

## **BULK, Test Code 1058-Thermophilic Fungal Count with Identification**

Thermophilic fungi have a growth range of 20 to 50°C. A building related fungus that falls within this category is *Aspergillus fumigatus*. *Aspergillus* spores are normally found in the air we breathe and don't generally cause illness. In hospital settings an immune compromised individual can inherit a nosocomial infection known as aspergillosis. The spores are inhaled into the lungs and the fungus will grow and reproduce readily in an individual with a weakened immune system. The individual with a weakened immune system can die very easily from this type of infection.

*Aspergillus fumigatus* can grow at 25C but it may be overgrown by other fungi at this temperature. Swabs are set up at 25C and 45C allowing the thermotolerant fungi to grow but not the saprophytic room temperature fungi.

The test code 1058 includes both a thermophilic and mesophilic fungal culture.

1. Samples should be collected when the material is porous and swabbing is not practical.
2. 25 to 50 grams is the preferred amount needed for the culture. The sample can be placed in a Ziploc® bag for transportation.
3. Bulk samples can be shipped ground and by regular mail, no ice pack is needed for these samples

### **References:**

Dillon, H. Kenneth, L. Hung, J. Miller, Field Guide for the Determination of Biological Contaminants in Environmental Samples., 5.2.6.1: 57-58 (2005).

Macher, Janet, Sc.D., M.P.H., Bioaerosols , 12.1-12.1.4.2 (1999).