

# AVOSAFE® ANTIMICROBIALS

A family of natural antimicrobials from avocado that can replace synthetic preservatives.



## BACKGROUND

The global market for food antimicrobials is worth \$1,400 Million USD, where 96% accounts for synthetic antimicrobials. Harmful bacteria can grow in packaged foods, so it is important to use antimicrobials that preserve food and are not harmful to the consumer, but today there is little supply of natural antimicrobials.

There is currently concern that these synthetic preservatives (such as nitrates and nitrites) can cause cancer.

The cosmetic and pharmaceutical industries also require the use of these type of preservatives.

## TECHNOLOGY

The Avosafe (R) family of antimicrobials are natural compounds extracted from avocado that outperform synthetic antimicrobials.

Avosafe(R) products are protected by a family of international patents.

The Avosafe(R) family of chemicals also includes solutions for the healthy foods and disease prevention markets.

## KEY BENEFITS

- Proven bactericidal and sporicidal effects for important food-borne pathogens like *Listeria spp.* and *Clostridium spp.*
- Toxicology: Non-mutagenic according to Ames test, LD50 >2,000 mg/kg.
- Clean label product for ready to eat foods like meats, dairy, and some beverages.

## DEVELOPMENT STATUS

- Industry agreements for avocado pit supply & with potential final users.
- Optimized (cost & yield) scaled-up industrial process with a green technology.
- Currently running bacterial challenge tests of the final prototype in meat products.

Technology Readiness Level: 6/9

## INTELLECTUAL PROPERTY

Patent applications in Mexico, USA, Canada, Europe, Phillipines, China and Japan. (WO2012042404). Trademarked.

This technology is available for licensing. More opportunities on our website: <http://redottec.com>



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