



Portable UV-C Light Sterilizing Instructions

How to use your UV-C Light in Mycology (mushroom growing)

Overview

UV-C Light has been used in laboratories & hospitals for many years. Just recently the technology has been shown to be effective in mycology for many uses. This guide will go over the various applications and proper, safe and effective use.

Uses during Inoculation

Create a UV-C barrier while injecting spores.

Whatever sterile method you choose the use to inoculate your jars or spawn bags you can add this as an additional layer of protection. The first thing you want to do is setup your work area. Follow the guide and prepare your oven or glovebox. If you have a friend helping they can simply hold the UV wand over your work area. The UV kill zone is only 6" or closer to the light, so stay within that area.

Our preferred method uses the oven door method and the UV light together. Here are two examples of how to set that up.

1. **Foil method:** This method is easy for one person to handle. Wrap the wand in aluminum foil (3-4 layers). With a knife cut out the back UV light area and the front control pad.



2. Pull out the top oven rack and the bottom rack. Position the UV light over your work area. The foil will help protect the unit from the oven heat. Depending on the type of oven you have this method may or may not be the best.



Oven Method 2

This method allows you to get creative and simply build a stand next to your work area on the lower oven rack. We used books, but a small box or anything that will support the UV light will work. Turn the UV light on by holding the button for 3 seconds and set the timer for 30 minutes. Once you see the light is on you can begin



- When you start inoculating your jars or spawn bags, bring the spore syringe needle less than 1" from the light for 10 seconds. The closer you are to the light the shorter the sterilization time.
- Repeat this for every jar and do not forget to flame your needle and use alcohol swabs as needed

How to use during the fruiting process

UV-C light has been shown to be safe on growing mycelium and mushrooms. These are the current known uses, but we are learning more and hearing more success stories everyday.

- **Sterilizing your fruiting chamber when birthing jars.**

-Use the UV light to scan the inside of the fruiting chamber. Pass the wand over all parts of the container very slowly, allowing at least 10 seconds per area. You should spend about 5-10 minutes in total going over all sides and the lid prior to placing the cakes inside.

-Add the perlite and water, slowly scan the surface of the perlite and make sure the light is at least 6" or less from the surface, scan for 3-4 mins. The closer the light is to the surface the shorter the time you need to sterilize it.

- **Combat mold!**

-Occasionally mold may start to grow on a cake. In the past, there was not much you could do except throw the cake out. UV-C Light sterilizing works best when a cake is less than 21 days old after birthing & showing signs of mold. Usually you will notice a small pea sized spot of green, black or purple mold, usually a fuzzy appearance or slimy look.

-Remove the affected cake from the fruiting chamber and place on a clean surface. Next, hold the wand less than 1" away from the affected spot and turn on for 45 sec- 1 min. The thicker the mold spot, the longer you need to scan the area. Repeat this process for any remaining mold. It is also a good idea to remove all the remaining healthy cakes & quickly scan the remaining cakes to prevent mold from affecting them as well. We recommend cleaning out your fruiting chamber at the same time by sterilizing everything else inside as well. Scan the surface of the Perlite, and add at least two cups of hydrogen Peroxide to it, pouring it around the entire area.

- UV-C light will kill many of the common molds that affect mushroom cakes. There are some strains that are more resistant, but when in doubt it cant hurt to try.

- **Spore Prints & More!**

-We don't include information on making spore syringes, since there are so many different ways, we suggest using UV-C light to sterilize your spore prints & glovebox in the process. We recommend searching YouTube to watch videos on different methods.

-Every month we learn about new uses for UV-C light in mycology, if you find a new use, please share with us! If you have any questions about the process please feel free to use our Live Chat or call us at (800) 921-4717