DR. MÖLLER & SCHMELZ GmbH

Gesellschaft für angewandte Mikrobiologie



Instruction for Use of Ready-to-use Agar

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

Pour plate method

- Melt the agar in a boiling water bath until it is completely liquefied. Cool down to 49 ± 2 °C.
 Note: Make sure that the cap is loosened in order to allow pressure equalization during this process.
- 2. Pipet 1 ml of the sample into a sterile Petri dish. After addition of 7 10 ml (60 mm Petri dish) or 15 20 ml (90 mm Petri dish) of the agar gently mix both components.
- After solidification incubate the Petri dish with the lid facing down. Incubation conditions (temperature and time) are dependent on the agar medium and the target organisms.

Membrane filtration method

- Melt the agar in a boiling water bath until it is completely liquefied. Cool down to 49 ± 2 °C.
 Note: Make sure that the cap is loosened in order to allow pressure equalization during this process.
- 2. For preparation of the agar plates the cooled agar $(49 \pm 2 \,^{\circ}\text{C})$ is poured into sterile Petri dishes. About 7 10 ml is needed for a 60 mm Petri dish, 15 20 ml are required for a 90 mm Petri dish. Allow the agar to solidify.
- 3. For filtration of the sample through a suitable membrane filter follow the manufacturer's instruction for use of the filtration system.
- 4. After filtration remove membrane filter from the frit with a sterile tweezers and place it on the prepared nutrient agar without catching air bubbles. Incubate the Petri dish with the lid facing down. Incubation conditions (temperature and time) are dependent on the agar medium and the target organisms.

<u>Note:</u> Growth and positive results with selective media are to be considered as indication only. For safe diagnosis further tests are necessary (e.g. "IMVIC-test"). Further information and application procedures are available on request.

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Streak plate method

- Melt the agar in a boiling water bath until it is completely liquefied. Cool down to 49 ± 2 °C.
 Note: Make sure that the cap is loosened in order to allow pressure equalization during this process.
- 2. For preparation of the agar plates the cooled agar (49 ± 2 °C) is poured into sterile Petri dishes. About 7 10 ml is needed for a 60 mm Petri dish, 15 20 ml are required for a 90 mm Petri dish. Allow the agar to solidify.
- Pick up the sample with a sterile inoculation loop and spread it on the surface of the agar plate.
- 4. Incubate the Petri dish with the lid facing down. Incubation conditions (temperature and time) are dependent on the agar medium and the target organisms.

Spread plate method

- Melt the agar in a boiling water bath until it is completely liquefied. Cool down to 49 ± 2 °C.
 Note: Make sure that the cap is loosened in order to allow pressure equalization during this process.
- 2. For preparation of the agar plates the cooled agar $(49 \pm 2 \,^{\circ}\text{C})$ is poured into sterile Petri dishes. About 7 10 ml is needed for a 60 mm Petri dish, 15 20 ml are required for a 90 mm Petri dish. Allow the agar to solidify.
- 3. Pipet an aliquod (usually 0.1 ml) onto the surface of the agar plate and spread it equally by using a sterile Drigalski spatula.
- 4. Incubate the Petri dish with the lid facing down. Incubation conditions (temperature and time) are dependent on the agar medium and the target organisms.

Disposal

After finishing the analysis the Petri dish and membrane filter 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.