
SAKATA 3D FILAMENTS

SAKATA 3D FILAMENTS is born from a long experience of more than 50 years in the transformation of polymers and the constant innovation of its team.

In 2013 it started its activity in Granada (Spain), being one of the pioneering companies dedicated to the manufacturing of 3D printing filaments.

Since then, the company has been moving towards continuous improvement of production processes and intensive training of its professionals, a fact that allowed it to grow rapidly and distribute its products in more than 40 countries.

Today, thanks to a close collaboration with its distributors, SAKATA 3D FILAMENTS has established itself as a professional additive manufacturing brand nationally and internationally.

Trust and personalized treatment with the client are one of the fundamental pillars for mutual growth.

"True progress is that which places technology in everyone's hands."

(Henry Ford)

PLA Filaments
- PLA Go&Print
- PLA 850
- PLA 850 Special
- PLA 850 Glass
- PLA HR-870
- PLA 700
- PLA-M
- PLA Texture Wood

Support filaments
- PLA Easy-Off
- HIPS

ABS Filament

ASA Filament

PET-G Filament

Flexible Filament : X-920

OBC Filament

PA (Nylon) Filaments
- PA-NT
- PA-GF20-FR

Sustainable Filaments

DLP/LCD Resins
- Hard Resin
- Ultra Hard Resin
- Flex Resin
- Castable Resin
- Cleaner

Customization

Contacts

PLA GO&PRINT

Sakata 3D Filaments PLA GO&PRINT filament is a biodegradable material, compatible with all FDM printers.

This filament stands out for its great ease of printing and excellent quality/price ratio. It requires a low extrusion temperature (185-200 ºC) and does not necessarily require a heated bed, although its use is recommended at a temperature between 40ºC and 60ºC. It presents a low shrinkage, which avoids deformation or warping phenomena in the printed parts. Suitable for all those who want to start in the world of 3D printing.

PLA GO&PRINT filament is ideal for the manufacture of decorative and artistic pieces and prototypes. It is available in 9 colours with a high opacity.

Ficha Técnica
Data Sheet

Colores RAL
RAL Colours

185-205 °C

>= 40 °C

PLA 850

Sakata 3D Filaments PLA 850 filament is manufactured from PLA Ingeo 3D850 resin, a biodegradable material specifically designed for 3D printing by NatureWorks, a world leader in biopolymers manifacturing.

It is mainly characterized by its high thermal and mechanical performance as well as its high crystallization speed, marking a great difference compared to a standard PLA, being able to create pieces mostly with no supports.. It presents a very low thermal contraction, which allows to significantly reduce the problems of deformation or "warping" and to create pieces with an excellent resolution.

Due to its high adhesion to the bed, the PLA 850 filament does not necessarily need a heated bed, although its use is recommended at a temperature between 40ºC and 60ºC.

Ideal for prototypes manufacturing, tools and functional parts. It is available in more than 40 colours with a high gloss and excellent opacity.

Ficha Técnica
Data Sheet

Colores RAL
RAL Colours

200-220 °C

>= 40 °C

PLA 850 SPECIAL

PLA 850 MAGIC

850 MAGIC contains shiny particles that give the filament a metallic and shiny finish, with very fine glitters, suitable for printing with a 0.4mm nozzle.

PLA 850 MAGIC PLUS

850 MAGIC PLUS, contains shiny particles that give the filament a metallic and shiny finish, with a greater amount of very fine glitters, suitable for printing with a 0.6mm nozzle

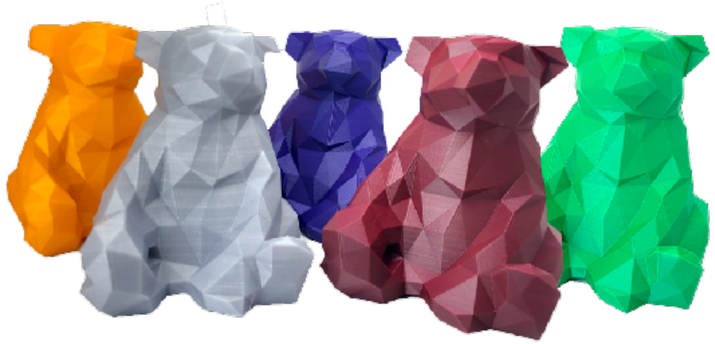
PLA 850 SPECIAL

PLA 850 GRANITE

850 Granite allows you to create pieces that simulate the texture of the mineral material

PLA 850 QUARTZ

QUARTZ colours are characterized by being translucent and by their fluorescent tones



PLA 850 SILK

Silk colours are characterized by a shiny and pearly finish, giving the pieces a slightly metallic reflections

PLA 850 GLASS

The new GLASS Family is caracterized by
its translucent colours
Unlike general-purpose PLA, PLA 850 exhibits
higher crystallization rate, temperature resistance,
and mechanical properties.
Thanks to its good adherence to the bed and its low shrinkage capacity,
it allows to obtain pieces with excellent definition.

200-220 °C

>= 40 °C

PLA HR-870

Sakata 3D Filaments PLA HR-870 filament is manufactured from PLA Ingeo 3D870 resin, a biodegradable material specifically designed for 3D printing by NatureWorks, a world leader in biopolymers manufacturing.

This filament has superior thermal and mechanical performance than PLA 850, being comparable to ABS, maintaining the ease of printing of PLA without the emission of toxic vapors of ABS.

To achieve its maximum performances, post-processing of printed parts is recommended. This process allows its softening temperature to be increased up to 85ºC (much higher than any standard PLA) and its impact resistance (5 times more resistant than ABS).

Similar to PLA 850, PLA HR-870 filament does not necessarily require a heated bed, although its use is recommended at a temperature between 40ºC and 60ºC.

Ideal for the manufacture of parts for industrial applications that require high mechanical and thermal performance. It is available in 10 colours with a high gloss and excellent opacity.

210-230 °C >= 40 °C

PLA 700

Sakata 3D Filaments PLA 700 filament is manufactured from PLA Ingeo 3D700 biodegradable resin, an innovative and new material from NatureWorks, a world leader in biopolymers manufacturing.

This revolutionary filament is specifically developed for the manufacture of huge pieces that require long printing periods. Thanks to its amorphous structure, the thermal contraction of this material is much lower than PLA 850, PLA870 and standard PLA, significantly reducing possible printing failures due to deformations (warping effect). More even, this less crystalline structure makes it possible to print parts satisfactorily at low temperatures (185-195ºC), increase the flow in a percentage higher than 10% and increase the adhesion between layers.

The PLA 700 filament is ideal for creating prototypes or large functional parts or long series, especially within the industrial field.

Ficha Técnica
Data Sheet

Colores RAL
RAL Colours

185-195 °C

>= 40 °C

PLA-M

Sakata 3D Filaments PLA-M filament has been specifically formulated to obtain parts with a matte finish and low visibility of print layers. It has a rough texture, a low level of abrasion and a great ease of printing at high speeds.

This filament stands out for its great ease of printing.

It requires a low extrusion temperature (190-200 ºC) and does not necessarily require a heated bed, although its use is recommended at a temperature between 40ºC and 60ºC. It presents a low shrinkage, which avoids deformation or warping phenomena in the printed parts.

The PLA-M filament is ideal for manufacturing pieces that need a total absence of shine.

Ficha Técnica
Data Sheet

Colores RAL
RAL Colours

190-200 °C

>= 40 °C

PLA TEXTURE WOOD

Sakata 3D Filaments PLA TEXTURE WOOD filament is made from PLA and a high percentage of wood fibers. It is a biodegradable material, developed specifically for 3D printers.

Its low abrasion and its great fluidity allow the use of a nozzle of only 0.4 mm, achieving a realistic effect both in touch and smell, without the risk of generating material deposit in the throat and premature wear of the nozzle.

One of the properties of this material is that you can use temperature variations to achieve different shades of wood, achieving a more realistic grain effect.

Ficha Técnica
Data Sheet

Colores RAL
RAL Colours

195-230 °C

>= 40 °C

PLA 450 EASY OFF

Sakata 3D Filaments' new PLA EASY-OFF support filament is manufactured from Ingeo 3D450 PLA biodegradable resin, a material specifically designed for 3D printing by NatureWorks, a world leader in biopolymers manufacturing.

Unlike other support materials, EASY-OFF filament makes it possible to obtain highly complex industrial parts with high-quality finishes. Thanks to its easy extraction, post-processing times are shorter than those of other materials, improving the performance of the process.

This filament is designed to work with PLA 850 and PLA HR-870 at speeds up to 100 mm/s without suffering deformations or cooling problems. It does not require solvents for its extraction. It has a lower sensitivity to humidity than other (soluble) support materials, so it can be stored for a longer period of time with no change in its characteristics.

Suitable for molds manufacturing in architecture, metal casting, prototyping and jewelry

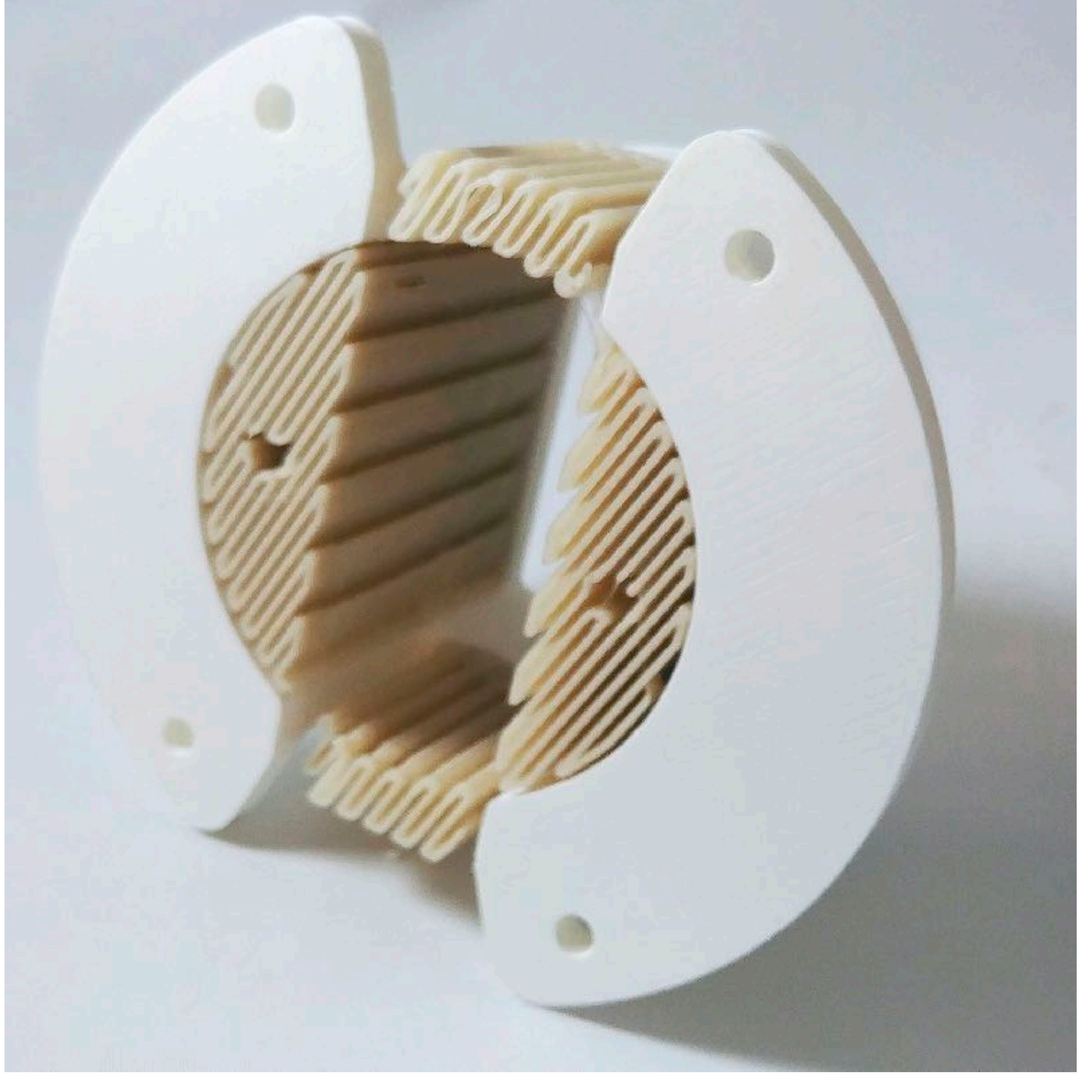


image credits: IC3D and NatureWorks

Ficha Técnica
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Colores RAL
RAL Colours

200-220 °C

>= 40 °C

image credits: Simplify3D

HIPS

High impact polystyrene (HIPS) is a highly versatile thermoplastic material, highly resistant to impact and easy to print. It has high rigidity and good dimensional stability and temperature resistance.

HIPS is mainly used in 3D printing as a support material thanks to its ability to dissolve in limonene. Its good mechanical performance also makes it an ideal material for various applications such as toys, electronic equipment housings, boxes, tools, etc.

HIPS exhibits good adhesion to the bed, low warping and curling, and enables high definition in the printed parts.

We recommend its use as a support material for parts made of ABS or ASA.

The use of a natural and/or forced ventilation system is recommended to guarantee the renewal of air at workplace.

Ficha Técnica
Data Sheet

Colores RAL
RAL Colours

235-245°C

>= 90 °C

ABS-E

Sakata 3D Filaments ABS-E filament has been specifically designed for 3D printing, presenting mechanical performance (mainly elongation at break and impact resistance) superior to other ABS.

Other notable characteristics are its high rigidity, gloss, ease of printing and good adhesion both to the bed and between layers, minimizing "cracking" and "warping" phenomenas.

Sakata 3D Filaments ABS-E filament is available in more than 10 colours.

Its multiple applications include printing parts for the automotive sector, for the electrical and electronic field, packaging, aeronautics, etc.

The use of a natural or forced ventilation system is recommended to guarantee air renewal at workplace.

235-250 °C

>= 60 °C

Ficha Técnica
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Colores RAL
RAL Colours

Ficha Técnica
Data Sheet

Colores RAL
RAL Colours

ASA

ASA is a thermoplastic material made from acrylate, styrene and acrylonitrile monomers. It has mechanical properties similar to ABS, but with a high resistance to UV radiation and weathering. Currently, the use of ASA as a material for 3D printing, is experiencing progressive growth in the industrial sector, making it an ideal candidate for a large number of applications.

Sakata 3D Filaments ASA filaments are characterized by excellent mechanical properties and resistance to UV radiation, easy printing, good bed adhesion and adhesion between layers.

Its main field of application can be found in the automotive, aerospace, naval sector and ultimately in any part that requires resistance to UV rays and mechanical resistance.

The use of a natural and/or forced ventilation system is recommended to guarantee the renewal of air at workplace.

240-260 °C

>= 80 °C

PET-G

Polyethylene terephthalate glycol (PETG) is a thermoplastic material widely used in 3D printing. In general, it's characterized by its printing ease, high transparency and gloss, and excellent mechanical properties. In addition, it has high adhesion to the bed, low warping deformation and significantly greater flexibility than ABS or PLA. PET-G combines mechanical properties similar to ABS and the easy printability of a PLA.

SAKATA 3D FILAMENTS PET-G filament offers high surface transparency and gloss, excellent mechanical and chemical properties, it is recyclable, it does not generate odours or toxic gases during printing, and is very easy to print.

It is a suitable material for any piece that needs high mechanical resistance and flexibility, such as mechanical joints, electrical and electronic equipment parts, tools, etc.

Ficha Técnica
Data Sheet

Colores RAL
RAL Colours

225-245 °C

>= 60 °C

X-920

X-920 is a biodegradable thermoplastic material that combines elastomer (TPU) and polyester (PLA) properties. It is characterized by its flexibility, rubbery feel, resistance to temperature and good adhesion to the bed.
In addition, it has excellent mechanical properties and impact resistance, which makes it an ideal material for printing flexible parts such as miniature tires, belts, and parts that require flexibility.
The use of this material is recommended in the manufacture of parts that require high shock absorption and temperature resistance both at a domestic and industrial level.

Ficha Técnica
Data Sheet

Colores RAL
RAL Colours

220-245 °C

>= 40 °C

OBC

Reducing environmental impact and prioritizing product sustainability are the foundations on which the 3D printing industry is built. The OBC material, polyethylene copolymer, has been formulated to help sustain current resources.

Sakata 3D's polyethylene copolymer OBC filament makes it possible to create lightweight (up to 25%) and durable parts, eliminating the typical problems associated with printing other polyolefins such as polypropylene. Its semi-crystalline structure gives it excellent properties in the Z axis compared to other materials, preserving more than 70% of the mechanical properties obtained in the XY axes.

Its high chemical resistance and low flexural modulus allow it to be used in a large number of applications within the automotive or packaging industries, such as flexible hinges or chemical product tanks. In addition, it has excellent adhesion between layers, which makes it an ideal material for applications that require sealing.

When it comes to printing, the OBC filament requires 20% less flow than a PLA filament, which significantly increases the printability of the material.

Ficha Técnica
Data Sheet

Colores RAL
RAL Colours

170-210 °C

>= 65 °C

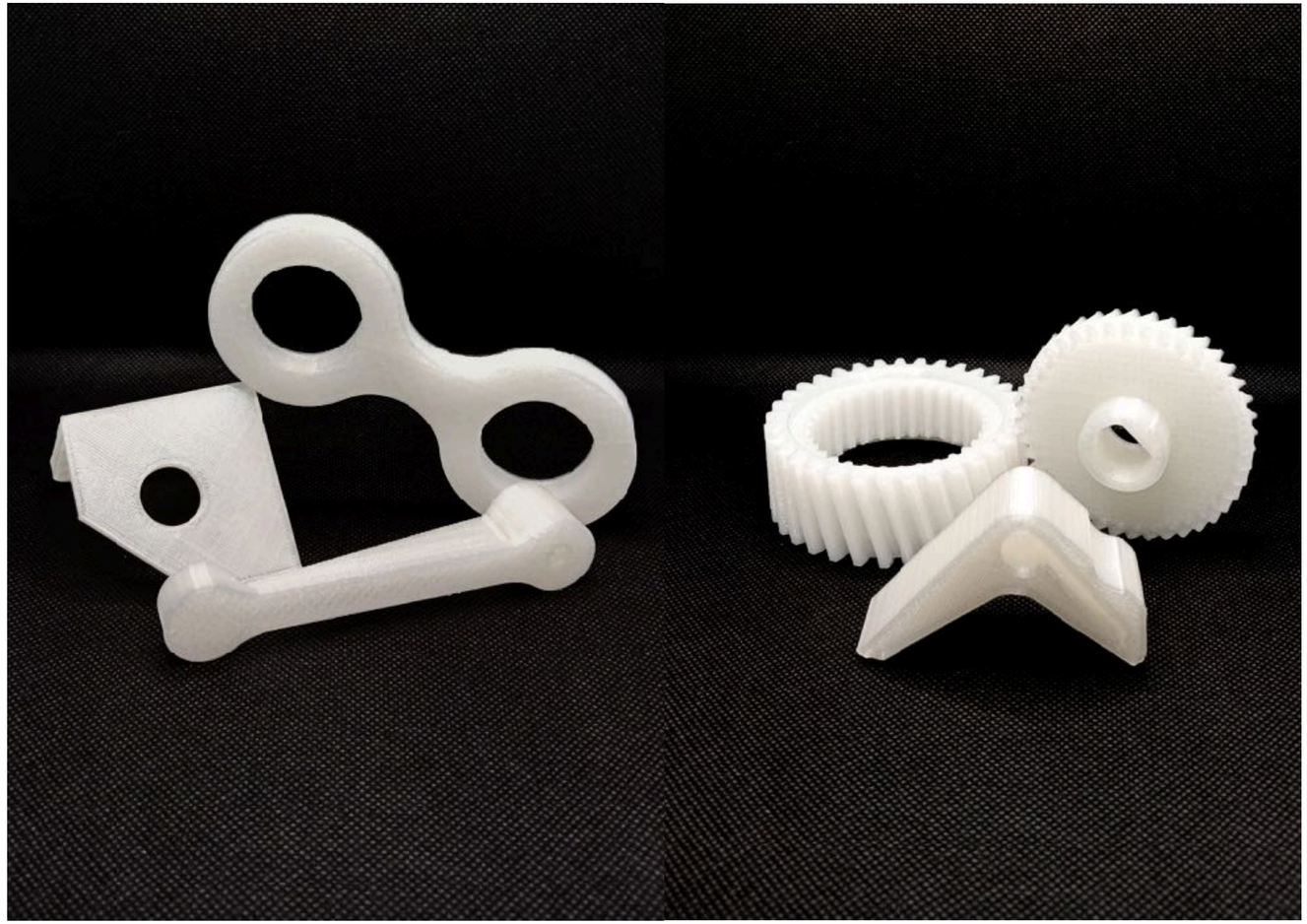
PA-NT

Sakata 3D Filaments presents a new technical filament, PA-NT polyamide (NYLON).
It is an unreinforced copolyamide (Nylon) with high transparency, developed specifically for 3D printing.
It offers excellent dimensional stability, rigidity, flexibility and shock resistance, and a very good balance between mechanical performance, shrinkage and adherence to the bed.

Unlike other Nylon grades, it has lower moisture absorption and a lower melting point.

The new PA-NT (Nylon) filament is ideal for printing durable, complex geometry objects with high mechanical, thermal or chemical requirements. In addition, its high resistance to abrasion makes it an excellent material for the manufacture of gears, housings and functional models, among other applications.

It is an easy material to print, with very good adhesion to the bed and between layers and low shrinkage, which significantly reduces the warping effect. In addition, it allows obtaining pieces with a smooth finish.



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Colores RAL
RAL Colours

220-235 °C

50-60 °C

PA-20GF-FR

Sakata 3D PA-GF20-FR is a Nylon filament reinforced with 20% glass fiber and thermally stabilized.

It also includes a flame retardant additive, which gives it a V-2 flammability rating according to UL94 classification.

The glass fiber provides great rigidity and resistance to tensile and impact stress and significantly reduces shrinkage, allowing for the creation of parts with high dimensional stability.

This material has higher thermal resistance than unreinforced Nylon (PA-NT), with HDT (Heat Deflection Temperature under load) values of 180°C. It is an excellent choice for the manufacturing of functional prototypes, molds, tools, and end-use parts with high mechanical, thermal and/or fire-resistant requirements.

240-250 °C

>= 65 °C

Since Sakata 3D Filaments was born, one of our commitments has been to the environment.

We started by looking for an electric power distributor that could assure us a high percentage of renewable energy, we implemented a filtering and recycling system for the water used in manufacturing, we turned off the equipment when not in use, we adjusted the temperature of the air conditioning, 98% of information or documentation exchanges with clients, suppliers and workers are done digitally, reducing the use of paper.

This constant search for sustainability led us from the beginning to have to find a solution for the impression material that is discarded in production, giving it another life and maintaining all the properties of the original pellets.

This is how the idea of the RE family was born, a family of sustainable materials, responsible for the environment and allowing a circular economy.

But the material was only the first of the elements. The entire product had to be sustainable.

We decided to bet on a new type of reel, obtained through the recycling of post-consumer and post-industrial materials.

In addition to giving a new function to plastics that would have ended up in landfills, contaminating and accumulating in the environment, we helped reducing the carbon footprint caused by the extraction of new crude oil and the manufacture of new reels.

We also bet on the use of raw cardboard packaging, without varnish or serigraphs, totally recyclable.

We were pioneers in Spain with the development of these sustainable materials starting with our recycled PLA 850 and HR-870 that we launched in 2018.

Thanks to the incredible acceptance by our customers, the RE family grew being able to add new materials such as RE-PETG and RE-ABSE.

And thanks to being pioneers in this circular economy, we have seen how other manufacturers have been inspired by the family of sustainable RE materials from Sakata 3D Filaments, developing recycled materials.

Invest so that next generations can enjoy a sustainable future and become aware that not only short-term benefits are important, became a motto in our company.

Our hope is that more and more companies join our vision and that they can take inspiration from us to create their own sustainable materials.

At "Sakata 3D, Filaments" we are committed to more ecological distribution formats adapted to the different 3D printing modalities

DIYs are designed for extruders or printers with extruders that directly use pellets for direct printing without the use of a filament.

The REFILL format, are replacement filaments that do not have a spool and are designed to be used within the Master Spool project that Richard Horne devised. This project consists of manufacturing filaments without the need to be wound on a spool, reducing the environmental impact of plastic waste from the empty spools after printing.

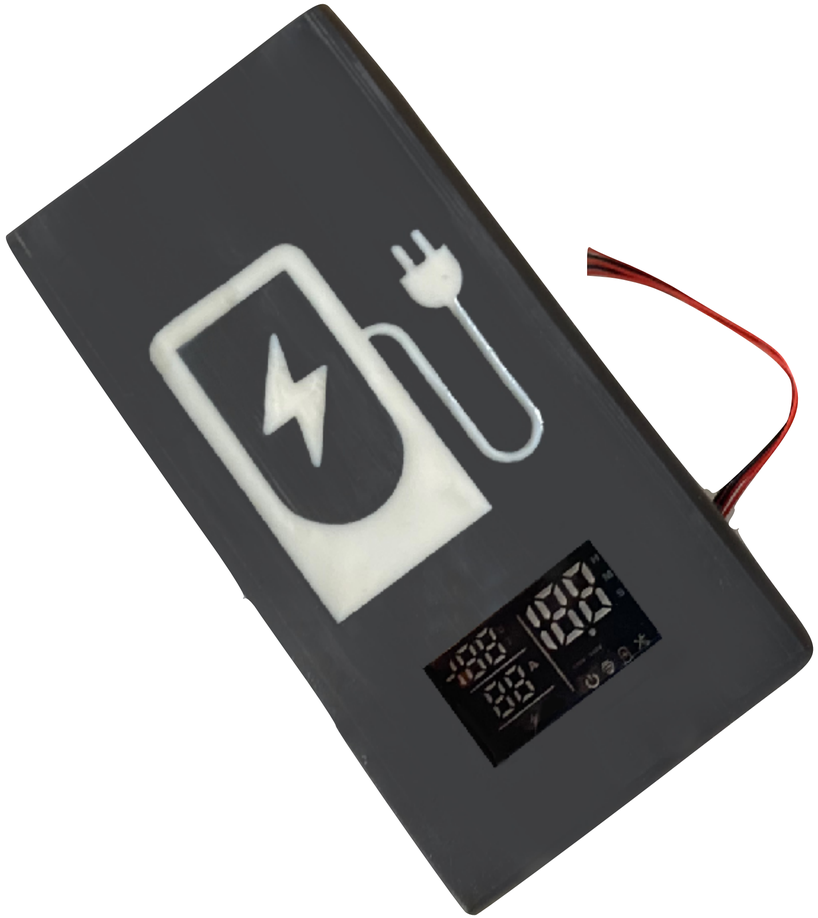
"Sakata3D, Filaments" was a pioneer in Spain in betting on this type of format. The user simply has to insert the REFILL on the previously printed spool that is freely available on any platform such as Thingiverse or Myminifactory. By eliminating the spool, we reduce the amount of plastic and consequently the energy that goes into crafting it, creating a solution that is better for the environment than most traditional methods.

HARD RESIN

Sakata 3D Resins' range of DLP / LCD HARD photopolymers is ideal for making objects where resistance is a must. The parts cannot be bent or compressed and have very high tensile properties and very low elongation. HARD DLP / LCD resin provides excellent definition on your desktop DLP / LCD printer.

You will experience the benefits of fast exposure times (DLC) and a wide exposure latitude, allowing you to preserve the finest details that your machine can provide. The solid material is tactile, durable and strong as long as it is stored in dry conditions away from strong UV light.

We have recently also developed a specific resin for all LCD printers, increasing its curing speed for those printers that use both RGB and Monochrome screens.



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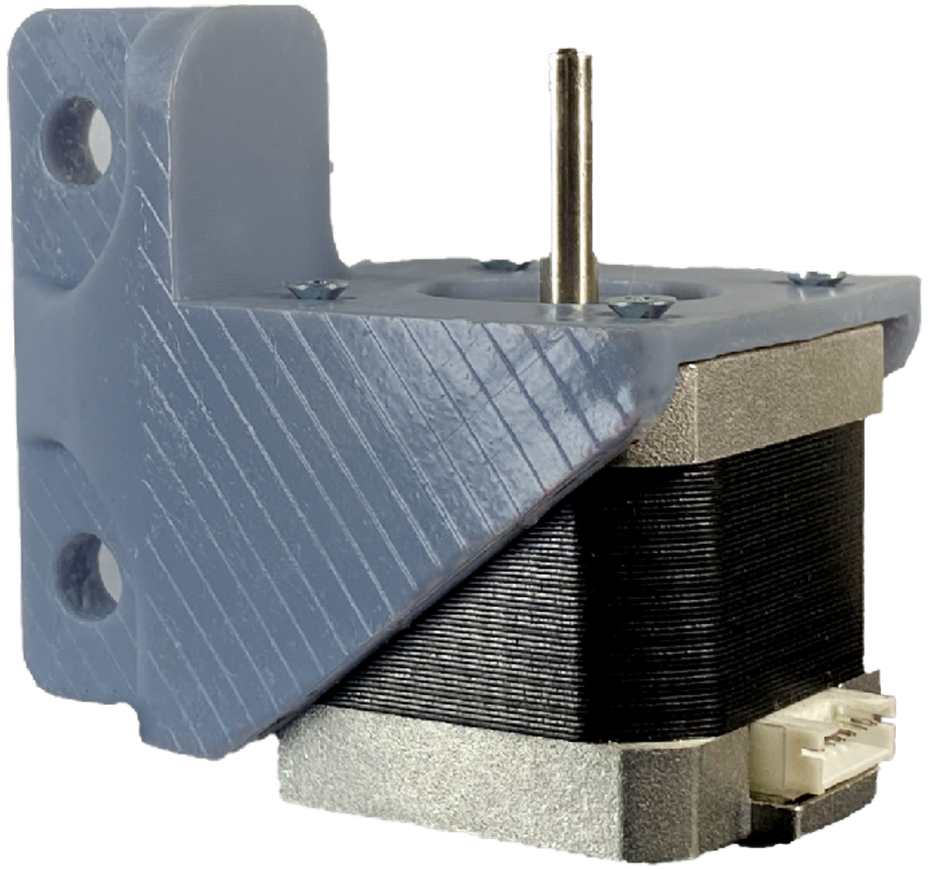
RAL Colours



ULTRA HARD

Sakata 3D Resins' range of DLP / LCD HARD photopolymers is ideal for making objects where resistance is a must. The parts cannot be bent or compressed and have very high tensile properties and very low elongation. HARD DLP / LCD resin provides excellent definition on your desktop DLP / LCD printer.

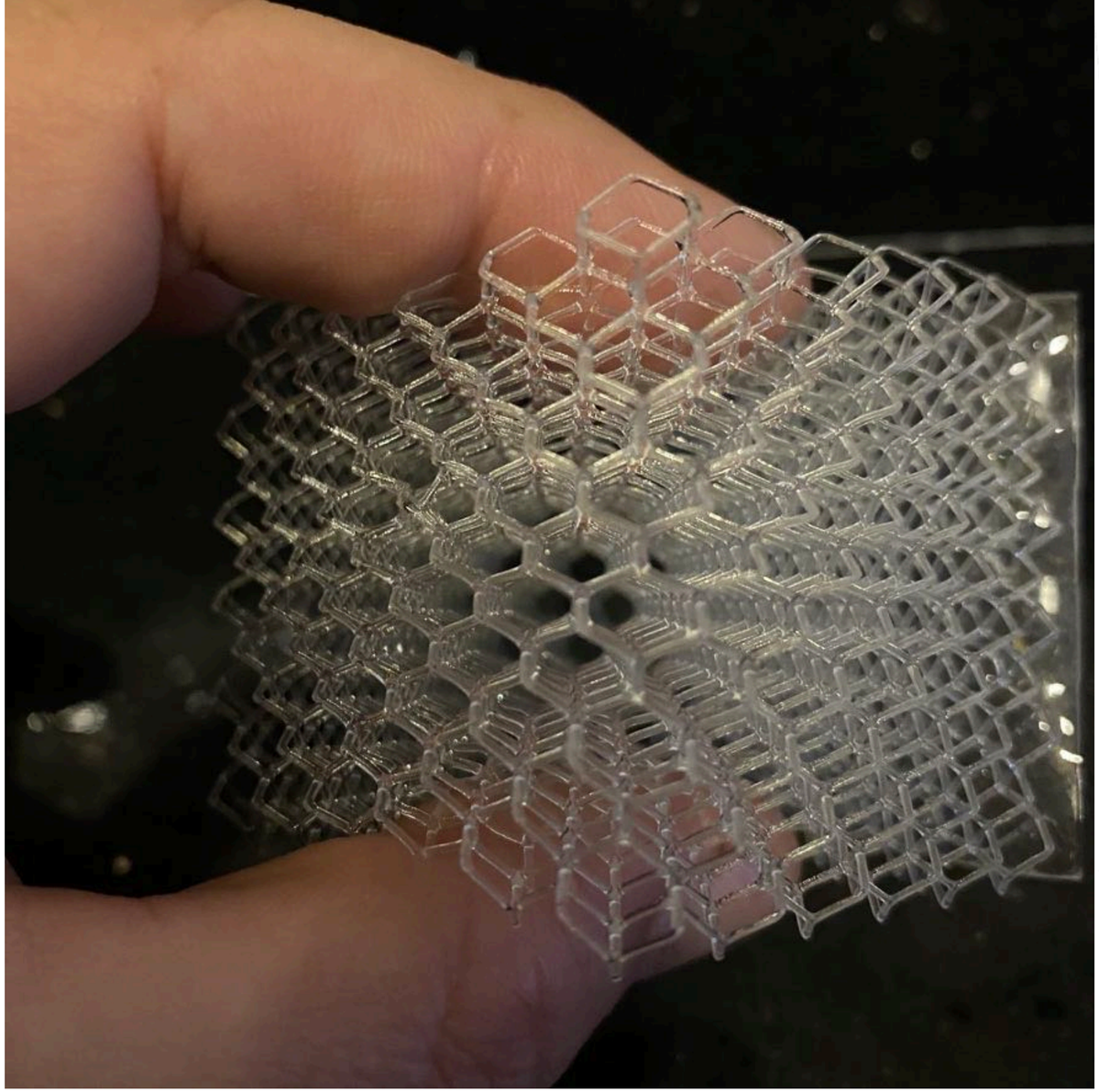
You will experience the benefits of fast exposure times (DLC) and a wide exposure latitude, allowing you to preserve the finest details that your machine can provide. Compared to HARD resin, ULTRA HARD has more hardness and a greater elongation capacity, making this resin perfect for all those projects that need greater resistance (for example, mechanical parts).

Ficha Técnica
Data Sheet

Colores RAL
RAL Colours

FLEX

Sakata 3D DLC-LCD FLEX photopolymers are ideal for creating objects where flexibility is needed. Thin objects will compress and deflect enough to bend and return to their original shape. They have very low tensile strength properties and limited elongation. The DLC-LCD FLEX provides excellent images on your DLP-LCD printer, where you also benefit from fast exposure times and preserve the finest details your machine can provide. The solid material is flexible, solid and durable as long as it is stored in dry conditions away from strong UV light.



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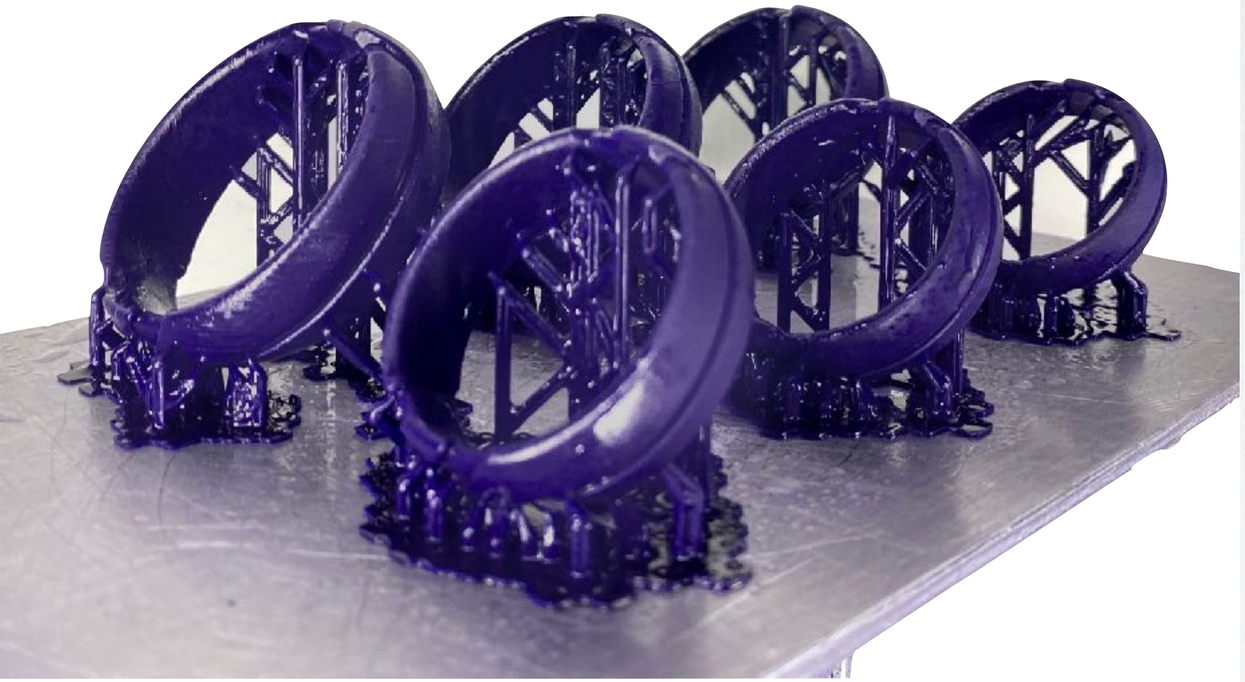

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CASTABLE

Sakata 3D Resins UV DLP Castable has been precisely formulated to work with your UV DLP printer to create castable jewelry pieces that display the highest level of detail. Printed parts are exceptionally accurate, display the highest level of detail, and are suitable for use in direct investment casting, making them perfect for the modern jewelry market. During the casting process, parts will burn evenly, with virtually no ash, expansion, or residue, leaving you with an ideal mold for melting metals. Final castings are extremely accurate and show a smooth surface finish. See our plastering guidelines for optimal results.

Key benefits:

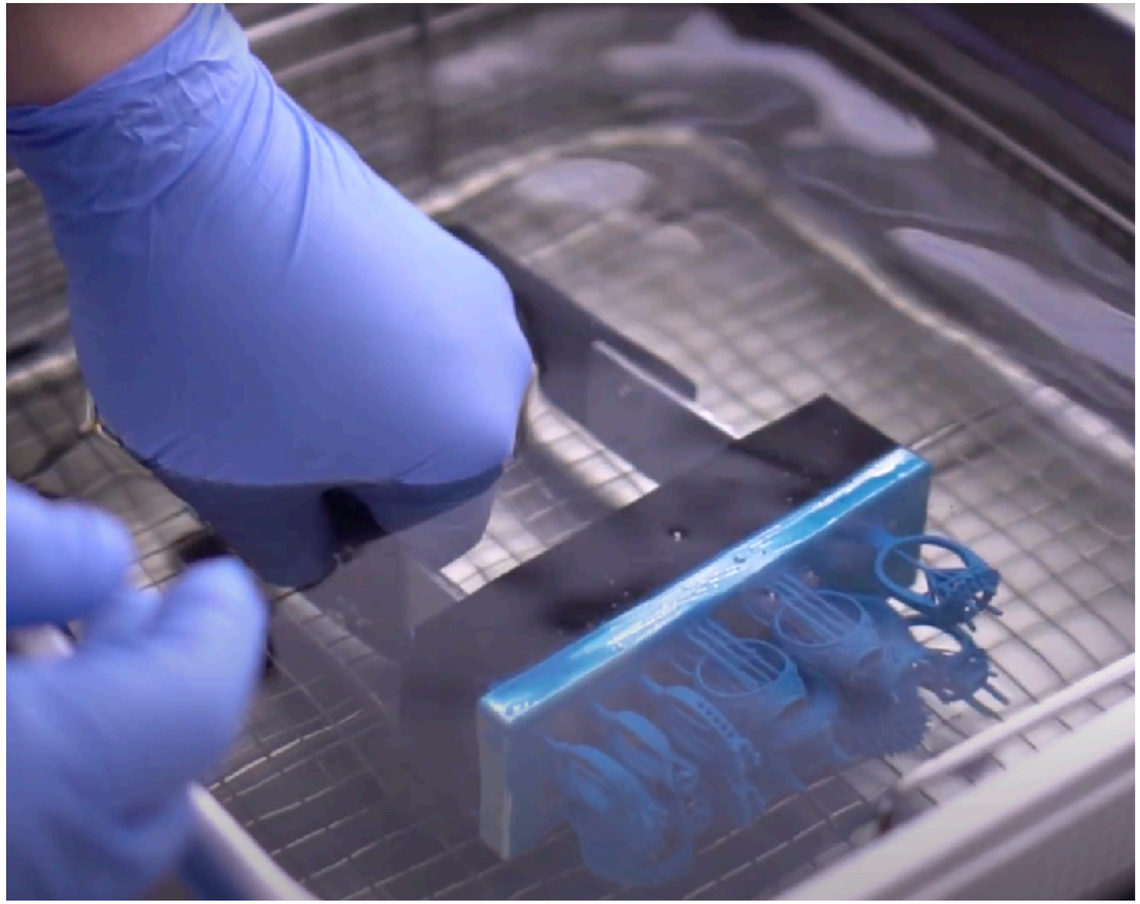
- Virtually no ash, expansion or residue during burning - High precision cast and printed parts with a good smooth surface finish.

ApplicationsJewelry, dental molds, models

CLEANER

Sakata 3D Resin Cleaner, the specific cleaning solution for all our resins and suitable for all types of cleaning systems: closed systems, ultrasound systems, wash/cure systems, etc.

Our cleaning fluid is fast and very effective and removes uncured resin from the surface of your prints, helping them look stunning.



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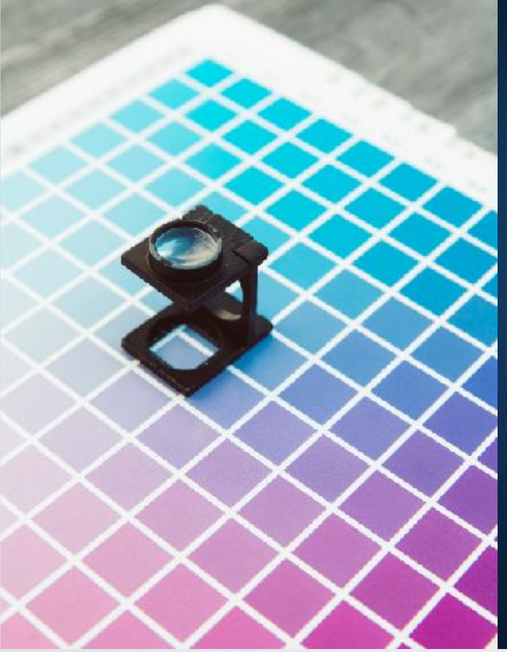

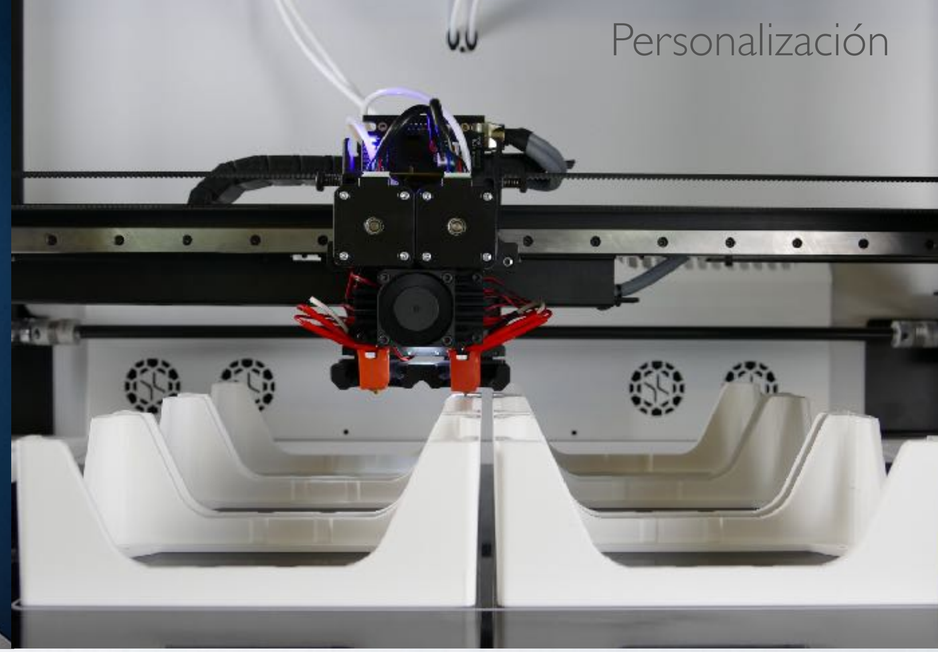

CUSTOMIZATION

All our materials are available in various formats and diameters, offering the customer the possibility of requesting a personalized format based on their demands and needs.

PACKAGING

We offer our clients sizes of 250, 500, 1000, 2500, 5000 and 8000g for any requirement, from sampling to industrial formats.

REBRANDING

At Sakata 3D filaments we offer you the possibility of creating your own brand with conditions and prices adapted to the needs of each client.

CUSTOM COLOURS

We offer our clients the possibility of creating custom colours, such as corporate colours and colours from the RAL table.

SAKATA 3D FILAMENTS

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