

## Laser Cutter Materials

### Acceptable Materials

MATERIAL	COMMENTS
Wood	<ul style="list-style-type: none"> <li>Woods with higher resin content such as pine or cedar are more susceptible to fire</li> <li>Composite woods such as plywood or MDF contains adhesives which may give off fumes such as formaldehyde gas</li> </ul>
Paper Carboard Card Stock	<ul style="list-style-type: none"> <li>Cuts well, should be watched for fires</li> </ul>
Most Acrylics Plexiglas	<ul style="list-style-type: none"> <li>Cuts well and not very combustible</li> <li>Certain acrylics (particularly rubbery ones) release hydrogen cyanide gas, read the SDS sheet under "stability and reactivity" to be certain</li> </ul>
Cork	<ul style="list-style-type: none"> <li>Cuts well and not very combustible</li> <li>Thicker cork may take more power/slower cutting speeds</li> </ul>
Cloth Leather	<ul style="list-style-type: none"> <li>Natural leather, fiber cloths and polyester cloths are ok. Other synthetic cloths/leather must not contain any of the hazardous materials listed below.</li> </ul>

### Unacceptable Materials

MATERIAL	COMMENTS
Unidentified plastics and other materials	<ul style="list-style-type: none"> <li>Never cut a material if unsure about its composition</li> </ul>
Foods	<ul style="list-style-type: none"> <li>Do not cut consumable material in a cutter that has been used for cutting other materials.</li> </ul>
<i>Halogen containing materials:</i> Polyvinyl Chloride (PVC) Vinyl Neoprene Teflon	<ul style="list-style-type: none"> <li>Releases toxic and corrosive gases which can cause significant harm</li> <li>PVC in particular should never be cut</li> </ul>
<i>Styrenes:</i> Polystyrene Styrofoam ABS	<ul style="list-style-type: none"> <li>Styrene gas is toxic</li> <li>Highly flammable</li> </ul>
<i>CN Bond Materials:</i> Nylon ABS Polyurethane Certain acrylics	<ul style="list-style-type: none"> <li>Releases toxic hydrogen cyanide gas</li> </ul>

### Links and Contacts

Additional guidance may be found from the [National Resource Center](#) and from the [Austin Texas Hackerspace](#)  
Contact [Iso@ehs.ufl.edu](mailto:Iso@ehs.ufl.edu) or 392-7359 with any questions.