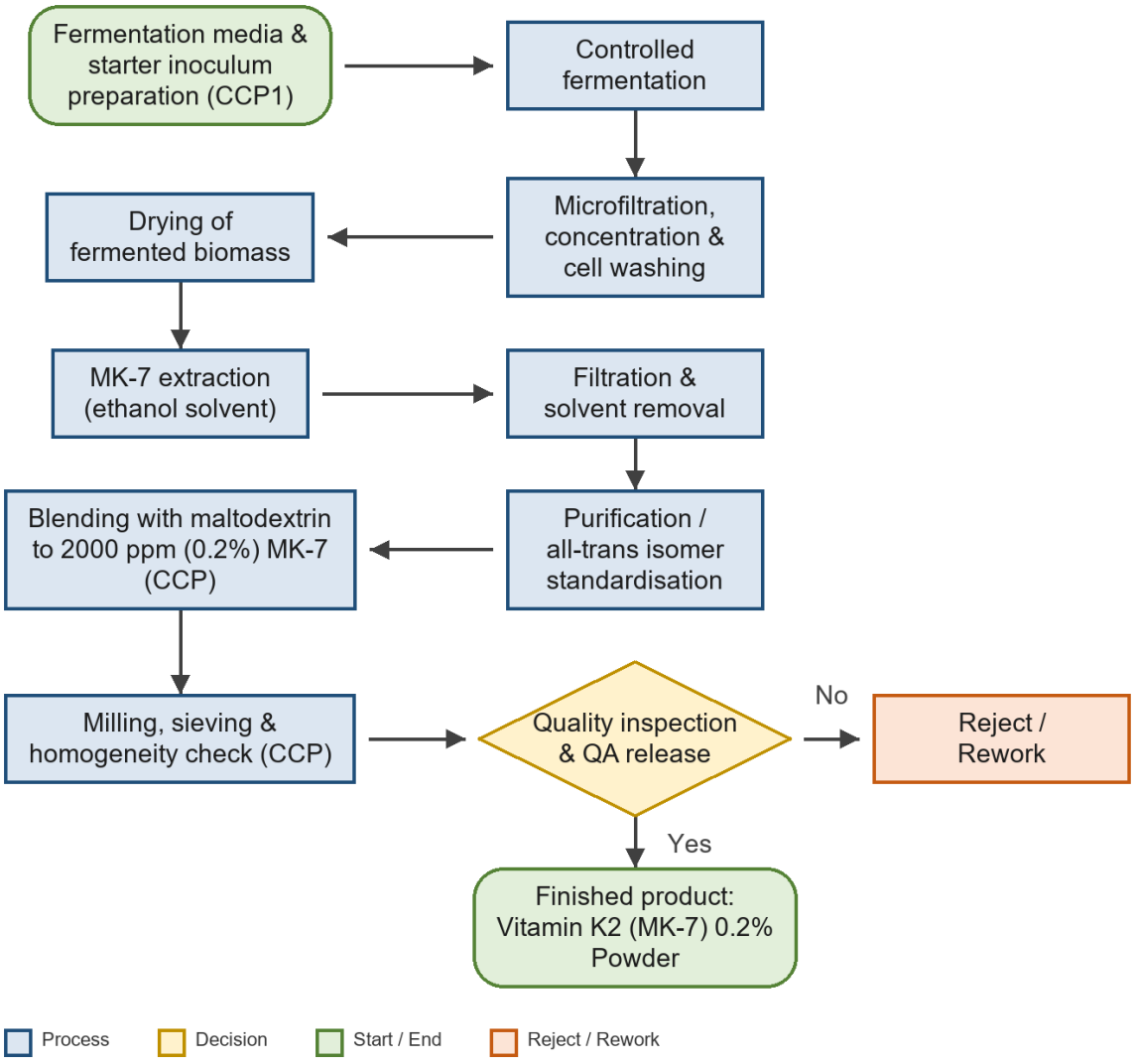
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PROCESS FLOW CHART

Vitamin K2 (MK-7)

Vitamin K2 (MK-7) powder is produced by controlled fermentation of a *Bacillus subtilis* natto culture. The fermented biomass is separated by microfiltration, concentrated, washed and dried. Menaquinone-7 is then extracted from the dried biomass with ethanol as the extraction solvent; the extract is filtered, the solvent is removed and the all-trans MK-7 isomer is standardised. The purified MK-7 concentrate is blended with food-grade maltodextrin carrier to the declared potency of 2000 ppm (0.2%) MK-7 (as is). The blend is milled, sieved and checked for homogeneity before quality inspection and QA release.



The process is operated under a HACCP-based food-safety plan and GMP; critical control points include raw-material acceptance (CCP1), the in-process checks marked on the chart, and the final quality inspection and QA release. Off-spec material is rejected or reworked.

Prepared by: Mia Yu Approved by: Charlie Wang Date: Nov. 16, 2026