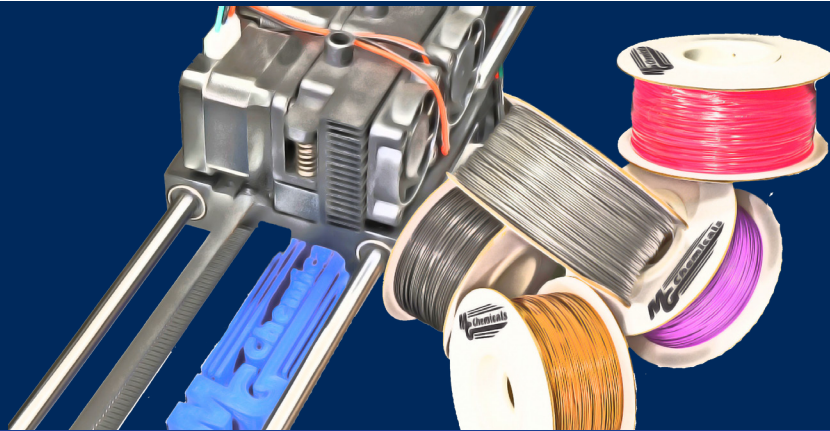


# 3D Printer Filaments, Chemicals & Accessories



High quality products for high quality results

## ABS

MG Chemicals ABS 3D printing filaments are made of high purity Acrylonitrile Butadiene Styrene pellets. They resist higher temperatures and offer great machinability, flexibility and strength making it the preferred choice of engineers and professionals. ABS plastic can be dissolved and welded in our 434 Acetone making post processing easy. Acetone can also be used to vapor or dip smooth ABS prints to give them a cast plastic finish.



It is important to note that a heated bed is required to work with this type of material and because it is petroleum based it emits a slight odour when heated, making it less desirable for home use. It is recommended that this product be printed in a well ventilated area.

- High purity Acrylonitrile butadiene styrene (ABS)
- Higher temperature resistance
- Flexible and strong
- Can be welded and smoothed using acetone
- Low diameter variance
- RoHS compliant
- Print temperature: 230 °C - 240° C [446 °F - 464 °F]
- Bed temperature: 90°C - 110 °C [194 °F - 230 °F]
- Bed surface: Polyimide tape or glass (treated)

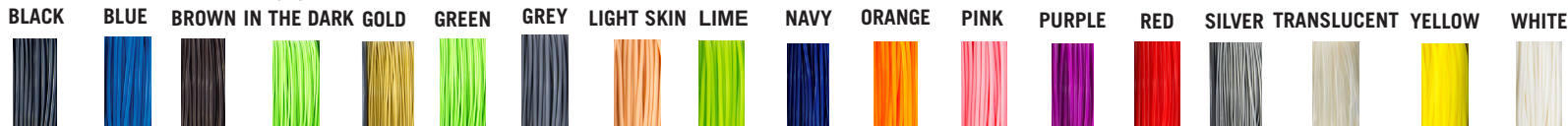
## PLA

MG Chemicals Polylactic Acid or Polylactide (PLA) 3D printing filaments are a corn based product made from high purity, high temperature pellets. It does not require a heated print bed and easily adheres to masking tapes. It is very hard, acetone resistant and can achieve faster print speeds and lower layer heights when properly used. It releases a mild, non-offensive sweet smell when heated and is the optimal choice for use in homes, schools and makers / hobbyists workshops or studios.



- High Purity Polylactic Acid or Polylactide (PLA)
- Made from renewable resources
- Can be used in high resolution applications
- Acetone resistant
- 1.75mm and 3.0mm diameters
- 18 Vivid colors
- Low diameter variance
- RoHS compliant
- Print temperature: 210 °C - 220 °C [410 °F - 428 °F]
- No heated bed required
- Bed surface: Masking tape

GLOW



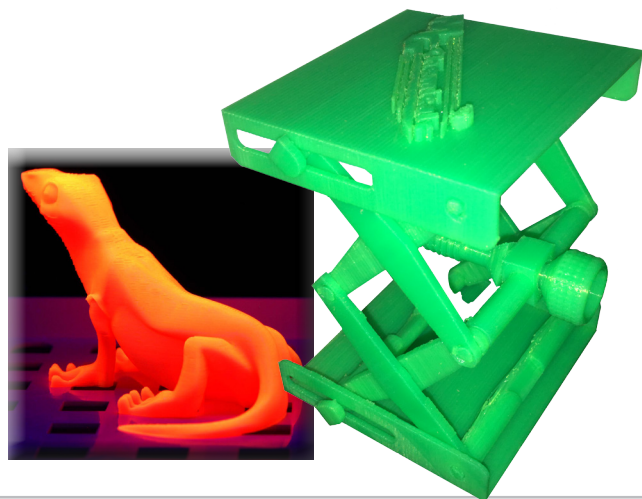
## SPECIALTY FILAMENTS

### FLUORESCENT

MG Chemicals Fluorescent Polyactic Acid or Polylactide (PLA) 3D printing filaments are filaments made from high purity, high temperature corn based pellets. It is a normal PLA in which we incorporated a fluorescence formula that makes your print 'glow' under black light. It does not require a heated print bed and easily adheres to masking tapes.

It is the optimal choice for use in homes, schools and makers / hobbyists workshops or studios.

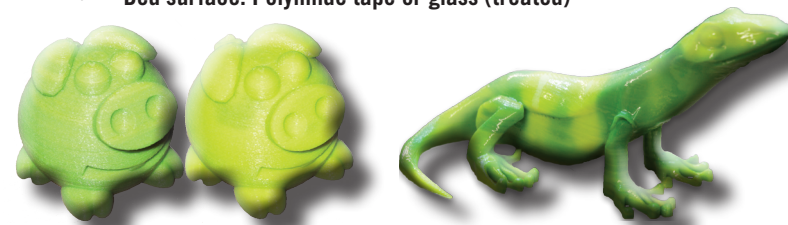
- Glows under black light
- Can achieve faster print times
- Acetone resistant
- Low Diameter variance
- RoHS compliant
- No heated bed required
- Print temperature: 180 °C - 230 °C [356 °F - 446 °F]
- Bed surface: Masking tape



### ABS / PLA THERMOCHROMIC

MG Chemicals Thermochromic 3D printer filaments are made of high purity Acrylonitrile Butadiene Styrene (ABS) or Polyactic Acid or Polylactide (PLA) pellets with a tight diameter tolerance. It is formulated to provide a discoloration effect when exposed to heat.

- ABS**
- Green colour changes to yellow at 31 °C [88 °F]
  - Purple colour changes to red at 31 °C [88 °F]
  - Higher temperature resistance
  - Flexible and strong
  - Can be welded and smoothed using acetone
  - Low diameter variance
  - Print temperature: 210 °C - 240 °C [410 °F - 464 °F]
  - Bed temperature: 110 °C [230 °F]
  - Bed surface: Polyimide tape or glass (treated)



- PLA**
- Red colour changes to natural at 43 °C / 109 °F
  - Can be used in high resolution applications
  - Low diameter variance
  - RoHS compliant
  - Acetone resistant
  - Print temperature: 180 °C - 230 °C [356 °F - 446 °F]
  - No heated bed required



### WOOD

MG Chemicals Wood 3D printing filaments are biodegradable, can be sanded and painted and have a sweet odour of wood. They have the ease of use similar to PLA and is great for artists and hobbyists who are looking to experiment with different printing materials. It is highly recommended this product be used with 0.4 mm nozzles or larger to avoid clogging. Smaller nozzles require higher heat to avoid clogging.



- Blend of high purity Polyactic Acid (Polylactide) (PLA) and wood
- Sandable and paintable
- Easy to use
- Low diameter variance
- RoHS compliant
- Print temperature: 185 °C - 230 °C [365 °F - 446 °F]
- No heated bed required
- Offered in both 1.75mm and 2.85mm diameter
- Bed surface: Masking tape

### PETG

MG Chemicals PETG 3D Printing filaments are a high strength thermoplastic with excellent moisture and chemical resistance. They are easy to use because of their low shrinkage properties and are excellent for applications where strong prints are desired. They are widely used in mechanical parts fabrication and robotics.



- High purity Polyethylene terephthalate glycol-modified (PETG)
- Print times comparable to PLA
- High strength and flexibility
- Minimal shrinkage and warping
- Recyclable
- Low Diameter variance
- RoHS compliant
- Print temperature: 210 °C - 240 °C [410 °F - 464 °F]
- No heated bed required

### ABS / PLA GLOW / SUPER GLOW IN THE DARK

MG Chemicals Glow / Super Glow in the Dark Acrylonitrile Butadiene Styrene (ABS) or Dark Polyactic Acid or Polylactide (PLA) 3D printing filaments are made from high purity pellets in which we incorporated a luminescent formula to provide a lighting effect in the dark by absorbing natural or manmade light. It is the optimal choice for use in homes, schools and makers / hobbyists workshops or studios.



- ABS**
- Higher temperature resistance
  - Flexible and strong
  - Can be welded and smoothed using acetone
  - Low Diameter variance
  - RoHS compliant
  - Print temperature: 230 °C - 250 °C [446 °F - 482 °F]
  - Bed temperature: 110 °C [230 °F]
  - Bed surface: Polyimide tape or glass (treated)

- PLA**
- Made from renewable resources
  - Can be used in high resolution applications
  - Acetone resistant
  - Low Diameter variance
  - RoHS compliant
  - Print temperature: 180 °C - 230 °C [356 °F - 446 °F]
  - No heated bed required
  - Bed surface: Masking tape

### HIPS

MG Chemicals High Impact Polystyrene (HIPS) 3D Printing filaments are made of high grade dissolvable High Impact Polystyrene pellets with a tight diameter tolerance. The HIPS filaments are used as stable support material for prints. Being easily soluble in d-Limonene, HIPS support can be freed from ABS by simply immersing the object in d-Limonene (Time to dissolve may vary depending on size and complexity of print). To print objects with HIPS support dual extrusion printer with heated bed is required. HIPS print temperature is 235 °C / 455 °F on a heated bed at 115 °C / 239 °F (Temperatures may vary between printers).

- High Impact Polystyrene
- Dissolvable in d-Limonene
- Use as support in ABS
- Low diameter variance
- RoHS compliant
- Print temperature: 235 °C [455 °F]
- Bed temperature: 115 °C [239 °F]
- Bed Surface: Polyimide tape
- Available 1.75mm and 3.0 mm diameters



# ACCESSORIES AND CHEMICALS

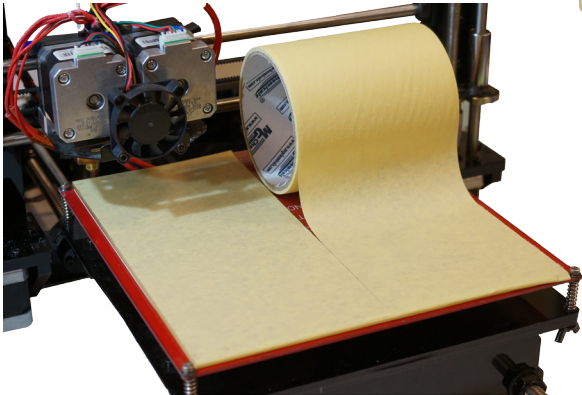
## TAPES

MG Chemicals offers 3D printing high temperature masking tapes and polyimide tapes to assist adhering the printed object to the print bed to help achieve the best possible results.

### MASKING TAPE

MG Chemicals high temperature masking tape is made from 8 mils beige crepe paper coated with a rubber adhesive designed for 3D printers heated beds. It is specifically designed to be heat resistant and provide superior print adhesion while allowing easy removal of completed objects. It also provides protection for the bed, while making clean up simple. It works excellent with PLA, Wood, PETG, ABS and many other 3D printing materials. It is available in 4 in. width on 49 ft rolls.

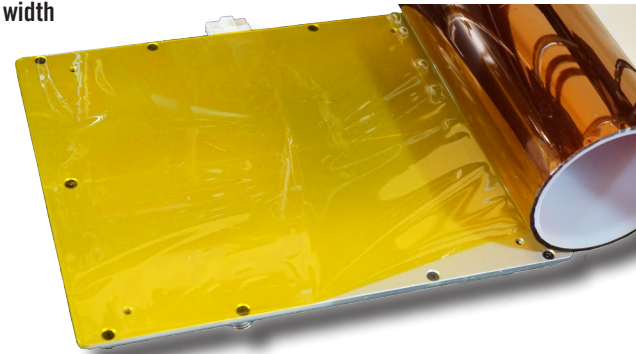
- Low thickness variation
- Strong heat resistant rubber adhesive
- Superior print adhesion
- Easy object removal
- Protection for 3D printer bed
- 4" width



### POLYIMIDE TAPE

MG Chemicals Polyimide film is a lightweight, flexible crystalline film with a silicone adhesive designed for 3D printers heated beds when using ABS and HIPS filaments and perfect for applying ABS slurry. It works well at low temperatures, does not soften when submitted to heat and provides an excellent release surface at elevated temperatures. It offers superior tensile strength, good elongation and is chemical resistant. It also serves as a printer bed surface protector. Available in 4 in. and 8 in. widths and offered in 49 ft splice free rolls.

- 2 mils thick
- Silicone adhesive
- Very high heat resistant
- Superior tensile strength
- Eases release of heated objects
- Protects printer bed
- RoHS and REACH compliant
- 4" or 8" width



## CHEMICALS

MG Chemicals 3D printing liquid solutions are formulated to assist in the 3D modeling process. They are designed to act as dissolving agents, as a post printing smoothing solutions or as cleaning solvents.

### d-LIMONENE PURE GRADE

MG Chemicals d-Limonene Pure Grade is a colourless liquid made from 100% pure natural citrus oils. It is ideal for dissolving HIPS when used as a support within 3D printed pieces

d-Limonene can also be used as a solvent to clean and degrease equipment. Extracted from natural fruits it releases a pleasant citrus smell when exposed to ambient air.

- 100% citrus oil
- Dissolves HIPS support filaments
- Biodegradable



### ACETONE

MG Chemicals Acetone is a superfast drying, VOC exempt and zero residue solvent. It is ideal for use in 3D printing. ABS dissolved in acetone, when applied to a print bed, can improve adhesion and reduce print warping. The acetone can also be used to smooth and weld the surface of finished ABS prints.

- Fast Evaporation Rate
- Dissolves ABS plastic to make a slurry for use on print beds when printing with ABS filaments
- ABS Smooth finishing agent
- ABS plastic welding agent
- Highly Miscible with Other Common Organic Solvents
- VOC exempt

