

**CHO clarification: 6,5% PCV\*, 2.10<sup>7</sup> cells/ml, 60% viability in UniFuge® Single Use Centrifuge.**  
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(\*) Packed Cell Volume

**Introduction :** In this study, we will clarify CHO Batch with a single use centrifuge. The batch is 250 liters of CHO cell culture broth @ 60% viability and 2.10<sup>7</sup> cells/ml (6,5% PCV). The purpose is to collect clean supernatant with solubilized protein.

**Experiment :** The Centrifuge Equipment is a tube bowl centrifuge called the UniFuge® Centrifuge manufactured by (PneumaticScale Angelus). The insert is a single use module with 4 tubes set. The process parameters are as follows: G force: 3000 x G, 4000 x G at bowl wall. Feed flow rate: 1-6 Lpm, and feed process time. We will fill bowl to 70% capacity before discharge. Centrifuge is at ambient temperature. The Centrifuge is operating in Automatic feed mode with one water 500 ml re-suspend. The process Method: Feed bowl with CHO, clarify, discharge pellet, add 500 ml, discharge pellet. Collect and pool all centrate for NTU.

Compare against Westfalia disc stack centrifuge SC6.

G force	Feed rate l/min	NTU	Resuspend	notes
4000	3.4	60	500 ml	Unifuge
4000	6	77		Unifuge
4000	1	33		Unifuge
3000	3.4	43		Unifuge
3000	5	50		Unifuge
Control	3.4	55	no	SC6



Cells centrate