



# Nutri~Shield, Inc.

## Product Bulletin NS-1010

### Nutri-Shield Process Technology

Using a proprietary, deodorization process, the off-flavors and odors often associated with dry chemical powders can be eliminated. By applying this technology to food preservatives, a new generation of products is now available for food formulators to utilize when designing preservation systems for new food formulations.

### Product Benefits

NS-1010 is a blended preservative system effective against bacteria, mold and yeast, effective at a pH range of 5.0 to 6.5. After the Nutri-Shield process, this system will NOT add any color, odor, or chemical flavors typically associated with the standard chemical components:

➤ **Calcium Propionate** – less soluble salt versus sodium propionate and the calcium may have incompatibility / reaction with chemical leavening acids. Effective at an ideal pH of 5.0 in most applications against mold and rope and some bacteria. INEFFECTIVE against yeast. (CFR 184.1221)

➤ **Potassium Sorbate** – Effective up to a pH of 6.5 against yeast and mold. INEFFECTIVE against bacteria. (CFR 182.3640)

➤ **Calcium Acetate** – Effective up to a pH of 4.5 against yeast & bacteria. INEFFECTIVE against mold. (CFR 184.1185)

Each of these components has a specific pH range limitation as well as what types of spoilage organisms they are effective against. By combining these together, a more effective system is attained. This allows for enhanced product stability and increased shelf-life of the finished products

### Typical Applications

NS-1010 has proven effectiveness in a variety of food systems including:

- Bakery Goods (in chemically leavened products the calcium propionate may deter reaction)
- Prepared Salads (potato, macaroni, etc.)
- Dressings and Sauces
- Cultured Dairy Products

### Typical Usage Levels

NS-1035 is typically added at a rate of 0.05% to 0.10% of the weight of the food product.

### Product Features

Color: White (free from other discoloration)

Form: Granular

GRAS (Generally Recognized As Safe)

Kosher Certified

Bioterrorism # 11980927702

### Packaging & Storage

A heat sealed, multi-wall plastic bag consisting of 3 layers.

Contents per bag: 50 pounds/22.7 kg net weight.

800 bags per 40 ft trailer, 40 bags per pallet.

Store in a cool, dry place, out of direct sunlight.

Keep boxes sealed tightly after opening.

Typical shelf-life: 6 months

**Labeling**  
Recommended labeling: calcium propionate, potassium sorbate, calcium acetate (preservatives).

Nutrition labeling is not required for this system.

Nutri~Shield, Inc.

15416 Johnson Drive • Shawnee Mission, KS 66217

Phone 913 631 - 0500 • 888 - 431 - 0500 • Fax 913 631 - 4759