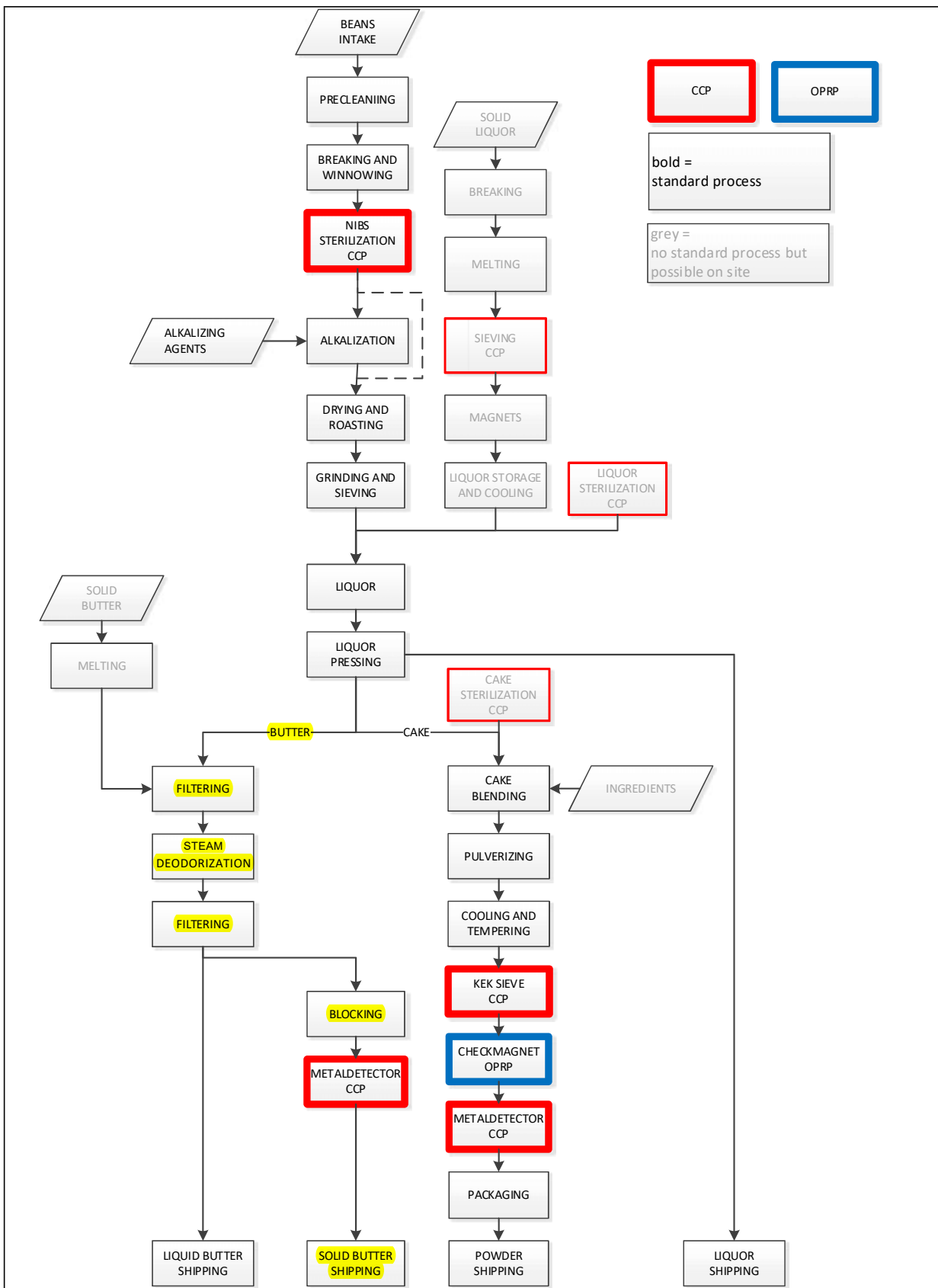


Hazard Analysis and Critical Control Point (HACCP) in **Cocoa Butter** Manufacturing



Cocoa Butter Deodorised Food Grade

Critical Control Points (CCP) in Manufacturing

Description	Hazard	Preventive measure	Corrective action	Control	Specifications
Sterilization (nibs)	Microbiological contamination	Sterilization	Automatic re-sterilization	Automatic, sterilization demand: Pathogen kill step	<ul style="list-style-type: none"> Zero pathogens TPC < 5000
Sterilization (powder)	Microbiological contamination	Sterilization + Rework control program	Automatic re-sterilization	Automatic, sterilization demand: Pathogen kill step. Microbiological analysis	<ul style="list-style-type: none"> Zero pathogens TPC < 5000
rotating sieve	Foreign matter	GMP + Sieving	Blocking and internal reject	Cleaning and inspection of sieve	800 μ sieve
Metal detector (in powder)	Metallic particles in finished product	Metal control program	Blocking and internal reject	Check of detection with testbolds. Check of routing detected product	Fe, non-Fe and SS: all ≤2mm
Metal detector (in butter)	Metallic particles in finished product	Metal control program	Blocking and internal reject	Check of detection with testbolds	Fe, non-Fe and SS: all ≤3mm
Sterilization (liquor)	Microbiological contamination	Sterilization + Rework control program	Blocking and internal reject	Automatic sterilization.	<ul style="list-style-type: none"> Zero pathogens TPC < 5000

Cocoa Butter Deodorised Food Grade

Operational Prerequisite Programmes (OPRP) in Manufacturing

Description	Hazard	Preventive measure	Corrective action	Control	Specifications
Check magnet	Foreign matter (magnetic metal)	Metal control program	Blocking and internal reject	Cleaning and metal analysis of check magnet	No parts > 7,0 mm length
Pressing (steam heating)	Microbiological contamination	Inspection	Blocking and analysis	Visual, by operator Laboratory analysis	No steam leakage
Pressing (Hydraulic oil)	Hydraulic oil contamination	Inspection	Blocking and analysis	Visual, by operator Laboratory analysis	No oil leakage
Air filtration	Microbiological and physical contamination	Air and filter control program	Correct practices	Filter control program	depending on intended use in accordance with control program
Butter filtering	Microbiological and physical contamination	filter control program	Blocking and analysis	Proper use of materials, filter control program	<ul style="list-style-type: none"> • Zero pathogens • no foreign matter
Ingredients intake	Microbiological/chemical/physical contamination	Inspection + Analysis Vendor control program	Reject	Visual inspection at intake Laboratory analysis	<ul style="list-style-type: none"> • Zero pathogens • food grade • No foreign matter
Pulverizing & Cooling	Microbiological contam. with cleaning	GMP	Correct practices	Inspection and proper use of material	<ul style="list-style-type: none"> • Zero pathogens • no foreign matter
Rework "Dry"	Microbiological contamination	Rework control Program	Correct practices	Rework control program	<ul style="list-style-type: none"> • Zero pathogens • no foreign matter
Rework 'wet'	Chemical contamination	Rework control program	Correct practices	Rework control program	<ul style="list-style-type: none"> • No foreign matter
Liquor sieve	Foreign matter	GMP + Sieving	Blocking and internal reject	Cleaning and inspection of sieve.	<ul style="list-style-type: none"> • 0,5 mm. sieve