**R2A Agar**

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| **Product No.** | **Product Category** | **Specification** |
| HCM089 | Dehydrated Culture Medium | 500g/bottle |
| 022029 | Dehydrated Culture Medium | 250g/bottle |

**Intended Use**

For the enumeration and cultivation of bacteria from potable water.

**Principle and Interpretation**

Casein hydrolysate and peptone provide nitrogen, vitamins, amino acids, carbon and minerals. Yeast extract is a source of vitamins and essential trace elements. Soluble starch has a positive impact on the recovery of injured organisms due to its ability to absorb toxic metabolic by-products. Sodium pyruvate also aids with the recovery of stressed cells. Magnesium sulphate provides divalent cations and sulphate. Potassium phosphate is added to stabilize the pH and as a phosphate source. Agar acts as solidifying agent.

**Formulation**

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| **Ingredients** | **/liter** |
| Yeast extract powder | 0.5g |
| Peptone | 0.5g |
| Casein hydrolyzate | 0.5g |
| Glucose | 0.5g |
| Soluble starch | 0.5g |
| Dipotassium hydrogen phosphate | 0.3g |
| Magnesium sulfate, anhydrous | 0.024g |
| Sodium pyruvate | 0.3g |
| Agar | 15.0g |
| pH7.2±0.2 at 25°C | |

**Preparation**

Suspend 18.1g in 1 litre distilled water. Boil to dissolve the medium completely. Sterilize by autoclaving at 121°C for 15 minutes..

**Quality Control**

The following quality control strains were inoculated and cultured at 30-35℃ for 24h. The results are as follows:

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| **Quality control strains** | **Inoculum (CFU)** | **Expected results** |
| *Pseudomonas aeruginosa* ATCC9027 | 10-100 | 50-200% recovery |
| *Bacillus subtilis* ATCC6633 |

**Storage and Shelf Life**

2-30℃，Keep container tightly closed, avoid direct sunlight.

Use before expiry date on the label.

**Precautions**

1. When weighing the dehydrated medium, please wear masks to avoid causing respiratory system discomfort

2. Keep container tightly closed after using to prevent clumping.

**Waste Disposal**

Microbiological contamination was disposed by autoclaving at 121°C for 30 minutes.

**Revision**

On June 14, 2024

**References**

EP