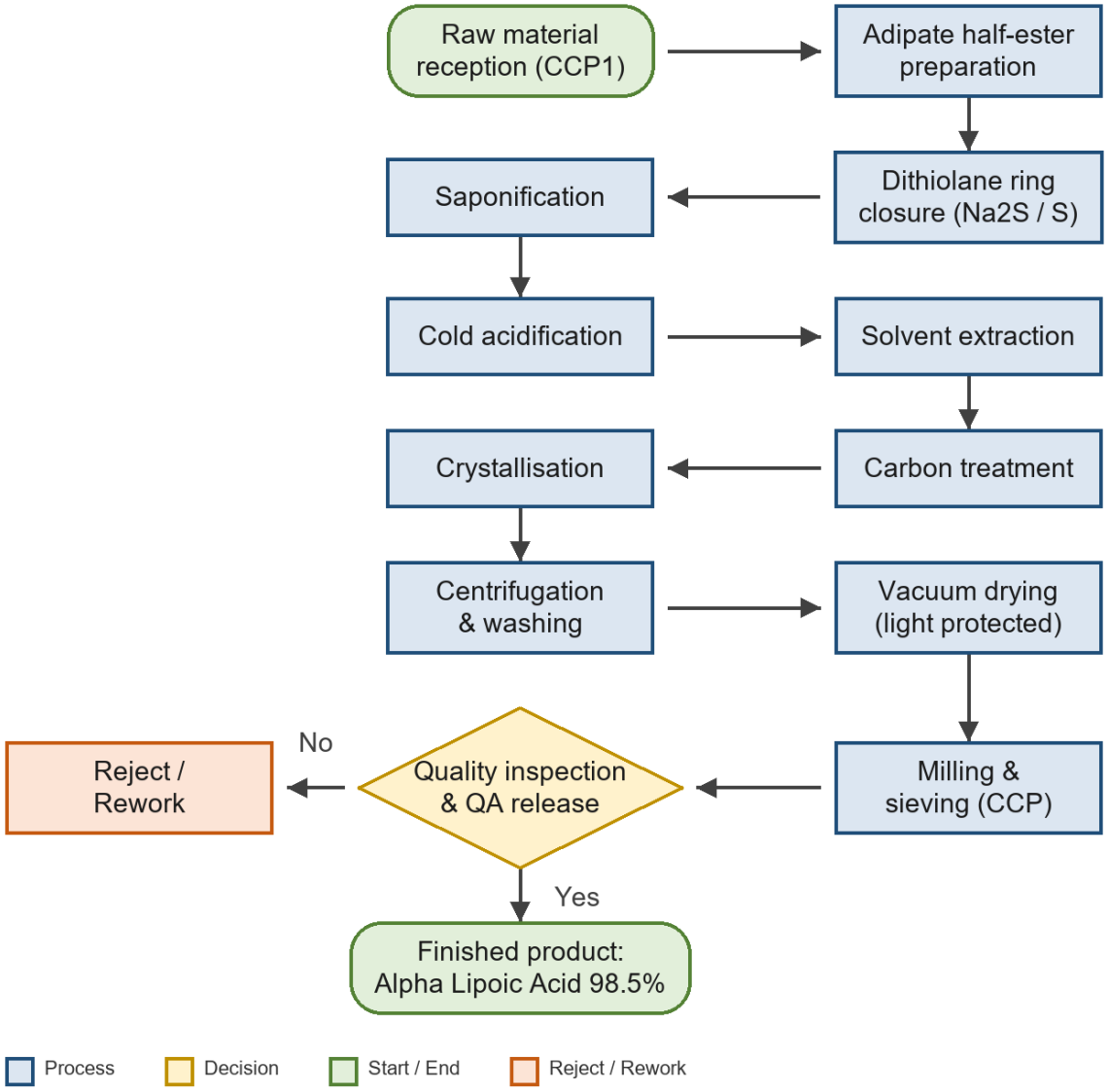
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PROCESS FLOW CHART

Alpha Lipoic Acid 98.5%

Alpha Lipoic Acid 98.5% is manufactured by chemical synthesis, not by extraction. An adipate half-ester is carried through chain extension to the 6,8-dihalo ester, which is treated with sodium disulphide to close the 1,2-dithiolane ring. The resulting lipoate ester is saponified, the free acid is released by cold acidification, extracted into solvent, treated with carbon and crystallised. The crystals are centrifuged, washed, vacuum dried in the dark and milled, and the powder is packed in light-proof containers after 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: Oct. 23, 2026