



Customized solutions for cell cultures.

Protocol

Production of **HEK FS Feed** from powder

Production of liquid feed solution with the HEK FS feed powder

Material:

- We recommend preparing the whole powder container in a single batch! For that, please adjust the amounts/volumes per L given in this protocol according to your container/batch size!
- HEK FS Powder (92.76 g/L)
- approx. 1 L H₂O per L feed solution (WFI or equivalent quality)
- 4 g/L NaOH pearls/Pellets Ph. Eur. (equivalent to 12.50 mL/L 8 M NaOH)
- 11.0 - 12.0 mL/L 6 M HCl Ph. Eur.
- We recommend wearing a dust mask during preparation!



Visual control:

Check:

- A. Container **Sealed and without any damage.**
- B. Appearance **Free flowing powder** (record color).




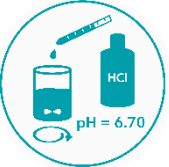







Color: _____

Procedure:

Check:

1.	15 - 35 °C 80 %	Fill 0.8 L per 1 L final feed solution 15-35°C pre-warmed water (WFI or equivalent quality) into the stirred tank/blending vessel. Note: <i>Deviating temperature may alter dissolution rate. An adaption of time for solubilization might be necessary.</i>	<input type="checkbox"/>
2.	80 %	Start the stirrer of the system. Due to foam formation during feed production, the vortex should not reach the stirrer.	<input type="checkbox"/>
3.	NaOH 4 g/L	Add 4.0 g/L NaOH slowly to the stirred water. Note: <i>Adjust amount according to batch size.</i>	<input type="checkbox"/>

4.		<p>Add 92.76 g/L of the HEK FS Powder Kit slowly to the solution to avoid clumping.</p> <p>Note: <i>We recommend preparing the whole Powder Kit at once.</i></p>	○
5.		<p>Rinse the weighing dish/container with 0.05 L water (WFI or equivalent quality) and pour liquid into the stirred tank.</p>	○
6.		<p>Stir for 30 minutes (pH will be 8.8 - 9.3 at this point).</p> <p>Note: <i>The powder will completely be dissolved at this stage! If powder is not completely dissolved, stepwise increase mixing time by 10 min.</i></p>	○
7.		<p>Titrate with 6 M HCl to pH 6.70 ± 0.10 (usually between 11.0 to 12.0 mL/L of 6 M HCl is required) and adjust volume to batch size</p> <p>Note: <i>The powder should be completely dissolved and the solution should be clear.</i></p>	○
8.		<p>Stir for 30 minutes (pH will be 6.6 - 6.8 at this point).</p>	○
9.		<p>Add an appropriate volume of water (WFI or equivalent quality) into the stirred tank/blending vessel to reach the final volume.</p> <p>Note: <i>Final volume depends on batch size!</i></p>	○
10.		<p>Stir for 10 - 15 minutes.</p>	○

11.		<p>Check pH (pH 6.6 - pH 6.8) and osmolality (360 - 400 mOsmol/kg - for 1: 2 dilution in water).</p>	<input type="radio"/> <input type="radio"/>
12.		<p>The feed solution can now be sterile filtered (0.45 µm + 0.1µm) and bottled.</p>	<input type="radio"/>

For further information or assistance contact us.

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