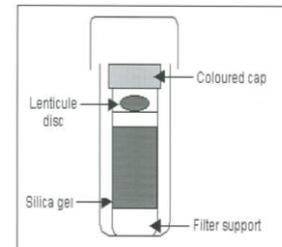


A Guide to using PHE LENTICULE® disc Bacteria and Fungi Reference Materials (RMs) and Certified Reference Materials (CRMs)



Refer to the Material Safety Data Sheet and the Certificate of Analysis for more specific details about the individual LENTICULE disc RM products which are available online at:

www.phe-culturecollections.org.uk/lenticulediscs

1. On receipt store the LENTICULE discs in the small plastic vials at $-20^{\circ}\text{C} \pm 5^{\circ}\text{C}$.
2. LENTICULE discs are reconstituted by a process of re-hydration and dispersion. Remove the vial(s) required from freezer storage ($-20^{\circ}\text{C} \pm 5^{\circ}\text{C}$) and allow them to reach room temperature for approximately 5 to 10 minutes before use.
3. Open the vial and remove the LENTICULE disc either by using fine forceps or by inverting the vial over the culture medium to be used. You can use any solid or liquid media although recovery of the organism will usually be lower on a selective medium compared with a non-selective medium. The LENTICULE disc can be rehydrated in any volume of liquid medium but needs to be completely covered by the liquid to ensure complete re-hydration. Please refer to the Certificate of Analysis for any further product-specific instructions.
4. Allow to stand for at least 10 minutes at room temperature to ensure that the LENTICULE disc has re-hydrated; ensure that the disc has completely dissolved before proceeding. If you are using a **solid medium**, the LENTICULE disc will dissolve on the surface and the resultant droplet can be spread with a loop or a spreader. Incubate the plate according to the relevant procedure. For **liquid media**, disperse the re-hydrated LENTICULE disc by shaking vigorously (~30 times/15 seconds), then leave to stand for approximately 5 minutes to allow any small bubbles that have formed to settle and disperse.
5. The results indicated on the Certificates of Analysis are **method and media specific**. Check these details on the Certificate of Analysis for your particular batch(es) of LENTICULE discs; they may be important when you are deciding how to use the LENTICULE discs in your laboratory. It may be prudent to determine the mean value (colony forming units per LENTICULE disc) for each batch of LENTICULE discs **in your own laboratory**, particularly if you are using them on selective media, for example as controls for enumeration methods. If your results are lower than the indicated mean for the batch, this does not mean that the LENTICULE disc has lost viability, but that the parameters used to assess the viability are different from those on the Certificate of Analysis.
6. There will be a natural variation in any batch of LENTICULE discs between the precise number of organisms in each disc. Therefore, the mean obtained in your laboratory may be different (lower or higher) than the certified value; however, your counts should be consistent and should demonstrate random variability by a Poisson distribution.
7. The recommended storage temperature for LENTICULE discs is $-20^{\circ}\text{C} \pm 5^{\circ}\text{C}$. Please note that storage temperatures below -30°C may alter the balance of the LENTICULE matrix and this can affect the subsequent recovery of organisms from the discs.
8. The LENTICULE discs do not require temperature-controlled conditions in transit; we have demonstrated that normal transit conditions will not affect viability.