper testing and fine-tuning before the model went into final production.



PRUSAMENT

PEI 1010

ULTRA-PERFORMANCE

PEI 1010 (polyetherimide, branded as Ultem) is one of the most resistant 3D printing polymers, suitable for specialized and demanding industrial applications. The material has a great high-temperature and chemical resistance, and excellent mechanical properties. It is inherently flame-retardant and resistant to gamma radiation. As one of the most resistant materials, it can be used for industrial applications directly as functional parts - it can even be used as a replacement for aluminum alloys. The unique combination of material properties makes it usable for various medicinal or aerospace applications.
Due to very high printing temperatures, this material can be printed only with the Prusa Pro HT90 or a similar printer with a heated chamber (minimum 90 °C). Also, this material is extremely prone to moisture absorption and it is necessary to dry it before every print and keep it in a dry box during the printing.

- Exceptional mechanical properties
- High strength-to-weight ratio
- Great high-temperature resistance
- Very good chemical resistance
- Gamma radiation resistance
- Inherently flame-retardant material

- Very high working temperatures (compatible with HT90 only)
- Extremely prone to absorbing moisture
- Strong adhesion to the PEI surface (separation layer needed)
- Large prints prone to warping

Heatbed: 150 ± 10 °C

Nozzle: 395 ± 10 °C

SCAN THE QR CODE FOR MORE DETAILS

NATURAL

TRANSPARENT 500 G

PRUSAMENT RESIN

MODEL

THE RESIN DESIGNED FOR MODELERS

Prusament Resin Model retains the great properties of our Tough resin, but its formula has been improved to make it even more suitable for modelers. It offers increased adhesion to the printing platform, reduced polymer shrinkage, good resistance to warping and high print opacity enhancing detail, and of course low health risks to the user. Great for printing at home and in the workshop, for producing various detailed parts such as model railways, action figures, jewelry, and various prototypes. It meets the need for easy and convenient home use, as our resins are designed to have low odor and the least health risk. This resin is free of Bisphenol A and other hazardous chemicals, yet is easy to use and offers amazing accuracy and a high level of detail. Prusament Resin Model is suitable for both beginners and experienced users.

- Fast and reliable high-resolution printing
- Increased adhesion to the print platform
- Reduced polymer shrinkage and print fragility
- Good deformation resistance
- The high opacity of prints enhancing details
- Low level of odor and liquid resin harmfulness
- Cured prints are not cytotoxic or skin-irritating
- Does not contain Bisphenol A

- Low temperature resistance of prints (50°C)
- Too much exposure of prints to UV radiation leads to yellowing which partially disappears over time

SCAN THE QR CODE FOR MORE DETAILS

ALABASTER WHITE

1 KG

PRUSAMENT RESIN | MODEL

SOLID GREY

1 KG

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

MODEL | PRUSAMENT RESIN

NEUTRAL BEIGE

1 KG

PRUSAMENT RESIN | MODEL

ULTRA VIOLET

1 KG

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

MODEL | PRUSAMENT RESIN

TRANSPARENT CLEAR

1 KG

PRUSAMENT RESIN

TOUGH

MOST POPULAR MSLA MATERIAL

Prusament Resin Tough offers good toughness, high printing speeds and an excellent level of detail. Due to its price and ease of use, it is the most popular MSLA resin. It is designed to have a low odor and the lowest possible health risk - it does not contain Bisphenol A and other dangerous chemicals, commonly used in other resin brands. This makes it one of the few resins that are actually suitable for hobby use. It is an excellent choice both for hobbyists and professionals, for printing various detailed parts, from scale models and miniatures to jewelry and small part prototypes.

- High print reliability
- Short exposure time
- Great print detail
- Good deformation resistance
- Low odor
- Low health impact
- Does not contain Bisphenol A

- Low temperature resistance (50 °C)

PRUSAMENT RESIN | TOUGH

SANDSTONE MODEL

1 KG

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

TOUGH | PRUSAMENT RESIN

BRIGHT YELLOW

1 KG

PRUSAMENT RESIN | TOUGH

PRUSA ORANGE

1 KG

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

TOUGH | PRUSAMENT RESIN

CLASSIC RED

1 KG

PRUSAMENT RESIN | TOUGH

BRICK RED

1 KG

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

TOUGH | PRUSAMENT RESIN

GRASS GREEN

1 KG

PRUSAMENT RESIN | TOUGH

TERRA BROWN

1 KG

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

TOUGH | PRUSAMENT RESIN

ANTHRACITE GREY

1 KG

PRUSAMENT RESIN | TOUGH

RICH BLACK

1 KG

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

TOUGH | PRUSAMENT RESIN

TRANSPARENT AMBER

TRANSPARENT 1 KG

PRUSAMENT RESIN | TOUGH

TRANSPARENT RED

1 KG | TRANSPARENT

SCAN THE QR CODE FOR MORE DETAILS

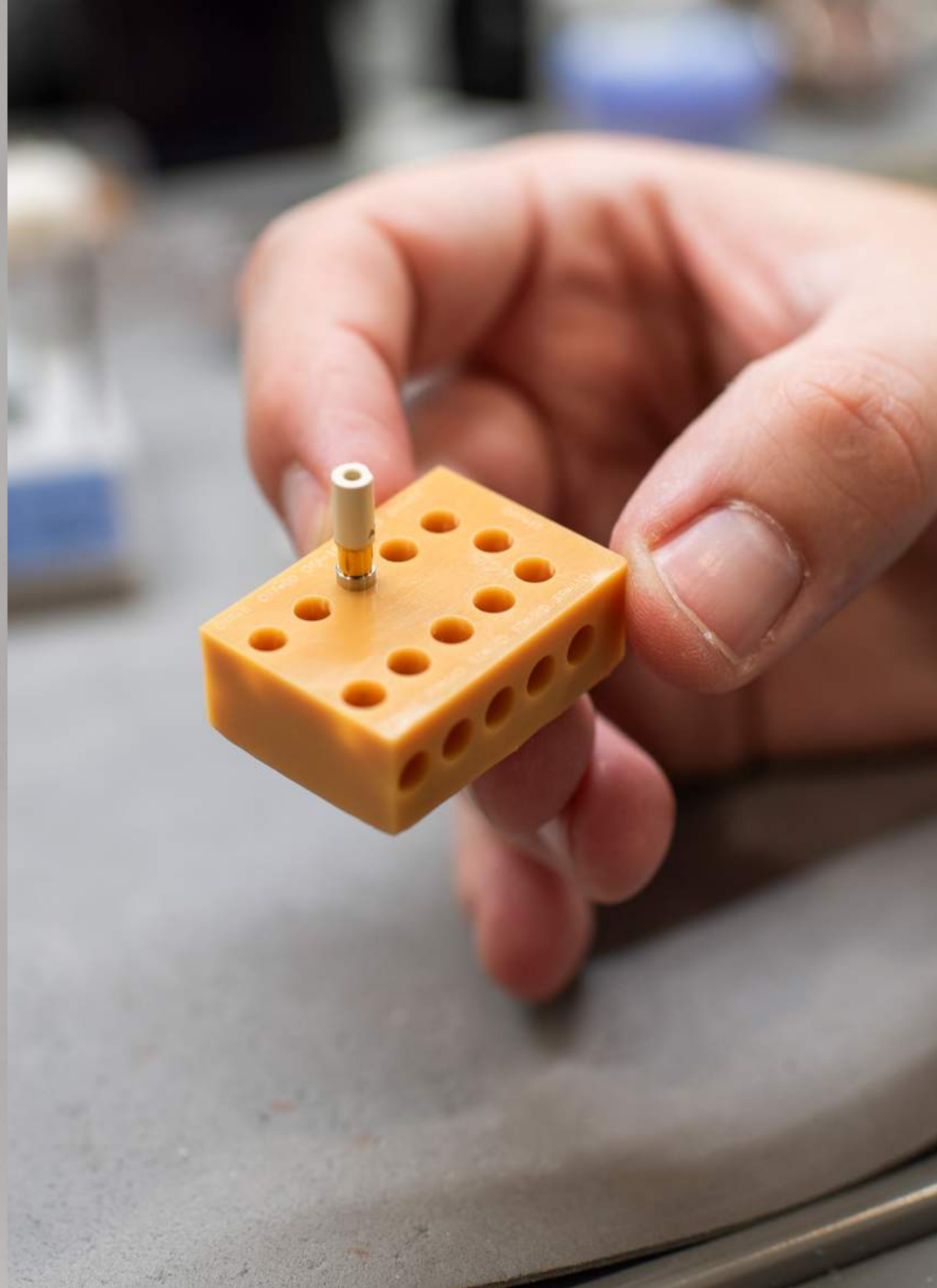
SCAN THE QR CODE FOR MORE DETAILS

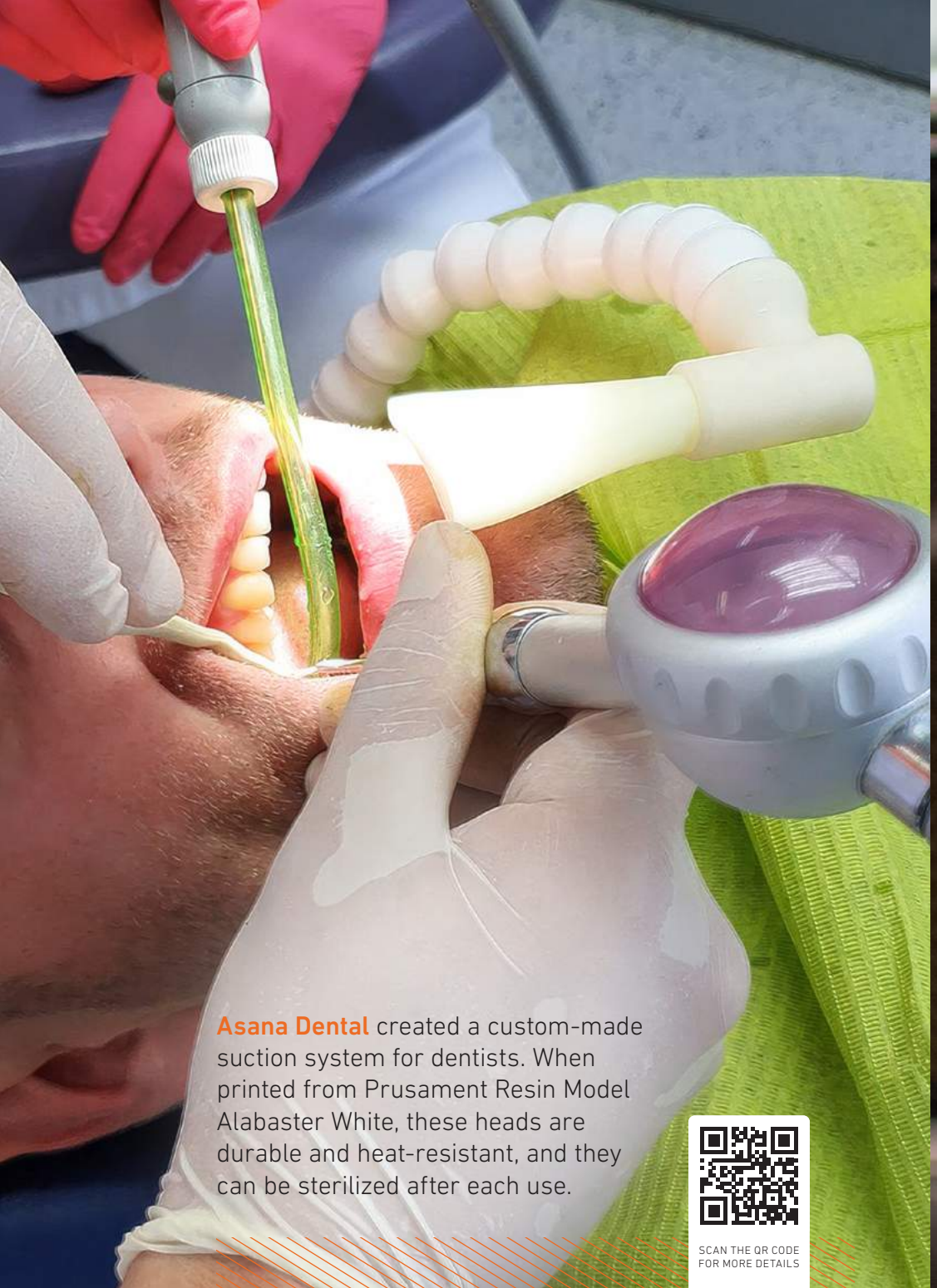
TOUGH | PRUSAMENT RESIN

TRANSPARENT GREEN

TRANSPARENT | 1 KG

Due to its easy and convenient use, Prusament Resin Model is popular among dentists and dental laboratories. It is best used for the production of highly detailed 1:1 3D models of teeth and replacement tooth crowns.





Asana Dental created a custom-made suction system for dentists. When printed from Prusament Resin Model Alabaster White, these heads are durable and heat-resistant, and they can be sterilized after each use.

SCAN THE QR CODE
FOR MORE DETAILS

The Shark, the fastest ultralight airplane in the world, has a control stick made from Prusament Resin Tough (covered by black and blue paint in the picture).

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FOR MORE DETAILS

PRUSAMENT RESIN

BIOBASED

INCLUDING PLANT-BASED INGREDIENTS

The BioBased60 resin comes with a unique formula which makes it more eco-friendly while making no compromises in the level of detail or print speed. About 60% of BioBased60 composition is composed from natural plant oils and terpenes, in contrast with classic resins that are made exclusively from petroleum-sourced products. One of the ingredients actually gives the resin a nice pine tree aroma.

- Made from plant-based resources
- Print reliability
- Short exposure time
- Great print detail
- Good deformation resistance
- Low odor with a faint smell of pine trees
- Low health impact
- Does not contain Bisphenol A

- Low temperature resistance (50 °C)

PRUSAMENT RESIN | BIOBASED

IVORY WHITE

1 KG

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

BIOBASED | PRUSAMENT RESIN

NATURAL YELLOW

TRANSPARENT 1 KG

PRUSAMENT RESIN | BIOBASED

MAGMA RED

1 KG | TRANSPARENT

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

BIOBASED | PRUSAMENT RESIN

SAPPHIRE BLUE

TRANSPARENT | 1 KG

PRUSAMENT RESIN | BIOBASED

HERBAL GREEN

1 KG | TRANSPARENT

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

BIOBASED | PRUSAMENT RESIN

OBSIDIAN BLACK

1 KG

PRUSAMENT RESIN

FLEX

RUBBER-LIKE MATERIAL

Prusament Resin Flex80 is an easy-to-use resin that provides reliable printing of detailed models with rubber-like properties. Unlike many other resins on the market, it allows printing large objects with little to no adjustments. Soft, yet durable properties make it suitable for printing intricate flexible models, such as RC car parts, medical models, durable figures, and many more. The flexibility of printed objects can be compared to a car tire, ebonite hard rubber, or a shoe sole. Compared to most other flexible resins on the market, our Prusament Resin Flex80 has a noticeably lower odor and viscosity allowing the finished models to be easily washed in isopropyl alcohol without special washing and post-curing procedures.

- Soft, rubber-like, and durable (hardness similar to car tire or rubber shoe sole)
- High print reliability
- Short exposure time
- Great print detail
- Low viscosity - no preheating required
- Low-odor
- Easy to wash
- Does not contain Bisphenol A

- Limited deformation

SCAN THE QR CODE FOR MORE DETAILS

FLEX | PRUSAMENT RESIN

FLEX80 TRANSPARENT CLEAR

TRANSPARENT | 1 KG

PRUSAMENT RESIN | FLEX

FLEX80 WHITE

1 KG

SCAN THE QR CODE FOR MORE DETAILS

SCAN THE QR CODE FOR MORE DETAILS

FLEX | PRUSAMENT RESIN

FLEX80 BLACK

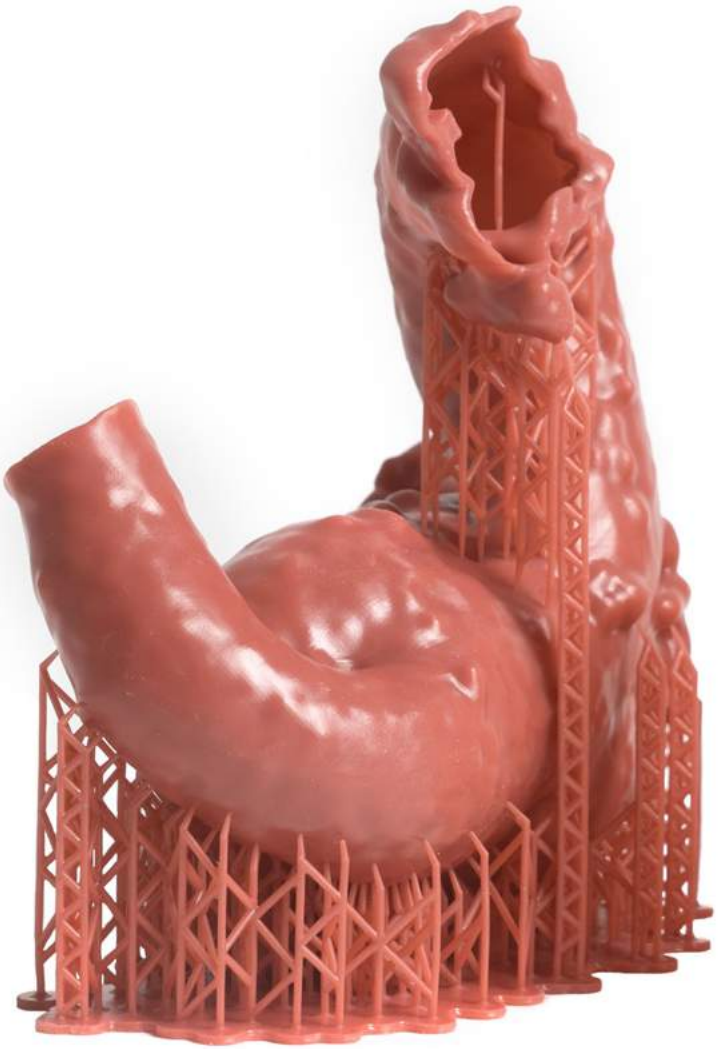
1 KG

PRUSAMENT RESIN | FLEX

ANATOMIC RED

1 KG

SCAN THE QR CODE FOR MORE DETAILS

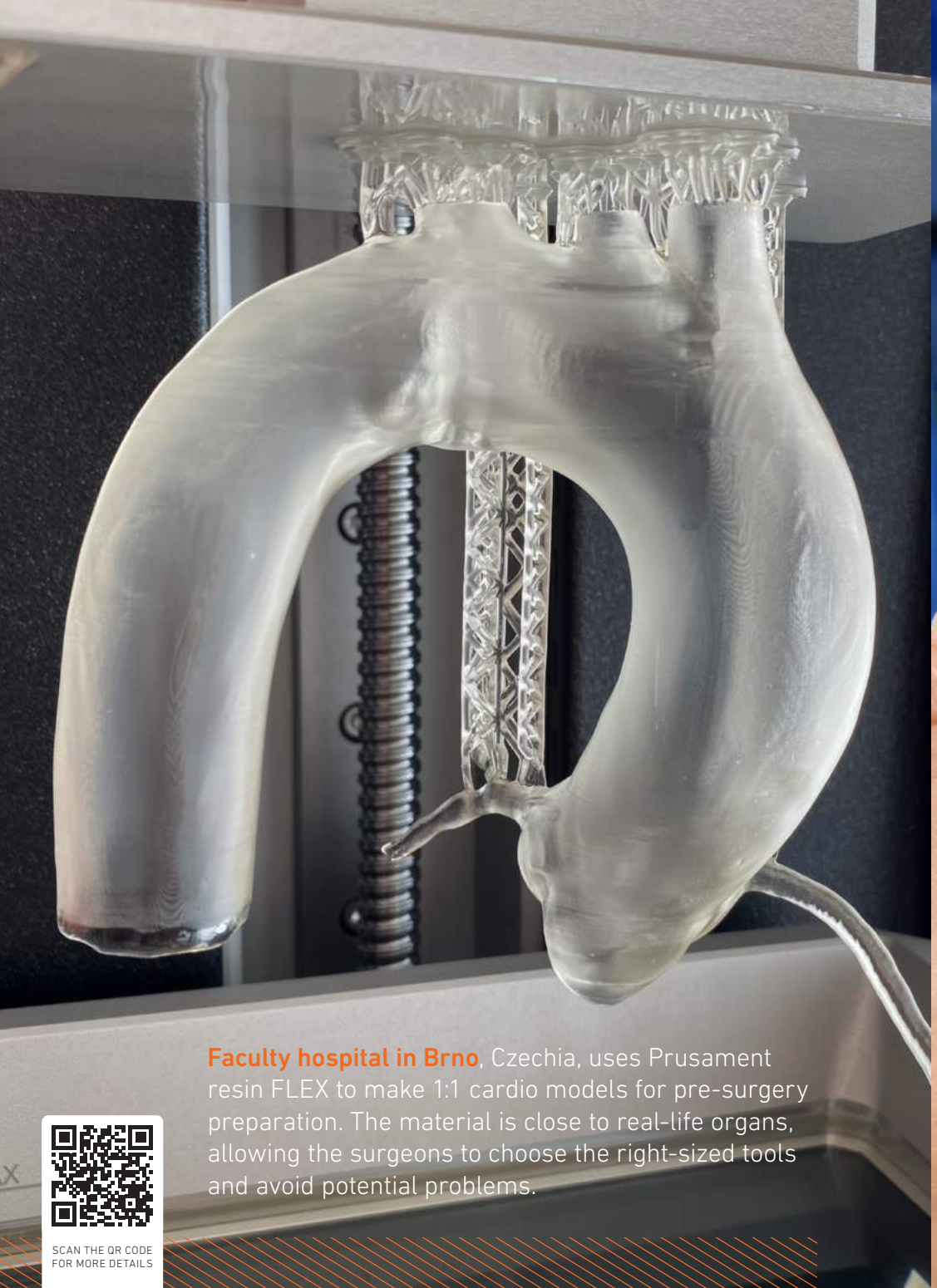


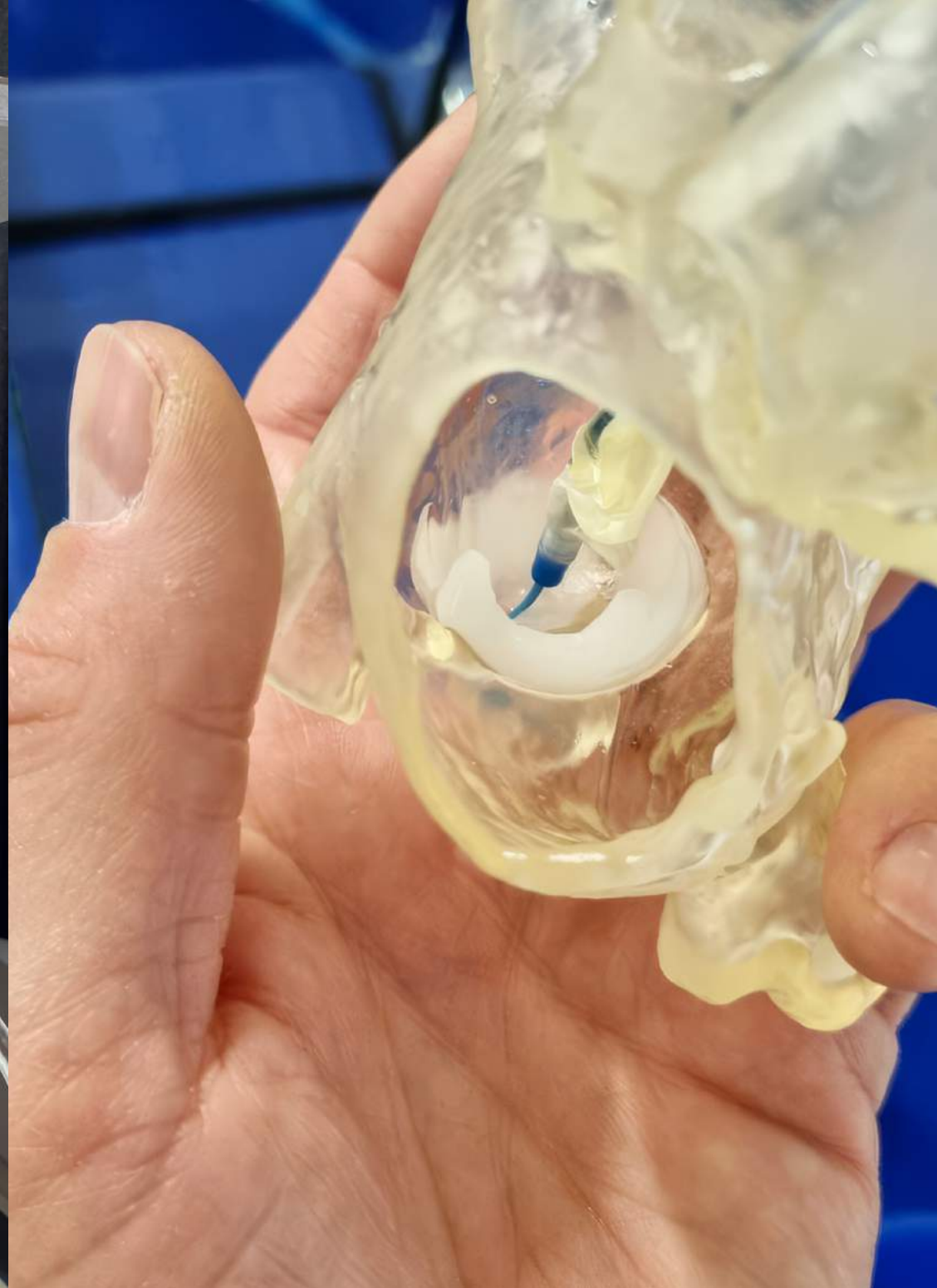
SCAN THE QR CODE FOR MORE DETAILS

FLEX | PRUSAMENT RESIN

GINGIVA MASK

1 KG





Faculty hospital in Brno, Czechia, uses Prusament resin FLEX to make 1:1 cardio models for pre-surgery preparation. The material is close to real-life organs, allowing the surgeons to choose the right-sized tools and avoid potential problems.

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PRUSAMENT

GUIDE

[1] Heat defection temperature (ISO 75): The point when the tested object bends under a 0.45 MPa load.

[2] Impact resistance Charpy: Energy necessary to break object with Charpy pendulum (ISO 179-1).

[3] Tensile strength: Force necessary to tear (or deform) test objects (ISO 527-1, ASTM D638 for flexible filaments).

	Material features				Printing setup			Printing setup		Sheets			
Material	**Heat deflection [1]**	**Impact resistance [2]**	**Tensile strength [3]**	**Soluble in solvents**	**Enclosure**	**Hardened nozzle**		**Nozzle Temperature**	**Bed temperature**	**Textured**	**Smooth PEI**	**Satin**	**PA Nylon (clean with water)**
Prusament PLA	55 °C	12 kJ/m²	57 Mpa	Toluene, EDC, THF, Chloroform	No	No		215 °C	60 °C	Yes	Yes	Yes	No
Prusament PETG	68 °C	no break	46 Mpa	DCM	No	No		250 °C First layer: 240 °C	90 °C First layer: 85 °C	Yes	with glue stick	Yes	Yes
Prusament ASA	86 °C	25 kJ/m²	42 Mpa	Acetone	Recommended	No		260 °C	110 °C First layer: 105 °C	with glue stick	with glue stick	Yes	No
Prusament PC Blend	113 °C	no break	63 Mpa	Chloroform, DCM	Recommended	No		275 °C	115 °C First layer: 110 °C	with glue stick	with glue stick	Yes	No
Prusament PC Blend Carbon Fiber	114 °C	35 kJ/m²	65 Mpa	No	No	Yes		285 °C	115 °C First layer: 110 °C	Yes	with glue stick	Yes	No
Prusament PA11 Carbon Fiber	172 °C	30 kJ/m²	42 Mpa	No	Recommended	Yes		285 °C First layer: 275 °C	115 °C First layer: 90 °C	with glue stick	Not recommended	with glue stick	Yes
Prusament PETG Tungsten 75%	94.2 °C	22 kJ/m²	39 Mpa	DCM	No	Yes		260 °C First layer: 260 °C	85 °C First layer: 85 °C	Yes	with glue stick	Yes	No
Prusament PVB	55 °C	55 kJ/m²	50 Mpa	IPA	No	No		215 °C	75 °C	No	Yes	Yes	No

PRUSA RESEARCH

Prusa Research was founded as a one-man startup in 2012 by Josef Prusa, a Czech hobbyist, maker and inventor. Today, Prusa Research has grown to a 1000+ team and we ship more than 10 000 Original Prusa printers per month to over 165 countries directly from Prague.

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24/7 LIVE CHAT

Prusament Portfolio
June 2024

Sample Models Credits:
Lion Low Poly by TheDiamondDirt
Hogwarts by Loafers Lodge
Raccoon In Trash Can by Marcossierra
Bauhaus tray by AndrzejG
Groot Sitting and Smiling by 3DLime
Flour and sugar shovel spoon by SIE-Maker
All other models were created by Prusa Research, a.s.

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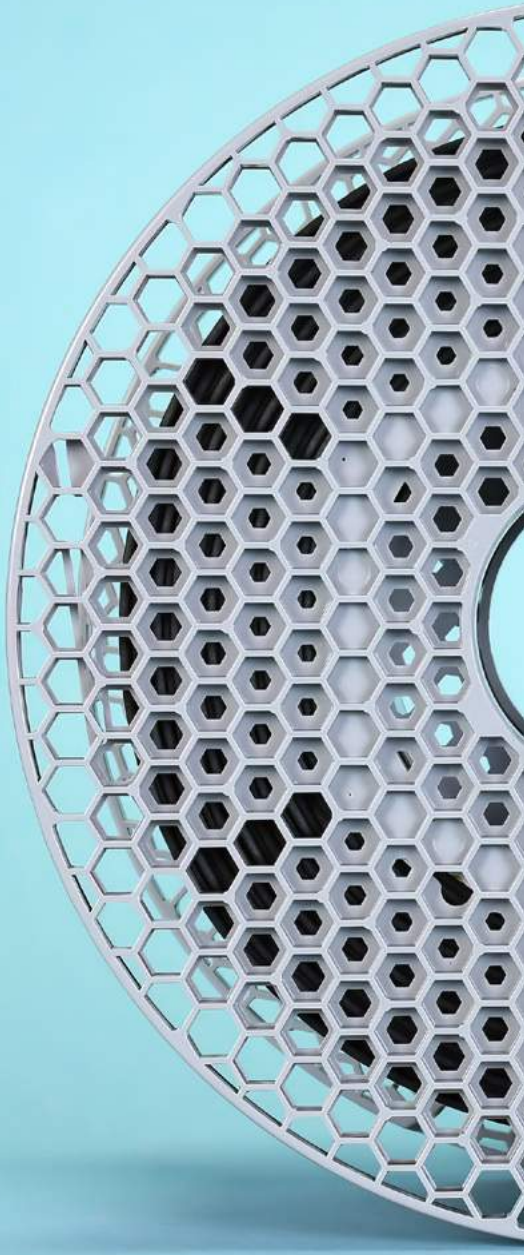

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