

**THE SPECTRUM®
INTERVENTION
PROGRAM FOR
POULTRY
PROCESSING**

OUR PROVEN NEXT-
GENERATION
ANTIMICROBIAL
SOLUTION MULTIPLIES
THE BENEFITS
OF EFFICIENT,
EFFECTIVE, RELIABLE
BACTERIAL CONTROL IN
POULTRY PROCESSING
OPERATIONS.



SPECTRUM®

Meeting Today's Demands & Anticipating Tomorrow's

The challenges inherent in poultry processing are unique. And they are ever changing. New bacterial enemies, increasing numbers of potential sources of contamination, growing regulatory demands and understandably rising consumer expectations are all fueling the need for antimicrobial solutions that provide wider benefits and a broader scope of efficacy and reliability.

The SPECTRUM[®] Intervention Program is targeted to meet the special requirements of poultry processors. An antimicrobial agent approved for on-line poultry reprocessing, SPECTRUM[®] is used in multiple intervention points by adding it to spray, wash, rinse, dip, chill or other poultry processing waters. It can be applied to poultry carcasses, poultry organs and poultry parts.

Through ongoing research and development, SPECTRUM[®] has acquired new approvals and patents that give our customers more options and broad flexibility in the application of our intervention program, enhancing results, meeting new challenges and yielding multiple benefits for our poultry industry customers. These innovations and our proven track record have allowed SPECTRUM[®] to rapidly gain market share among recognized industry leaders.

Using our patented peracetic acid technology (approved up to 2,000 ppm), our SPECTRUM[®] Intervention Program can achieve the desired results in the most challenging processing conditions without affecting organoleptic quality.

IMPROVED SAFETY FOR WORKERS

SPECTRUM[®] is a single chemistry, requiring no mixing that might otherwise introduce the chance for product contact or the need for special blending equipment. And because SPECTRUM[®] is not a chlorine-based product, it generates no chlorine inhalation hazards.

SAFE AND COST-EFFECTIVE CHEMICAL DEGRADATION

SPECTRUM[®] is designed to address safety and efficiency like no other antimicrobial processing solution. Based on peracetic acid, which is an equilibrium solution of hydrogen peroxide and acetic acid (vinegar), SPECTRUM[®] degrades after use to vinegar, water and oxygen. Unlike chlorine-based chemistries, SPECTRUM[®] produces no toxic byproducts and is not persistent in the environment. It also works across a broad pH range, so no other costly chemicals are needed to acidify the water.

DEPENDABLE, SAFE, COST-EFFECTIVE RESULTS

Approved for use in OLR, chillers, finishing chillers, and other poultry processing waters, SPECTRUM[®] is a peracetic acid-based antimicrobial that can be used up to 2,000 ppm – giving you the needed efficacy to successfully meet the most challenging processing conditions and new food safety regulations.



WHAT MATTERS MOST: BEATING BACTERIA

SPECTRUM® is a cost-effective, chlorine-free solution that meets USDA standards and reduces contamination of pathogenic bacteria Salmonella, Campylobacter, and E.Coli. When used as directed, the product also reduces bacterial contamination that may cause product spoilage or decay.

In a 2011 university study, carcasses were inoculated with Salmonella Typhimurim and Campylobacter jejuni and treated with various antimicrobials using a finishing chiller as the only intervention point. At 400 ppm and 1,000 ppm, Spectrum showed over 2log₁₀ reductions in both Salmonella and Campylobacter.

SPECTRUM®

Table 1

Salmonella Typhimurium Recovered from Inoculated Carcasses treated with Chlorine (40 ppm) and SPECTRUM® PAA (400 and 1,000 ppm)

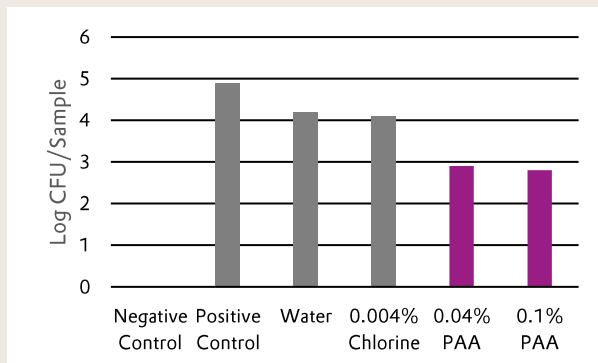
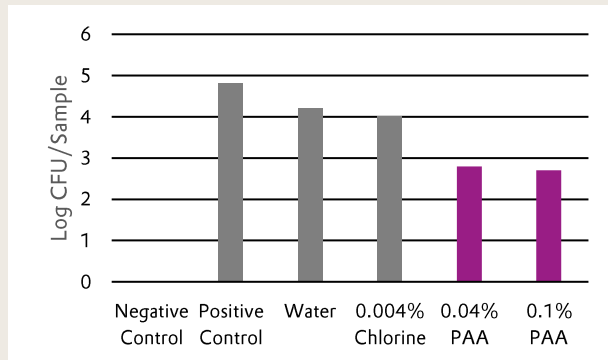


Table 2

Campylobacter jejuni Recovered from Inoculated Carcasses treated with Chlorine (40 ppm) and SPECTRUM® PAA (400 and 1,000 ppm)



REGULATORY APPROVALS FOR SPECTRUM®

- USDA FSIS approved for on-line reprocessing (OLR)
- Approved for use in chiller, finishing chiller, salvage treatment and other poultry processing waters for use at up to 2,000 ppm
- FDA Food Contact Substance Notification Numbers FCN #323, FCN #880, FCN #1144
- OMRI approved and permitted for use in the processing of organic poultry



EXPERIENCE. FOOD SAFETY. SERVICE.

YOUR SPECTRUM® TEAM

The SPECTRUM® team brings a century of combined experience in poultry processing. We understand that no two processing facilities are alike, because every challenge is unique. Likewise, no bacterial intervention program is exactly the same. The approach employed may vary widely depending on the method of application, specific concentrations, reliability of dispensing equipment and the knowledge level of key personnel.

With our team's depth of scientific expertise, our intimate understanding of poultry processors' unique needs and our reliable performance in making a positive difference every day for leaders in the poultry industry, you can be assured of receiving the very best results for your business today - and many tomorrows to come.

YOUR RELIABLE PARTNER

With 150 years of experience, our poultry team delivers confidence and results. We deliver chemistry with integrity.

We launched our Spectrum Intervention Program to help promote food safety at poultry processing facilities. A peracetic acid-based antimicrobial agent, SPECTRUM® is FDA and USDA approved for use directly on poultry carcasses and in poultry processing waters. Spectrum is unique, as it is based on several of the basic tenets of green chemistry, providing one of the safest, most innovative means of bacterial control on the market today.

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