



# Conquest International LLC

**Envirolyte-Conquest USA**  
*Leaders in the EcoWorld*

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## USDA & FDA Approval for Use of Anolyte

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### Electrolyzed Water:

- Is approved under 21 CFR 173.315 for direct contact with processed foods. FDA decision #692 allows for produce wash using Electrolyzed Water.
- Is approved for several indirect food contact applications under 21CFR 176.170 and 21CFR 177.2800.
- Is an approved sanitizer that meets 21 CFR 178.1010.
- Is exempt by the EPA under 40 CFR 180.1054 for washing raw foods that are to be consumed without processing.
- Is exempt by the EPA under 40 CFR 180.940 provided that Electrolyzed Water is applied on a semi-permanent or permanent food-contact surface with adequate draining before contact with food.
- Is approved under 21 CFR 7120.1 for spray and water treatment for processing of beef, chicken and hogs.

The USDA has issued the following Regulatory Compliance, Dosages & FDA Labeling Requirements for the use of Anolyte in the Production of Meat & Poultry Products, 10/05/06.

## Regulatory Compliance: USDA FSIS Guidance for Anolyte Use

### *Antimicrobials*

PRODUCT	SUBSTANCE	AMOUNT	REFERENCE	LABELING REQUIREMENTS
Red meat carcasses down to a quarter of a carcass	Electrolytically generated hypochlorous acid	Applied as a spray at a level not to exceed 50 ppm (FAC) free available chlorine	Acceptability determination	None under the accepted conditions of use (1)
On whole or eviscerated poultry carcasses	Electrolytically generated hypochlorous acid	Applied as a spray at a level not to exceed 50 ppm (FAC)	Acceptability determination	None under the accepted conditions of use (1)
In water used in meat and poultry processing	Electrolytically generated hypochlorous acid	Not to exceed 5 ppm calculated as free available chlorine	Acceptability determination	None under the accepted conditions of use (1)
Poultry chiller water	Electrolytically generated hypochlorous acid	Not to exceed 50 ppm (FAC) Measured in the incoming potable water.	Acceptability determination	None under the accepted conditions of use (1)
Poultry chiller red water (i.e., recalculated and reused in chiller)	Electrolytically generated hypochlorous acid	Not to exceed 5 ppm (FAC) Measured at influent to chiller.	Acceptability determination	None under the accepted conditions of use (1)
Reprocessing contaminated poultry carcasses	Electrolytically generated hypochlorous acid	20 ppm (FAC) Note: Agency guidance allows up to 50 ppm (FAC)	9CFR 381.91	None under the accepted conditions of use (1)
On giblets (e.g., livers, hearts, gizzards, necks) and salvaged parts	Electrolytically generated hypochlorous acid	Not to exceed 35 ppm (FAC) in chiller influent. 20 min max.	Acceptability determination	None under the accepted conditions of use (1)
Beef primals	Electrolytically generated hypochlorous acid	20ppm calculated as free available chlorine	Acceptability determination	None under the accepted conditions of use (1)

1) The use of the substance (s) is consistent with FDA's labeling definition of a processing aid.

Source: USDA – FSIS: Safe and Suitable  
Ingredients Used in the Production of Meat and  
Poultry Products 10/05/06

Conquest International LLC has been issued FDA Non-Objection Letter 2009-0925 for use of Envirolyte Electro-Chemical Activation [ECA] Technology in the generation and use of Anolyte for food processing applications where the technology is used in a manner consistent with current good manufacturing practices.



**DEPARTMENT OF HEALTH AND HUMAN SERVICES**

Public Health Service

Food and Drug Administration  
College Park, MD

September 25, 2009

Ned Colburn  
President and CEO  
Conquest International LLC  
1108 SW 8<sup>th</sup> Street  
Plainville, Kansas 67663

Dear Mr. Colburn:

This is in response to your letter of September 6, 2009, to the Food and Drug Administration (FDA), concerning an electrochemical activation (ECA) technology product that Envirolyte Industries International Ltd manufactures. You note that, in the past, FDA has confirmed that a similar ECA technology product is suitable for generating chlorine for food use applications. FDA maintains no comprehensive listing of suitable technologies, but will retain your correspondence in our files.

Your letter describes Envirolyte Industries International Ltd's ECA technology as an electrolysis of a dilute solution of sodium chloride and water that produces an anolyte consisting of water (99.6%), sodium chloride (0.36%), and hypochlorous acid (0.04%).

Based on the information that you provided, we conclude that the chlorine solutions generated by ECA technology are suitable for food processing applications. Therefore, we have no objection to the use of ECA technology to produce chlorine solutions for food processing applications where the technology is used in a manner consistent with current good manufacturing practices. The use of this technology does not require further FDA approval.

We believe that our letter is responsive to your inquiry. If you have any further questions concerning this matter, please do not hesitate to contact us.

Sincerely,

Felicia M. Ellison, M.S.  
Consumer Safety Officer, HFS-265  
Division of Petition Review  
Office of Food Additive Safety  
Center for Food Safety  
and Applied Nutrition

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# Water Problems? We have *The Solution!*

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