Composites Lab Safety Checklist

Inspector Name: _____ **Date:** _____

Location/Lab: _____

General Facility & Supervision

[ ] **Teacher:** available in the shop whenever students are present.
[ ] **Work zones:** clearly marked around all equipment.
[ ] **Freezers**: Materials are stored in an orderly manner, emergency door release operates properly, and there is no buildup of ice.

Personal Protective Equipment (PPE)

[ ] **Safety glasses:** with side shields.
[ ] **Chemical goggles**
[ ] **Closed-toe shoes**
[ ] **Tyvek suits and latex gloves**
[ ] **Respirators**
[ ] **Eyewash/shower station:** available, inspected weekly, and documented.

Chemical Safety & Flammable Storage

[ ] **Chemical use areas:** strictly separated from hot work and grinding areas.
[ ] **Chemicals:** properly stored.
[ ] **Chemical inventory:** up to date and Safety Data Sheets (SDS) are available.
[ ] **All chemical containers:** manufacturer's labels (no homemade labels).
[ ] **Flammables > 25 gallons:** stored in a flammable storage cabinet.
[ ] **Flammable storage cabinets:** not loaded past capacity.
[ ] **Flammable liquids:** stored properly rated flammable liquid cabinets.
[ ] **Liquids:** stored in original containers with proper lids.

Power & Electrical

[ ] **Emergency stop button**
[ ] **Equipment:** positive on/off switch or stand-alone electronic device .

[ ] **Stationary equipment:** plugged into a permanent power source.
[ ] **Cords:** intact with no cuts, deterioration, or bare wires.
[ ] **Extension cords:** good repair, equipped with a ground, used *only* as temporary power for handheld tools and not a trip hazard .

Compressed Air

[ ] **Limiting device:** < than 30 PSI.
[ ] **No PVC/CPVC piping.**
[ ] **Compressed air:** not used for cleaning workstations or people.
[ ] **Hoses:** good repair, coiled, and stored.

Specialized Lab Equipment

Autoclave:

[ ] **Equipped with operating interlocks.**
[ ] **Maintenance is completed and documented.**

Oven:

[ ] **Oven:** locked when heated.
[ ] **Installed under a proper ventilation hood**.
[ ] **Maintenance:** completed and documented.

Cutting Table:

[ ] **Emergency stop button:** (red).
[ ] **Pause button:** (yellow).
[ ] **Operator manual:** available.
[ ] **Maintenance:** performed per manufacturer instructions.

Laser Engraver:

[ ] **Exhaust hose:** free of kinks, damage, holes, or blockages.
[ ] **Interlocks between the laser and the exhaust fan operate properly.**

Paint Booth

[ ] **Appropriately rated electrical equipment is installed without modification .**

[ ] **No electrical cords or appliances are run into the booth.**
[ ] **Filters:** clean and cover the entire filter grid.
[ ] **Minimum 100 FPM draw at the face of the booth, and flow meter operates properly.**
[ ] **Fire sprinklers:** installed if the booth is > 9 sq ft (in both the booth and plenum).
[ ] **Fire sprinkler heads:** protected.
[ ] **Walls, floor, plenum, and fans:** clear of overspray.
[ ] **No storage of flammable or combustible material inside the paint booth.**

Machinery & Power Tools

Handheld Tools & Grinders:

[ ] **Handheld tools:** good repair.
[ ] **Handheld grinders:** properly sized wheels and installed guards.
[ ] **Grinding:** performed in an area with mechanical ventilation.

Bench Grinders:

[ ] **Base:** secured.
[ ] **Spindle guard:** present and covering the spindle.
[ ] **Tool rest:** adjusted.
[ ] **Tongue guard:** adjusted.
[ ] **Wheels:** dressed, properly sized, and not worn.
[ ] **Grinding is performed in an area equipped with a mechanical ventilation system.**

Bandsaws:

[ ] **Base:** secured.
[ ] **Blade:** covered by the guard.
[ ] **Guards:** lowered.

Drill Presses:

[ ] **Base:** secured.
[ ] **Equipped with a chuck guard or a keyless chuck.**
[ ] **In good working condition.**
[ ] **Clamps:** available.

Jointers:

- [ ] **Guard**
- [ ] **Proper working clearances.**
- [ ] **Fence:** is secure and rigid**.**
- [ ] **Push sticks:** available.

Miter Saws / Chop Saws:

- [ ] **Guards:** installed and working.
- [ ] **Work area:** adequately sized.
- [ ] **Saw base:** secured.

Planers:

- [ ] **Blades:** sharp.
- [ ] **Housing or guard:** covers the blades.
- [ ] **Machine automatically returns to the starting point when released.**
- [ ] **Anti-kickback device.**

Table Saws:

- [ ] **Blade guards:** installed.
- [ ] **Fence or sled:** except for custom/Dado cuts.
- [ ] **Spreader:** installed.
- [ ] **Anti-kickback device:** installed
- [ ] **Push sticks:** available.