

# NATUREWORKS 3D PRINTING SUPPLIERS GUIDE



naturally advanced materials

# WELCOME TO THE IN GEO 3D PRINTING SUPPLIERS GUIDE

Inside this guide you will find our recommended partners from around the globe for resin distributors, compounders, and filament manufacturers all supplying Ingeo-based materials to the 3D printing market.

For more information on Ingeo, visit [www.natureworkslc.com](http://www.natureworkslc.com) or find us on Twitter at [@natureworks](https://twitter.com/natureworks).

## INGEO BRINGS EXCELLENT PERFORMANCE IN 3D PRINTING

PERFORMANCE REQUIREMENT	MARKET EXPECTATION	INGEO PERFORMANCE	ABS PERFORMANCE
Temperature in printing	Lower is better for safety and control	190-230°C possible, sharp melting behavior	230-250°C
Vapor or odor in printing, EH&S	Low or no emissions, small particulate	Very low emissions & studies show lower particulate count	Strong negative odor and higher particulate count
Heated build chamber	Ideally not required and many desktop and large-format printers lack this capability	Does not require heated build chamber, but opportunity to leverage	Required to avoid warping while mfg. larger parts
Fusing performance	Fuses easily, sticks to self and build chamber	Good fusing and build platform adhesion	Difficult to stick to certain build platforms
Thermal shrinkage	Low shrinkage and warping	Excellent, low shrink	Warps on larger builds

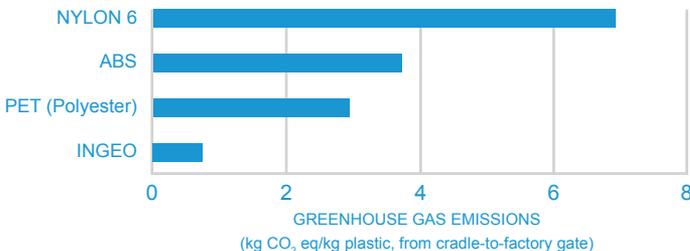
## HOW IN GEO IS MADE

Locally abundant and rapidly renewable plant resources capture and sequester atmospheric carbon over their growing season, producing simple sugars via the process of photosynthesis. Through a process of fermentation and separation, these harvested plant sugars are converted into lactic acid. A safe material naturally present in our bodies and in many of our foods, this lactic acid building block is transformed into Ingeo, a performance thermoplastic with physical characteristics and performance tailored for 3D printing applications.



## LOW CARBON FOOTPRINT

Made from the carbon sequestered in plant sugars, Ingeo, by nature, has a very low carbon footprint<sup>1</sup>.



<sup>1</sup> For more information visit [www.natureworkslc.com/The-Ingeo-Journey/Eco-Profile-and-LCA](http://www.natureworkslc.com/The-Ingeo-Journey/Eco-Profile-and-LCA).

## WORLDWIDE DISTRIBUTORS / COMPOUNDERS

### PREFERRED INGEO RESIN DISTRIBUTORS

These are the distributors NatureWorks has authorized to sell Ingeo PLA grades for 3D printing.

#### NORTH AMERICA

<b>JAMPLAST</b>		<a href="http://www.jamplast.com">www.jamplast.com</a>	
John Moisson	jamplast@jamplast.com	+1 (636) 238-2100	United States

#### EUROPE

<b>RESINEX</b>		<a href="http://www.resinex.com">www.resinex.com</a>	
Carlo Todeschini	ctodeschini@resinex.it	+39 349 688-5064	Belgium

#### MIDDLE EAST

<b>JOLYBAR</b>		<a href="http://www.jolybar.com">www.jolybar.com</a>	
Anver Inbar Ofar Ben Yishay	anver@jolybar.com ofar@jolybar.com	+972 9885-0848	Israel

#### ASIA PACIFIC

<b>FIRST IN COLOURS</b>		<a href="http://www.firstincolours.com">www.firstincolours.com</a>	
Noli Q. Jimenez	njimenez@firstincolours.com	+63 2 6350680	Philippines
<b>NATUR-TEC INDIA</b>		<a href="http://www.naturtec.com">www.naturtec.com</a>	
Sunder Balakrishnan	sbalakrishnan@ntic.com	+91-9840641731	India
<b>UNIC TECHNOLOGY CORP.</b>		<a href="http://www.unicgroup.com">www.unicgroup.com</a>	
Mei Chen	meichen@u-nic.com.tw	+86 512 6271-8188	China

#### JAPAN

<b>BP CONSULTING, INC.</b>		<a href="http://www.bpc-tyo.com">www.bpc-tyo.com</a>	
Takeyuki Yamamatsu	take@bpc-tyo-com	+81 3 6423-2712	Japan

## PREFERRED COMPOUNDERS

These companies make compounds that are suitable for Ingeo-based 3D printing filament.

<b>CLARIANT</b>		<a href="http://www.clariant.com">www.clariant.com</a>	
Tina Lee	tina.lee@clariant.com	+64 9 914-5566	New Zealand
<b>KINGFA SCI. &amp; TECH. CO., LTD.</b>		<a href="http://www.ecopond.com.cn">www.ecopond.com.cn</a>	
Edison Liang	edison.liang@ecopond.com.cn	+86 (0)2066221696	China
<b>TEKNOR APEX</b>		<a href="http://www.teknorapex.com">www.teknorapex.com</a>	
Edwin Tam	etam@teknorapex.com	+1 (401) 642-3753	United States



United States FILAMENT PRODUCER

#### ABOUT 3DOMFUEL USA

3DomFuel is a global manufacturer of high-quality 3D printing filaments. In 2016, 3DFuel, 3DomUSA and 3DomEurope joined forces as 3DomFuel, dedicated to bringing highly functional and sustainable materials to the 3D printing market. 3DomFuel specializes in eco-friendly 3D printing filaments made from materials including recycled coffee grounds, sustainably grown hemp and even discarded hops from the beer making process!

[3DFUEL.COM](http://3DFUEL.COM)

#### INGEO GRADES THEY USE:

Standard - 4043D

Workday - 3D850

Pro PLA - 3D870



Germany FILAMENT PRODUCER

#### ABOUT GEHR

Founded in 1932 and family-owned ever since, GEHR is one of the world's leading manufacturers of semi-finished thermoplastics, primarily in rods, sheets and precision tubes. The headquarter of this medium-sized company is Mannheim with a branch in Philadelphia (USA). Beyond that GEHR maintains sales offices in France, Italy, Hong Kong, China and California.

[GEHRPLASTICS.COM](http://GEHRPLASTICS.COM)



United States FILAMENT PRODUCER

#### ABOUT IC3D

IC3D is an on-demand engineering applications workshop converging traditional manufacturing process with digital 3D printing technologies. IC3D owns the entire process from filament extrusion, CAD design and custom built 3D printing equipment to large object 3D printing and low volume production.

[IC3DPRINTERS.COM](http://IC3DPRINTERS.COM)

INGEO GRADES THEY USE:  
4043D



New Zealand FILAMENT PRODUCER

#### ABOUT IMAGIN PLATICS

Imagin Plastics Ltd is the leading manufacturer of 3D printing filaments in New Zealand. They produce and stock top quality 3D printing filaments made with Ingeo PLA. Imagin Plastics Ltd guarantees the quality of their filament will be held to exact tolerances specified for the 3D printing industry. All products are manufactured in New Zealand from only the highest quality raw materials and tested by experts worldwide.

[IMAGINPLASTICS.CO.NZ](http://IMAGINPLASTICS.CO.NZ)

INGEO GRADES THEY USE:  
3D850



China COMPOUNDER

#### ABOUT KINGFA

Kingfa Sci. and Tech. Co., Ltd. is recognized as a global leader in the advanced materials industry and ranks first in terms of scale in the Asian-Pacific region. In addition to a yearly output of one million tonnes in regular products, Kingfa prioritizes 3D printing as one of its strategically innovative directions on new materials. A series of materials are applied in 3D printing under their brand name ECOPOND®, including various PLA-based products made from naturally advanced Ingeo biopolymer. High-end, unique and consistent characteristics differentiate from other materials on the market, and have seen positive adoption by customers.

[ECOPOND.COM.CN](http://ECOPOND.COM.CN)

#### INGEO GRADES THEY USE:

4032D  
3D850  
3D870



United States FILAMENT PRODUCER

**MakerBot®**

#### ABOUT MAKERBOT

Founded in 2009, MakerBot sells desktop 3D printers and materials to industry-leading customers worldwide, including engineers, architects, designers, educators, and consumers.

[MAKERBOT.COM/FILAMENT](http://MAKERBOT.COM/FILAMENT)

#### INGEO GRADES THEY USE:

2003D  
4043D

# **PLASGROUP** AUSTRALIA

Australia FILAMENT PRODUCER

## ABOUT PLASGROUP

Plasgroup has been at the forefront of plastic welding wire supply since 2002. We are excited to offer our range of ABS/HIPs and Ingeo PLA 3D printer extrusion filaments. Plasgroup is based in Melbourne and manufactures all the ABS & Ingeo PLA filament at our plant in Bayswater, Victoria.

[PLASGROUP.COM.AU](http://PLASGROUP.COM.AU)



China FILAMENT PRODUCER

## ABOUT POLYMAKER

Polymaker is an international team passionate about 3D printing. We produce the very best 3D printing materials by controlling every stage of production. With a diverse portfolio of materials ranging from high performance plastics to unique aesthetic solutions, Polymaker will continue to innovate adding new cutting edge materials to the market.

[US.POLYMAKER.COM](http://US.POLYMAKER.COM)



Argentina FILAMENT PRODUCER

## ABOUT PRINTALOT

First 3D filament factory in Argentina. Their quality exceeds international standards and is recognized in the whole region. Printalot offers a full range of materials and colors.

[PRINTALOT.COM.AR](http://PRINTALOT.COM.AR)

### INGEO GRADES THEY USE:

4043D

3D850



South Korea FILAMENT PRODUCER

#### ABOUT TLC KOREA

Top Leaf Chemical (TLC) Korea has been working with Ingeo PLA for more than 10 years developing products for the injection molding, thermoforming, and film markets. In 2013, TLC began research and development on 3D printing filaments made with Ingeo PLA. The first filaments were introduced in early 2014 featuring a range of bright translucent colors. TLC Korea is very environmentally conscious and is using recycled Ingeo PLA to create even the filament spools themselves. We promise to continually offer filaments of more variety, better quality, and cheaper prices based on our extensive experience with Ingeo PLA.

[TOPLEAF.CO.KR](http://TOPLEAF.CO.KR)



United States FILAMENT PRODUCER

#### ABOUT TONER PLASTICS, INC.

Since 1989, Toner Plastics has been manufacturing extruded products to exact customer specifications with an uncompromising commitment to quality and customer service, and is currently a world leader in 3D printer filament products. While the company has many of its own products that are found in the 3D printing, craft and toy markets, Toner Plastics focuses on manufacturing extruded products for industrial OEM customers.

[TONER-PLASTICS.COM](http://TONER-PLASTICS.COM)



Japan FILAMENT PRODUCER

#### ABOUT UNITIKA

Unitika's biomass material TERRAMAC™ is found in a range of products that provide support in a variety of lifestyle situations and we can shift our lifestyle step by step with TERRAMAC™. Born from a combination of sustainable annually renewable plant feedstocks coupled with advanced human technology, TERRAMAC™ is intended to help create an ideal world with humans and nature in harmony.

[UNITIKA.CO.JP/TERRAMAC/E/](https://unitika.co.jp/terramac/e/)



[www.natureworksllc.com](http://www.natureworksllc.com)

 [@natureworks](https://twitter.com/natureworks)