Materials Not Safe to Laser Cut

- PVC Results in chlorine gas when cut
- Polycarbonate/Lexan Doesn't cut well, discolors
- ABS Results in cyanide gas when cut, tends to melt
- HDPE/milk bottle plastic -Melts, can catch on fire
- Polystyrene foam Catches on fire
- Polypropylene foam -Catches on fire
- Fiberglass Emits fumes, doesn't cut well
- Carbon Fiber Emits fumes, doesn't cut well
- Mirrored Surfaces Doesn't cut well, reflects the laser beam
 - If it is Acrylic with a plastic mirror coating, sometimes we can be successful by pointing the mirrored surface away from the laser and cutting in reverse. Please check in with Digital Lab staff if you are interested.
- PTFE Emits toxic fumes
- Epoxy or Phenolic Resins Emits toxic fumes
- Corrugated Cardboard The air gaps in the corrugation can cause fires
- Foam Core Board The center is made of polystyrene which catches on fire
- Linoleum Printmaking Blocks Emit toxic fumes
- If we can't identify a material, we will not be able to use it in the laser cutter

Materials Safe to Laser Cut

For many of these we have examples. Please stop by the Digital Lab to see them.

- Wood
- Plywood
- MDF
- Acrylic
- Paper
- Matboard
- Chipboard
- Fabric Natural materials work best. Synthetic materials tend to melt.
- Leather Natural dyes are best.
- Felt
- Laserable Rubber These will say specifically that they are safe for the laser cutter
- Glass engrave only, can't cut
- Stone engrave only, can't cut

Digital Lab staff have final say on whether a piece of material will be used on the laser cutter. Please check with digital lab staff if you don't see your material listed or email us at <u>digitallab@mcad.edu</u>. We encourage you to do your own research online to see if your material is safe to laser cut.