
BULK, Test Code 1008-Total Bacterial Count W/ Identification

Several health conditions are related to exposure to bacteria, bacterial antigens, endotoxins and by-products. Bacterial antigens can be found in the outdoor air, in settled dust, active indoor reservoirs and humidifiers and other water related sources.

Some of the conditions related to exposure to bacteria are asthma, building-related symptoms (BRS), humidifier/inhalation fever, hypersensitivity diseases (allergy), infectious diseases, Legionnaire's diseases and pneumonia.

Bulk samples are indicated when obvious microbial growth is apparent and when enumeration of the organisms may be relevant in cases of workplace-related illness. This is considered the primary sample and should always be submitted when possible, over a swab or a tape of the material. The assessment of microorganisms may be useful in evaluating the hygienic status of a particular environment and the viable culture allows for genus and speciation, if desired.

1. Samples should be collected when the material is porous and swabbing is not practical. Given the choice of sending the primary reservoir and swabbing the material, the bulk sample is always preferable.
2. 25 to 50 grams is the preferred amount needed for the culture. The sample can be placed in a Ziploc® bag for transportation. Heavily contaminated material should be double bagged.
3. Bulk samples can be shipped by overnight, ground or by regular mail. Submit in cooler with ice pack during warmer months.

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).