

## Environmental Health and Safety

## 3D-Printing Checklist for Purchase

If you are planning on purchasing a new additive manufacturing unit (3D Printer), please follow this checklist to ensure you are establishing a safe work environment and in compliance with regulatory requirements.

## **Lab/Area Considerations**

- Use only in designated areas.
- The ventilation rate for the area should be a minimum of 5 air changes per hour.
- Increased ventilation may be necessary when several 3D Printers are in the same space.
- When feasible, order 3D Printers that are fully enclosed and equipped with filtration systems (both HEPA and Charcoal filtration, depending on the media).

## **Required Elements**

- 3D printers must be listed and labeled in accordance with UL 2011, UL 60950-1, or UL 62368-1.
- 3D printers shall not utilize inert gas, an external combustible dust collection system, combustible powders or metals, or create a hazardous (flammable) environment outside the equipment unless approved by EHS before it is installed or put into use. Operational and/or building permits may be required. Please contact EHS for assistance.
- An operable fire extinguisher must be in the area.
- If a corrosive bath is part of the process, an eyewash station must be in the area.

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