

Materials

Approved and prohibited materials for the laser cutters.

Approved Materials for Rabbit Laser Cutters

Scroll up and down to see the list; scroll right for additional information.

Approved Materials for Trotec Laser Cutter

Scroll up and down to see the list; scroll right for additional information.

Prohibited Materials for All Laser Cutters

Unapproved material use is prohibited. Failure to comply will lead to revocation of privileges or membership.

Lasering unapproved material could lead to fire other equipment damage or hazardous fumes creating risk to human health.

Scroll up and down to see the list; scroll right for additional information.

Notes

Know your Poly*

There are many plastic polymers made of different materials. Some can be lasered, others can not. Make sure you think critically about the words that come after poly.

- Polyacrylic, Polyester, Polyethylene, Polylactic are generally the good ones. **See specifics Below**
- Polystyrene requires vigilant observation so you don't burn down the laser.
- Polyurethane, Polycarbonate, Polypropylene are ones are the bad ones. **See specifics Below**

Monitor Closely

The following materials **MUST BE** monitored closely as they have an increased risk to cause damage to the equipment by causing fire or melting.

- Cotton / Felt / Hemp / Wool (watch for fire)
- Polystyrene **Fire Risk**
- Foamboard/foam core (must not contain fire retardants; R.L. Adams is known good) **HIGH FIRE RISK** the entire job must be monitored closely.
- Coroplast brand corrugated polypropylene **watch for melting**; bulk polypropylene is not approved)

Etched Only

- Glass
- Ceramic
- Stone (marble, slate, quartz, etc.)
- Plaster of Paris
- Paints and thin spray coatings, thinner than powder coating (General blanket approval, but please use common sense and don't engrave your grandfather's old High Lead Special paint he has stockpiled.
- Metal (painted/anodized)

- The laser must not be used over 50% power in this scenario. Reflections can damage the optics.
- Cermark metal marking compound
- Plasti-dip

Submission of Material For Consideration

To submit a material for approval submit the request to the [#lasers channel on Discord](#). Please provide the Safety Data Sheet (SDS).

Laser Material Spreadsheet

The source of the above tables can be found in the following Google Sheet:

https://docs.google.com/spreadsheets/d/1RDp_Kf5wWVkaAUypppxwd_1NlgEtOxAvZAGb8n5b-Vc/edit?usp=sharing

The Google Sheet has several pages, including:

- Notes on the spreadsheet
- Approved materials for the Rabbits, including suggested speed and power settings
- Approved materials for the Trotec, including suggested speed, power, and resolution settings
- Prohibited materials (applicable to all laser cutters)

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