Instruction for Use of DRCM-Broth, dehydrated

(Items 4030 and 5160)

DRCM-broth is used for the detection of sulphite-reducing spore-forming anaerobic bacteria (Clostridia) from 50 ml mineral water (item 5160) or 20 ml drinking water (item 4030).

In general it has to be made sure that all equipment is sterile and that the standard rules of microbiological work are followed.

1. Fill up either a bottle containing dehydrated DRCM medium (item 5160) with 50 ml mineral water (sample) or a glass tube (item 4030) with 20 ml drinking water.

2. Heat the sample in the bottle or tube up to 90 – 95 °C for 10 min in a water bath. This incubation step is important for three functions:
   i) all vegetative cells are eliminated
   ii) the dehydrated medium is dissolved
   iii) the paraffin is melted

   At the end of the incubation there are two phases with the sample in the lower aqueous phase and the liquid paraffin as upper phase.

   Note: Insufficient heating may lead to false results!

3. Remove the bottle or tube from the water bath. Agitate until the medium is completely dissolved. During cool down the molten paraffin will become solid and seals the lower sample phase from air and create anaerobic conditions.

4. Screw the cap loosely (gas generation possible!), the paraffin disc will guarantee anaerobic conditions.

5. Incubate 20 ± 4 hours at 36 ± 1°C, observe for further 20 ± 4 hrs.

   Note: We recommend putting the bottles and tubes into a beaker or on a tray, as there is a small risk of overflow during incubation.

6. Development of black colour and development of gas, which is shown by lifting the paraffin disc, indicates a positive result.

7. In case of a positive result, further analysis e.g. on m-CP agar is recommended for confirmation.

Disposal

After finishing the analysis the bottles, tube and agar plates should be autoclaved (121 °C for 15 minutes) in order to avoid any possible contaminations. After sterilization the remnant can be disposed in the domestic waste.

Note: National regulations concerning infectious materials must be observed closely.

Please contact us in case of any questions. We will be happy to assist you.

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