



# POWDER MEDIA

## Reliable Cell Culture Performance With Extended Shelf Life and Easy Storage

In cell culture, consistency is key. However, many components in liquid media, such as L-Glutamine, are inherently unstable. Over time, hydrolysis and degradation can affect critical parameters like pH, osmolality, and nutrient balance – introducing variability that can compromise data quality in longitudinal studies, bioassays, or critical protocols.

Capricorn Scientific's powder media provide a reliable solution: fresh preparation immediately before use, combined with excellent solubility, extended shelf life, and simplified storage. Ideal for routine culture, parallel assay setups, or workflows requiring freshly prepared media with defined quality.

### EXPLORE CAPRICORN SCIENTIFIC'S POWDER MEDIA



#### >> Easy-to-Dissolve

Formulated to dissolve fully and quickly, our powder media combine ease of use with high-quality standards for reproducibility.



#### >> Extended Shelf Life

Powder media offer longer shelf lives than liquid equivalents — ideal for reducing waste and long-term storage without loss of performance.



#### >> Cost-Efficient and Practical

Powder formats reduce costs and cold-chain dependence. Prepare only what you need, when you need it.

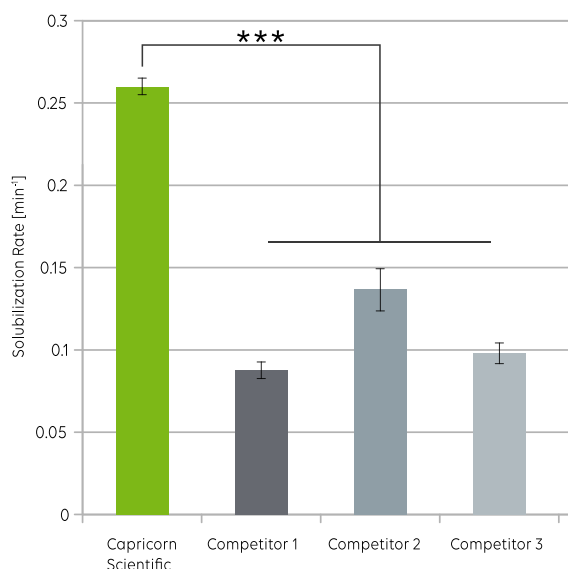


#### >> Flexible Volumes & Customization

Choose from standard units (10 L / 50 L) or request your preferred batch size or formulation. We also offer customized buffer and additive blends.

## SOLUBILITY STUDY

To assess handling performance, we conducted a comparative study on the solubilization rate of DMEM High Glucose powder media. Capricorn Scientific's formulation was benchmarked against three commercially available alternatives. All media were dissolved at standard 1× concentration in WFI-quality water:



**Fig. 1 Solubilization rate of Capricorn Scientific's DMEM-HA Powder compared to three competitor powders.**

Powders corresponding to 1 L of liquid medium were reconstituted in WFI-quality water at standard concentration (1x), until completely dissolved. The solubilization rate was defined as the inverse of the time required to reach a fully clear solution; n = 4.

Capricorn Scientific's formulation showed the fastest average solubilization rate, significantly outperforming all three competitor products. This confirms the excellent reconstitution properties of our powder media, ensuring faster preparation, fewer handling issues, and consistent results — even in high-throughput or time-sensitive workflows.

## ORDER INFORMATION

### PRODUCT

### VOL. CAT.NO.

#### DMEM High Glucose (4.5 g/l) Powder Medium

with L-Glutamine, w/o Sodium Bicarbonate

50 L DMEM-HA-P50  
10 L DMEM-HA-P10

#### DMEM High Glucose (4.5 g/l) Powder Medium

with L-Glutamine, with Sodium Pyruvate, w/o Sodium Bicarbonate

50 L DMEM-HPA-P50  
10 L DMEM-HPA-P10

#### DMEM Low Glucose (1 g/l) Powder Medium

with L-Glutamine, with Sodium Pyruvate, w/o Sodium Bicarbonate

50 L DMEM-LPA-P50  
10 L DMEM-LPA-P10

#### RPMI 1640 Powder Medium

with L-Glutamine, w/o Sodium Bicarbonate

50 L RPMI-A-P50  
10 L RPMI-A-P10

#### RPMI 1640 Powder Medium

with L-Glutamine, with 25 mM HEPES, w/o Sodium Bicarbonate

50 L RPMI-HA-P50  
10 L RPMI-HA-P10

#### MEM with Earle's Salts, powder medium

with L-Glutamine, w/o Sodium Bicarbonate

50 L MEM-A-P50  
10 L MEM-A-P10

For further support, feel free to contact our experts at [techservice@capricorn-scientific.com](mailto:techservice@capricorn-scientific.com) or phone (+49 6424 944 64 0).

