

## Naturally preserving product flavor and freshness

PlantGuard™ WS is a water-soluble powder blend of natural plant extracts with potent antioxidant activity. As a highly effective natural preservative, it helps to prevent oxidation in a variety of food applications.

## Unique features of PlantGuard™WS



Neutral taste





Non-GMO



Heat stable



Kosher and halal suitable



Water Soluble

Natural plant extracts



Low cost-in-use

#### The benefits of PlantGuard™ WS

- **Extends shelf life**
- **Improves freshness**
- **Enhances flavor**
- Improves texture
- Improves color stability
- Supply chain security



For more information, please visit: prinovaglobal.com or contact your local sales office.

info@prinovausa.com





## How should PlantGuard™ WS be used

**Recommended use:** Between 0.03% and 0.15% of final product.

**When:** Added at the earliest possible stage of manufacturing

With What: Pre-dissolve in the water phase during manufacturing. The solution will remain

instantly clear.



# Preserving a wide range of food applications

PlantGuard™ WS can provide a wide range of functional benefits in both sweet and savory, low fat applications. Including:



#### Meats

Particularly effective in fried meat applications including chicken nuggets or fish sticks



#### **Fats & Spreads**

Ideal for preserving the quality of fats and oils



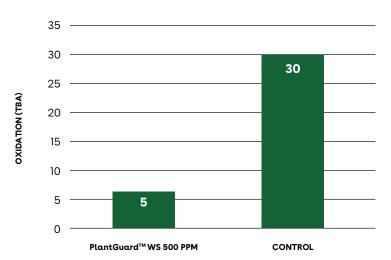
#### **Baked goods**

Perfect for use in pastries and doughnuts

#### Snacks

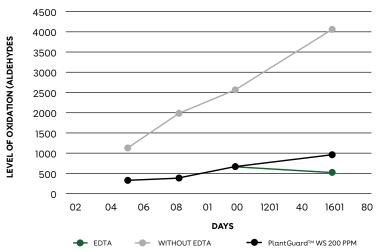
### Superior preservation

When used in cooked meats, PlantGuard™ WS reduced rancidity, flavor off-notes, discoloration and protein degradation compared to Rosemary Extract. Rosemary Extract was used at 900 ppm, compared to 500 ppm of PlantGuard™ WS. In addition, Rosemary Extract was often detected in organoleptic tests as a negative addition to the product.



## Clean antioxidant properties

In mayonnaise, PlantGuard™ WS was used to replace EDTA from a shelf stable product. 0.02% of PlantGuard™ WS was sufficient to offer similar antioxidant properties to EDTA, thereby offering a cleaner labeled product.



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