REACH RoHS nqa ISO 9001 Registered compostable BNL34322000

eSUN®

2018 Product manual

About Us

eSUN was originally founded in Shenzhen in 2002, which is dedicated in R&D and industrialization of bio-degradable polymers, such as PLA and PCL. Adhering to Open Innovation with several top universities and institutions, eSUN own three R&D centers, which are syntheses, modification and application of polymers.

Since 2007, eSUN started to research 3D printing material, so far, eSUN successfully developed PLA, ABS, PVA(water soluble support filament), HIPS, PA, PCL, and PC filament etc. Since 2015, eSUN developed photopolymers for SLA/DLP/LCD 3D printing applications.

'Best Quality, Reasonable Price' is eSUN 's long-term insistent policy. Because of these, eSUN 3D printing materials are very popular in the globe market with eSUN brand or OEM brands. eSUN successfully established a stable win-win relationships with many famous 3D printer manufacturers, distributors and resellers all over the world.

Our History

In 2002

Company founded in Shenzhen, China.
R&D PLA raw material.

In 2007

Established iSUN3D
as eSUN's subsidiary in 3D Printing.
Launched PLA and ABS filaments.

In 2011

Developed 12 Color ABS filaments.

In 2012

Launched PVA/HIPS/Shiny filaments.

In 2013

CEO Kevin Yang was named as
Forbes China Pioneer.
Launched soft PLA, ePA(Nylon),
eConductive and ePC.

In 2014

Named as the Preferred Brand of 3D
Printing filaments by 3D FOCUS.
Launched PETG, eClean, Wood and
Color Changing filaments.

In 2015

«Nanjixiong» (China's No.1 media in 3D printing)
identified eSUN as China's largest supplier
of 3D printing filaments.
Launched eMorph, eMate, eFlex, ePA,
eCopper and etc 3D filaments.

In 2016

eSUN has been listed on NEEQ.
Got 40+ global distributors & resellers,
Selling eSUN products to 80+ countries.
Launched Bio-based photopolymer: eResin-PLA

In 2017

Cooperated with Dupont, ZYYX.
Launched new 3D pen: iSUN3D LTP 4.0
Launched five new filaments: eABS Max,
eASA, ePA-GF, eSmooth, eBamboo.
Launched eBOX: the filament
storage box with three powerful functions.

In 2018

Launched three new
photopolymer: Strength, Jewelry, Dental
Launched recyclable filament
without spool: Refilament

Our Competence

16 years history of company

11 years history of 3D printing material

30+ 3D printing materials

20+ patents acquired

20+ production lines

1,500,000 kg annual production capacity of 3D printing material

3 warehouses covering China, America and Europe

30+ exhibitions attended globally every year

50+ distributors globally

100+ countries and areas supplied

Our Certifications

DIN CERTCO

NOTIFICATION OF REGISTRATION

Shenzhen Esun Industrial
Co., Ltd.
A403-1, Wuhan University Bldg.

of the type

Mainly Polylactic Acid Compound

conforms to

DIN EN 13432:2000-12
ASTM D 6400:2012
Certification scheme products made of compostable materials (Edition: 2015-04)

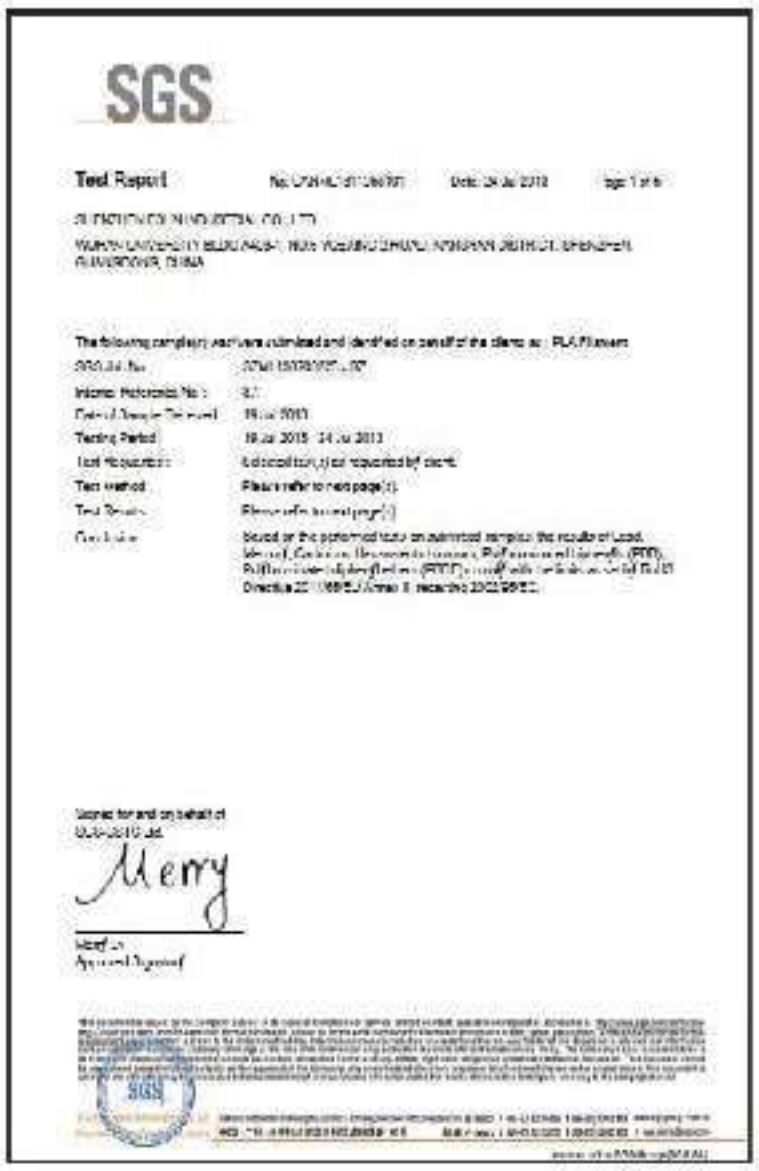
and is granted a specific entitlement for advertising purposes according to § 8 (1)
of the Regulations governing Use of the Mark for the mark

according to the Regulations governing Use of the Mark and the Trademark Usage Guidelines
in conjunction with the Registration No. below

Registration No.: DW9360

This Notification of Registration is valid until 2018-06-30.

2013-06-06

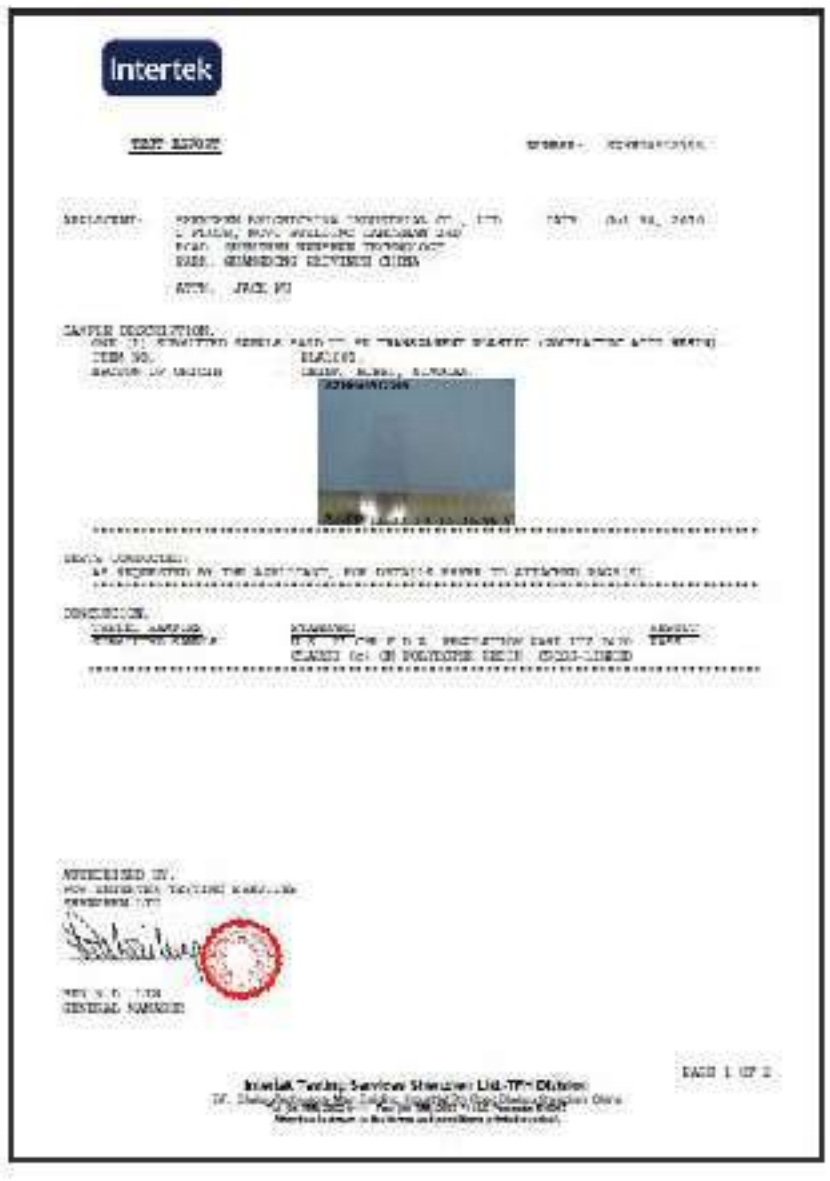


SGS

Test Report

The following sample(s) was/were submitted and identified on behalf of the client as : PLA Flowers

Tested for and on behalf of



Intertek

TEST REPORT

CAMPLE DESCRIPTION.

IQNet

CERTIFICATE

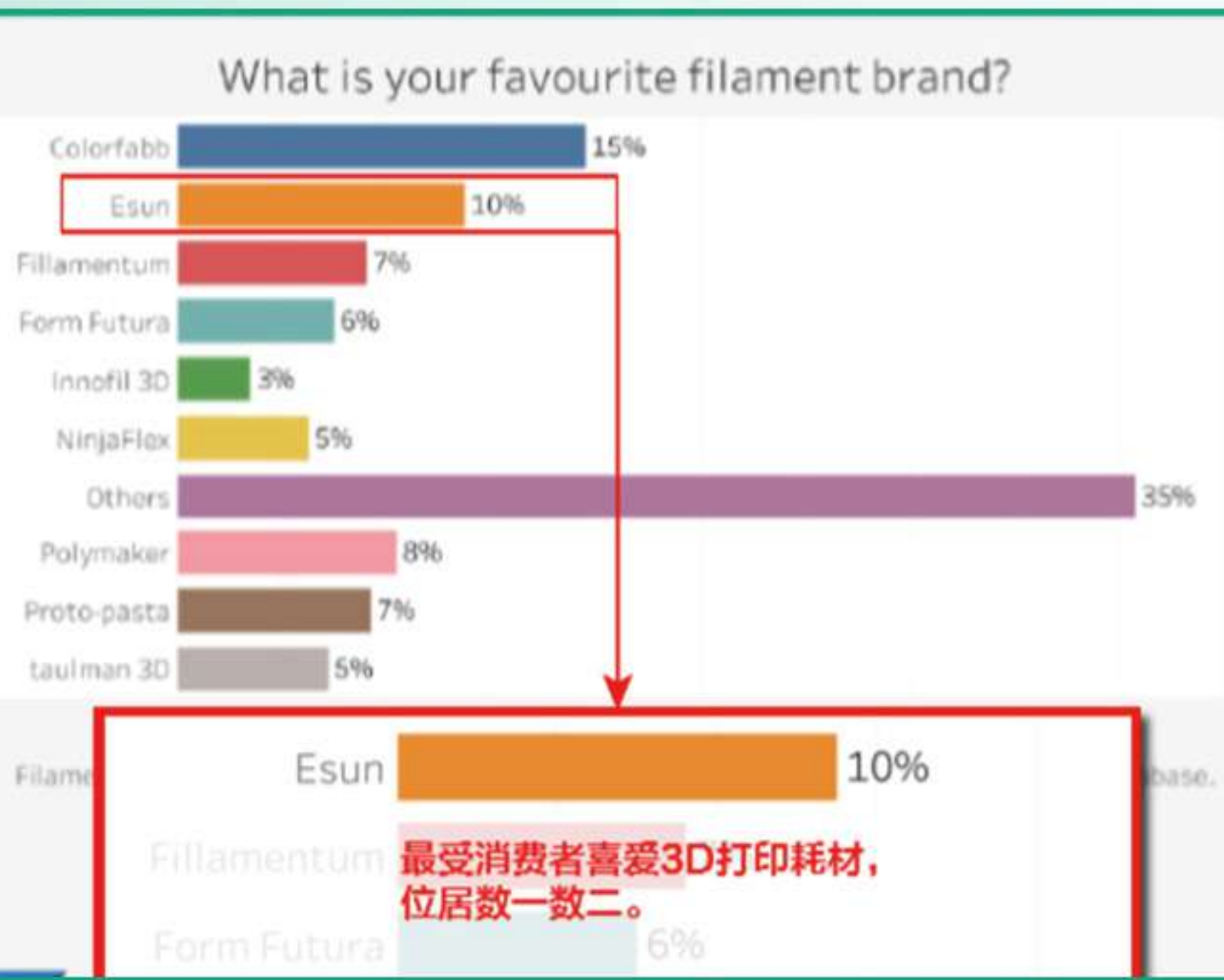
IQNet and CQM
hereby certify that the organization
Shenzhen Esun Industrial Co., Ltd.
Xiaogan Esun New Materia Co., Ltd.

is in conformity with
ISO 9001:2008 Standard

For the product/service to the customer:

Our Honors

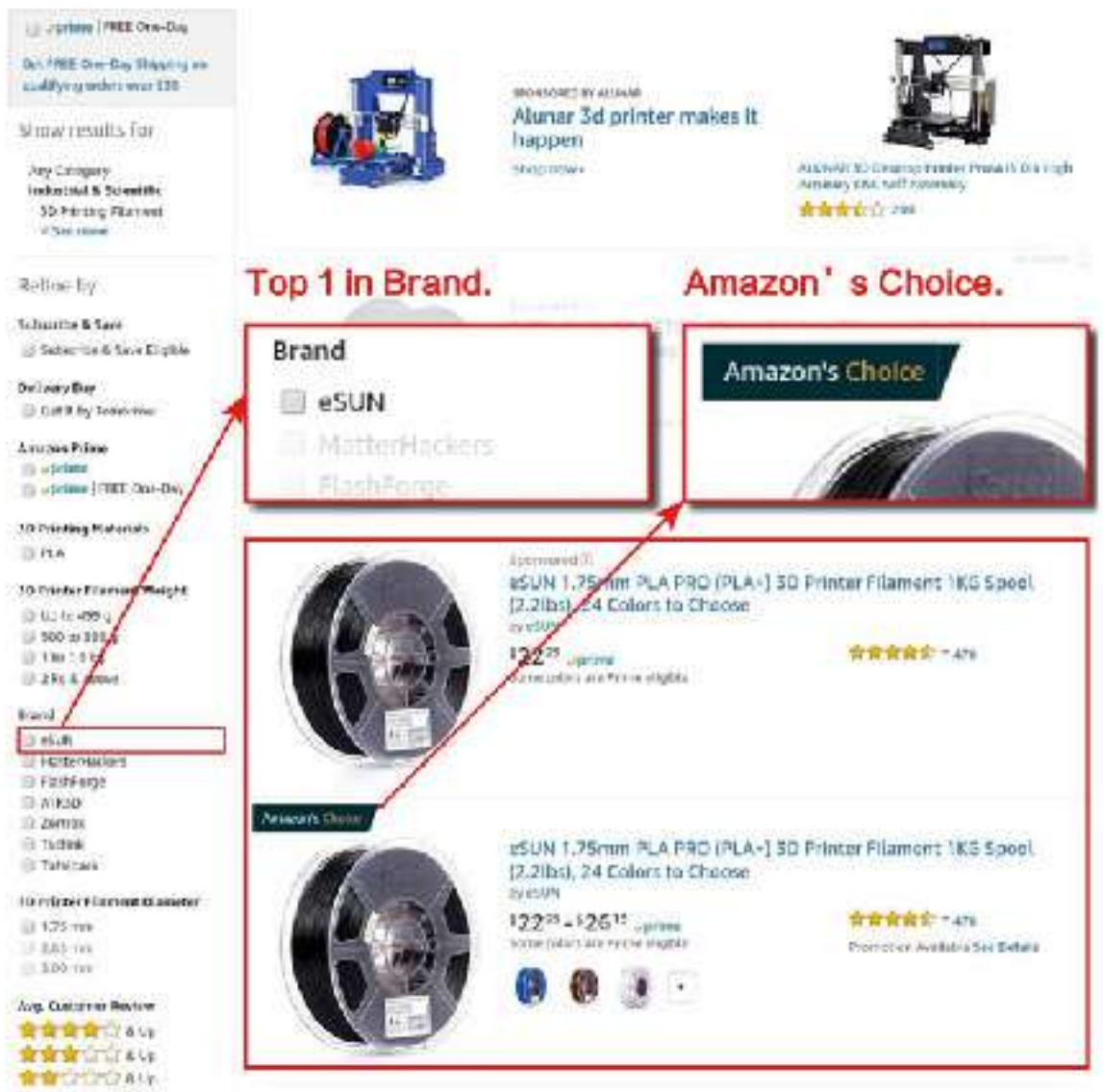
eSUN has the largest sales amount of
3D Filament in China in 2015, 2016 and 2017



eSUN was listed at Top 2 as 2018 favirouate
filament brand, by Filament.Directory

Our Achievements

Ranked top 1 on Tmall in China



Ranked top 1 on Amazon US

Ranked top 2 on Amazon Japan

Ranked top 2 on Amazon Germany

Product Colors

White

Luminous Green

Natural

Skin

Yellow

Gold

Orange

Luminous Red

Luminous Blue

Pink

Magenta

Red

Glass Purple

Glass Lemon

Glass Orange

Glass Red

Purple

Gray

Peak Green

Light Blue

Pine Green

Green

Blue

Glass Light Blue

Brown

Black

Silver

Index of Products

General Filaments

Engineering & Functional Filaments

Special Appearance Filaments

UV Products

Related Products

PLA

Standard PLA since 2007, earliest supplier in China.

- Non harmful, non-toxic, and environment friendly;
- Good material toughness, good strength;
- Suitable for complex models;
- Low material shrinkage rate, uniform diameter.

Demo prints:

Printing set:

Print temp: 190 - 220℃

Hot bed temp: 0/(60 - 80)℃

Print speed: 30 - 100mm/s

Offer 24 colors

PLA+

Upgraded PLA, solved the defects of standard PLA.

- High rigidity, good glossiness and transparency;
- Suitable for printing larger models;
- Toughness is 10 times more standard PLA;
- No wiredrawing problem;
- No cracking problem.

Demo prints:

Printing set:

Print temp: 205 - 225℃

Bed temp: 60 - 80℃

Print speed: 30 - 90mm/s

Offer 20 colors

ABS

Standard ABS, can be treated by acetone.

- High strength;
- Good toughness;
- Scratch resistance;
- The surface can be polished by using acetone and easy to be colored.

Demo prints:

Printing set:

Print temp: 220 - 260℃

Hot bed temp: 110℃

Print speed: 30 - 60mm/s

Offer 21 colors

ABS+

Upgraded ABS, solved the defects of standard ABS.

- Good flowability, easy to print;
- High toughness, hardness and rigidity;
- Good scratch resistance;
- Suitable for printing large models;
- Good heat resistance and oil resistance.

Demo prints:

Printing set:

Print temp: 220 - 260℃

Bed temp: 110℃

Print speed: 30-60mm/s

Offer 21 colors

PETG

Filament that combines the advantages of ABS ans PLA.

- No smelling when printing;
- Low shrinkage;
- Low hygroscopic;
- Good toughness.

Demo prints:

Printing set:

Print temp: 230 - 250℃

Bed temp: 25 - 80℃

Print speed: 30 - 80mm/s

Offer 17 colors

HIPS

Limonence soluble filament

- Soluble in limonence;
- Low water absorption;
- Good toughness.

Demo prints:

Printing set:

Print temp: 220 - 260℃

Bed temp: 110℃

Print speed: 30 - 80mm/s

Offer 5 colors

eMate(PCL)

Low temp print filament

- Melt at low temperature, very suitable for low temp 3D pen;
- After being used by 3D pen, the eMate can be reused for handicraft.

Demo prints:

Printing set:

3D Pen Print temp: 70 - 100℃

Bed temp: None℃

Print speed: 10 - 40mm/s

PLA Clear

PLA in translucent color

- Translucent color
- Non harmful, non-toxic, environment friendly.
- Good material toughness, good strength.
- Suitable for complex models.
- Low material shrinkage rate, uniform diameter.

Printing set:

Print temp: 190-210 ℃

Hot bed temp: 25-70 ℃

Print speed: 30-80mm/s

Luminous PLA

Luminous filament, glow in dark

- Glow long and bright in dark
- Easy to print
- Good material toughness, good strength.

Printing set:

Print temp: 190 - 210℃

Bed temp: 25 - 70℃

Print speed: 30 - 80mm/s

LuminousPLA+

Luminous filament, glow in dark

- Glow long and bright in dark
- Easy to print
- Good material toughness, good strength.

Printing set:

Print temp: 205 - 225℃

Bed temp: 25 - 70℃

Print speed: 20 - 90mm/s

Luminous ABS

Luminous filament, glow in dark

- Glow long and bright in dark
- High strength.
- Good toughness.
- Scratch resistance.

Printing set:

Print temp: 220 - 260℃

Hot bed temp: 110℃

Print speed: 30 - 60mm/s

Luminous ABS+

Luminous filament, glow in dark

- Glow long and bright in dark
- High strength.
- Good toughness.
- Scratch resistance.

Printing set:

Print temp: 220 - 260℃

Bed temp: 110℃

Print speed: 30-60mm/s

PVA

High performance water soluble filament

- Biodegradable;
- Dissolve faster in hot water (<60℃).

Demo prints:

Printing set:

Print temp: 180 - 210℃
Bed temp: No heat/60-80℃
Print speed: 30-80mm/s

eSoluable

High water dissolution speed filament. Less absorption of moisture

- Solving speed in water is more than twice of PVA;
- Less moisture absorption rate than PVA;
- Compatible with multiple materials.

Demo prints:

Printing set:

Print temp: 190 - 210℃
Bed temp: No heat/(60 - 80)℃
Print speed: 50-80mm/s

eABS MAX

Fire-resistant filament, UL94-V0 standard.

- UL94-V0 fire-resistant;
- Maintain 90% physical performance in -20℃ and won't crisp;
- Can be polished by acetone.

Demo prints:

Printing set:

Print temp: 200 - 240℃

Bed temp: 110℃

Print speed: 30 - 60mm/s

eASA

UV-resistant filament, perform well in outdoor environment

- Weather resistant;
- UV resistant;
- High-temp resistant;
- Anti-static material.

Demo prints:

Printing set:

Print temp: 220 - 260℃

Bed temp: 90 - 110℃

Print speed: 20 - 90mm/s

ePA(Nylon)

High toughness nylon material

- Transparent material;
- High toughness;
- Good weatherability;
- Oil resistant;
- Chemical resistant.

Demo prints:

Printing set:

Print temp: 230 - 260℃
Bed temp: 80 - 110℃
Print speed: 30 - 80mm/s

ePC

Polycarbonate (PC) material

- Environmental-friendly;
- High distortion temperature;
- Good thermostability.

Demo prints:

Printing set:

Print temp: 235 - 260℃
Bed temp: 80 - 110℃
Print speed: 30 - 80mm/s

ePA-CF

Nylon based carbon-fiber filament

- Nylon based, 20% carbon fiber filled;
- Suitable for industrial purpose;
- Heat distortion temp is 120℃;
- Low shrinkage.

Demo prints:

Printing set:

Print temp: 240 - 260℃
Bed temp: 80℃
Print speed: 30 - 80mm/s

ePA-GF

Nylon based glass-fiber filament

- Good mechanical strength;
- Low shrinkage;
- Low hygroscopicity.

Demo prints:

Printing set:

Print temp: 240 - 260℃
Bed temp: 80 - 80℃
Print speed: 40 - 60mm/s

eFlex（TPU）

TPU flexible filaments in Shore hardness 87A

- Transparent appearance;
- TPU filament in Shore hardness 87A;
- Good resilience.

Demo prints:

Printing set:

Print temp: 210 - 230℃

Bed temp: No heat/(25 - 80℃)

Print speed: 10 - 40mm/s

eLastic（TPE）

TPE flexible filaments in Shore hardness 83A

- Available in various colors;
- TPE filament in Shore hardness 83A;
- Good resilience.

Demo prints:

Printing set:

Print temp: 210 - 230℃

Bed temp: No heat/(25-80℃)

Print speed: 10-30mm/s

Offer 6 colors

eTPU-95A

TPU in Shore hardness 95A. Stronger than normal TPU

- TPU in Shore hardness 95A
- Stronger than normal TPU
- Easier to be printed compared with normal TPU and TPE.

Demo prints:

Printing set:

Print temp: 200 - 220℃

Bed temp: No heat/(60 - 80)℃

Print speed: 10 - 40mm/s

eClean

Clean filament used to clean hot end

- No smell;
- Wide printing temperature range;
- Used to clean FDM 3D printer hot end.

Printing set:

Print temp: 160 - 300℃

Bed temp: none

Print speed: none

ePEEK

High strength and hardness filament

- High strength, high hardness, high temperature resistance;
- Heat distortion temp is more than 150℃;
- Good adhesion between layers when printing.

Demo prints:

Printing set:

Print temp: 380 - 410℃

Bed temp: 120 - 140℃

Print speed: 15 - 30mm/s

ePEEK Pro

Upgraded PEEK, provide good printing experience

- Good printing experience;
- High strength, high hardness, high temperature resistance;
- Heat distortion temp is more than 150°C;
- Good adhesion between layers when printing.

Demo prints:

Printing set:

Print temp: 380 - 410℃

Bed temp: 120 - 140℃

Print speed: 15 - 30mm/s

eMagnetic

Magnetic filament, can be polished after printing

- Magnetic filament
- Can be polished mechanically after printing

Printing set:

Print temp: 190-210℃
Bed temp: 40-50℃
Print speed: 40-60mm/s

eConductive

Conductive filament

- Conductive property
- Can be used for electromagnetic shielding

Printing set:

Print temp: 190 - 210 ℃
Hot bed temp: 40 - 50 ℃
Print speed: 40 - 60mm/s

Bronze

Filament with metal powder and provides bronze appearance

- Bronze appearance after printing;
- Low shrinkage;
- Can be polished mechanically after printing.

Demo prints:

Printing set:

Print temp: 180 - 210℃

Bed temp: 25 - 70 ℃

Print speed: 30 - 60mm/s

eCopper

Filament with metal powder and provides copper appearance

- Copper appearance after printing;
- Low shrinkage;
- Can be polished mechanically after printing.

Demo prints:

Printing set:

Print temp: 200 - 220℃

Bed temp: 25 - 70℃

Print speed: 20 - 90mm/s

eAl-fill

Filament with metal powder and provides aluminum appearance

- Aluminum appearance after printing;
- Low shrinkage;
- Can be polished mechanically after printing.

Demo prints:

Printing set:

Print temp: 200 - 220℃

Bed temp: 25 - 70℃

Print speed: 30-60mm/s

eSteel

Filament with metal powder and provides steel appearance

- Steel appearance after printing;
- Low shrinkage;
- Can be polished mechanically after printing.

Demo prints:

Printing set:

Print temp: 200 - 220℃

Bed temp: 25 - 70℃

Print speed: 30 - 80mm/s

Wood

Wood appearance filament

- Wood appearance after printing;
- No smelling during printing;
- Can be printed without heated bed.

Demo prints:

Printing set:

Print temp: 190 - 220℃

Bed temp: 25 - 70℃

Print speed: 30 - 60mm/s

eBamboo

Bamboo filled filament

- Filament with bamboo powder;
- Wood aroma and appearance;
- Suggest to remove printed parts from the nozzle as soon as possible after printing, otherwise the wood powder ; may expand and burn.

Demo prints:

Printing set:

Print temp: 200 - 220℃

Bed temp: 25 - 70℃

Print speed: 20 - 90mm/s

eSmooth

High water dissolution speed filament.
Less absorption of moisture

- Solving speed in water is more than twice of PVA;
- Less moisture absorption rate than PVA;
- Compatible with multiple materials.

Demo prints:

Printing set:

Print temp: 190 - 210℃
Bed temp: No heat/(60 - 80)℃
Print speed: 50 - 80mm/s

Color Change

Color change by temp or light

- Color change by light filament will change color when exposed to light;
- Sunlight exposure life for Color change by light filament is around 5-12hours;
- Color change by light filament can be used for several years if each exposure time is very short ;
- Color change by temp filament changes color gradually in different temp.

Demo prints:

Printing set:

Print temp: 190 - 220℃
Bed temp: No heat/(60 - 80)℃
Print speed: 30 - 80mm/s

eResin-PLA(Bio-based resin)

Pioneer of Bio - based resin, environmental friendly.

- High Precision;
- High hardness and scratch resistance;
- good moisture-resistance performance.

Printing set:

Offer 3 colors

Layer thickness(mm): 0.02 - 0.05

Bottom layers: 3

Bottom Exposure Time: LCD:30s DLP:10s

Normal Exposure Time: LCD:15-20s DLP:3 - 5s

Strengh Resin for DLP

High intensity, low shrinkage, high speed printing

- High precision, smooth surface;
- Low volume shrinkage property;
- Low flavour and nontoxic, environment-friendly material;
- Fine flexibility, no crack after curing;
- Temperature up to 100 degree Celsius.

Printing set:

Offer 5 colors

Layer thickness(mm): 0.02 - 0.05

Bottom layers: 3

Bottom Exposure Time: 10s

Normal Exposure Time: 2 - 3s

Castable resin for jewelry

Specially designed for the jewellery industry .Low temperature casting. Suitable for both LCD and DLP printers.

- High precision, smooth surface;
- Casting easily and 100% no ash;
- Low Volume shrinkage property;
- Finest details with low odor;
- Fine flexibility, no crack after curing.

Printing set:

Layer thickness(mm): 0.02 - 0.05

Bottom layers: 3

Bottom Exposure Time: LCD:80s DLP:10s

Normal Exposure Time: LCD:15-20s DLP:3-5s

Castable resin for dental

Speiallly design for dental, Low Volume shrinkage. Suitable for both LCD and DLP printers.

- High precision, smooth surface;
- Great casting performance, ash free;
- High hardness, resistant to shock;
- Low Volume shrinkage to 1.88% - 2.45%;
- Compatible to most DLP with LED UV.

Printing set:

Layer thickness(mm): 0.02 - 0.05

Bottom layers: 3

Bottom Exposure Time: LCD:80s DLP:10s

Normal Exposure Time: LCD:15-20s DLP:3-5s

General-purpose resin for LCD

Compatible to most LCD printers

- Fasting Printing speed;
- Low Shrinkage;
- Low odor and no toxic;
- High hardness 88 shore D.

Printing set:

Layer thickness(mm): 0.02 - 0.05

Bottom layers: 3

Bottom Exposure Time: LCD:80s DLP:10s

Normal Exposure Time: LCD:15-20s DLP:3-5s

Offer 5 colors

iSUN3D-L120

Deskport LCD 3D printer

- The printing is higher accuracy, faster speed, and the stability is more stable;
- Achieve the best fineness and improve the multifunction of the 3D printer;
- Help animation, manufacturing, art, architectural design;
- Support different properties of resin materials to meet the requirements ;
- Any application to the desktop of education and product designers.

Printing set:

Build volume: 120mm*60mm*130mm

curing rate: 5s ~15s per layer

X/Y Accuracy: 0.05mm

Z Accuracy: 0.02mm

Wavelength: 405nm

Certification:

CE/FCC

iSUN3D-D150

Deskport DLP 3D printer

- High precision and speed, printed model can be used for direct casting;
- USA imported core projector component,ensure printer stability;
- Dedicated LED light source, higher efficient heat less, longer lifetime;
- Software corrects the projection distortion automatically to ensure the Aprinting precision;
- Software automatic calibrate the light intensity and make compensation.

Printing set:

Heating temp: 80°C
Filament type: eMate
Filament diameter: 1.75mm
Laying speed: 0 - 120cm/min

Certification:

CE/FCC

iSUN3D-SLA

Industrial SLA 3D printer

- The molded part has the ultimate detail and smooth surface quality;
- The precision can be as high as 0.05mm, and the precision sample can be made;
- Easy to produce various complex parts and assemblies;
- Support different properties of resin materials to meet the requirements of rigidity, detail, heat resistance and so on;
- energy-saving, environmental friendly and economical.

Printing set:

Laser System: 355nm Diode Laser 1000mw
Net Build Volumn: 300mm*300mm*250mm
/450mm*450mm*350mm/600mm*600mm*400mm
Laser Spot Diameter:0.08mm - 0.10mm
Scanning Speed:5.0m/s(Standard) 12.0m/s(Highest Speed)
Scanner Brand: Scanlab(Germany)

Certification:

CE/FCC

iSUN3D LTP4.0

Safe, light and environment friendly, three optional packing.

- Low temperature, draw in 80 °C;
- One-click operation;
- Available with mobile power;
- Lightly designed.

Demo prints:

Printing set:

Heating temp: 80°C
Filament type: eMate
Filament diameter: 1.75mm
Laying speed: 0 -120cm/min

Offer 4 colors

Certification:

CE/FCC/ROHS

iSUN3D LTP6.0

Built-in rechargeabld battery make it work without connecting power

- Built-in rechargeable lithium polymer battery;
- Low temperature, safe for kids;
- Available with power bank and PC USB output;
- Cute design with simple control.

Demo prints:

Printing set:

Heating temp: 90°C
Filament type: eMate
Filament diameter: 1.75mm,

Offer 4 colors

Certification:

CE/FCC/EN71/ROHS

eBOX — Multi-function

Product Specification

- Heating and dried;
- Moistureproof and dustproof;
- Weighing.

Printing set:

Package Size: 249(L)×138(W)×272.5(H) mm

Product Size: 215(L)×104(W)×238.5(H) mm

Max Capacity: Φ200×73(H) mm

Product Weight: 750g

Rated Power: AC100-240V~50/60Hz

Power Output: DC12V~3A

Power of Drying Heater: 36W

Max Temperature: 750g

Max Temperature: 0.1W

Weighing Load: 2kg

Weighing Error: ±20g

Filament Diameter: 1.75mm/2.85mm/3mm

PLA+ Refilament/Respool

PLA+ filament package without spool and customer can use the Refilament with eSUN spool or Respool.
3D Printed Spool(reusable) for PLA+ Refilament

- Twisting-free filament;
- Eliminate the accumulation of empty spools;
- Decrease the plastic waste and be environment-friendly.

Demo prints:

Printing set:

Print temp: 205 - 225℃

Bed temp: 25 - 70℃

Print speed: 30 - 80mm/s

Offer 24 colors

Applicated Brands and more

Sindoh

Wanhao

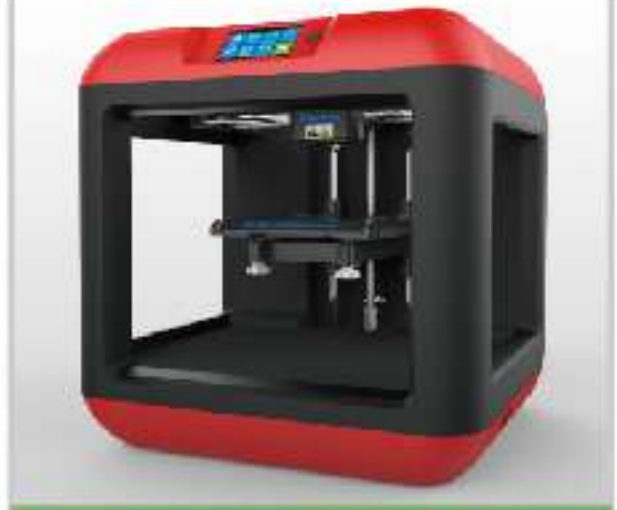
XYZ Printing

Makerbot

Raise 3D

Ultimaker

UP



Flashforge

Creality 3D

Media Partners

3Ders

pinshape

MyMiniFactory
GUARANTEED 3D PRINTABLE

All3DP

gizmochina

3D PRINTING INDUSTRY
THE AUTHORITY ON 3D PRINTING

3DPRINT.COM

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E-mail: bright@brightcn.net

Welcome to meet us on

Instagram

twitter

facebook

Linkedin