

SRL Robot Materials Guide

SRL uses a modified Plastic Antweight materials list. The spirit of these rules is to allow an easy entry point, limit destructive capabilities, and limit armor. While the Duckbowl is more lenient about materials, Tournaments will strictly enforce robot material rules. Teams should plan accordingly - Event Staff do not like asking teams to remove components and/or Branding before an event but will if needed. Final judgment calls are up to the Tournament Event Staff.

This list is not intended to be exhaustive but should be a good guideline. If your team has a question about materials or wants to use materials that may be questionable, please have your Coach contact Quarkmine before your Tournament, remembering to include your school/organization and team name.

3D Printed Materials - Unlimited within Weight Class

- PLA, PLA+, ABS, PETG ONLY
- No reinforced or otherwise enhanced 3D-printed materials

Recycled and Other Materials

- Metal - NONE
- Other Recycled Plastics - 1/16 inch or less wall thickness
- Wood - 1/16 inch or less balsa wood only
- Cardboard - OK
- Cardstock, Paper - OK
- Foam - OK
- Packing Materials Not Listed - OK
- UHM, HDPE, Delrin, etc. - NONE
- Polycarbonate, plexiglass, etc. - NONE
- Carbon Fiber - NONE
- Other non-metal, non-hardened materials - OK
- Laminates of above - 1/16 inch or less thickness

Adhesives and Tape

- **Not allowed for armor or to structurally reinforce the robot; not allowed on weapons.**
- Duct tape or similar tape - NONE
- Paper tape like painters tape or masking tape is okay for attaching parts or emergency repairs
- Layering tape for armor is not permitted
- Hot glue / epoxy - **small** amounts to attach decorations, make temporary repairs, or join smaller 3D printed components is ok

Non-Functional Decorations for Branding - OK

- Extra leniency, particularly in the Duckbowl
- Old toys
- Thrift store items
- Glitter, rhinestones, googly eyes and similar
- Glitter bombs, googly eye bombs, etc.
- Crafting materials that aren't metallic and don't cause undue entanglement

Other

- Liquids in liquid form - No
- Explosives and combustibles - No
- Electrical or jamming weapons - No
- Ball bearings - No
- Fire-based weapons - No
- Launched projectiles - No
- Lights, smoke, other vision impairments - No

Active Weapons / Tournament Day

Event staff are more stringent on Tournament Day. Tournaments are all about seeing the Active Weapons teams have created at their best.

Active weapons are ONLY 3D printed materials - PLA, PLA+, ABS, or PETG and may not be reinforced, enhanced, or have other materials embedded into them.