

POULTRY INTERVENTION

Summary of Intervention Chemistry for Poultry Production



TYPE	APPLICATION	TREATMENT TIMES & TEMP	USAGE	ESTIMATED COST PER BIRD	ESTIMATED LOG REDUCTION	ADVANTAGES	DISADVANTAGES	REGULATORY STATUS
Lactic Acid	Carcasses, primals, parts	Up to 130 ° 10-30 seconds	Up to 5%	\$0.0035	1 - 3 logs	Applied as spray, good efficacy	Cost, off flavor, low pH corrosiveness, discoloration, deproteinization	FSIS USDA 21CFR 101.100
PAA (MP2)	Carsasses, trim, process meats, organs	Process water applied to carcass as a spray, dip, chiller water or acald water	0.02% PAA 230 ppm H2O2 165 ppm 1oz./6gal.	\$0.0012	1.0 - 1.4 logs	Low concentration, cost	irritant/inhilation, discoloration, fat oxidation, low pH, less effective than lactic acid and on aerobes and coliforms	FSIS 21CFR 173.370 FCN
Acid Sodium Chlorite (Keeper)	Carcasses, primals, sub primal, parts, RTE, organs	Carcass spray or dip at 500-1200 ppm. Prechiller or chiller at 50-100 ppm. Post evisceration at 300-800 ppm	500-1200 50-100 300-800	\$0.0018	1.0-4.0 logs	High efficacy neutral pH, no adverse effect on taste, no adverse effect on nutritional quality	Two part system, must be generated on site, higher cost	FSIS FCN 739
Hypobromous Acid	Carcasses, processed meats, poultry products	Spray or dip at ambient temperature	200 ppm	\$0.0009	2-4 logs	Low cost, high efficacy, neutral pH, no adverse effect on taste or quality	Two part system, must be generated on site daily	FSIS FCN 944 FCN 1036