



Nutri-Shield, Inc.

Product Bulletin NS-1017S

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-1017S 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:

- **Sodium Propionate** – more soluble salt versus calcium propionate and will not have antagonistic reaction to 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 184.1784)
- **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. Contains no allergens.

We believe this information to be accurate and reliable; however, no warranty, either expressed or implied, is made and no freedom from liability, from Patents, Trademarks or other limitation should be inferred.

Typical Applications

NS-1017S has proven effectiveness in a variety of food systems including:

- Bakery Goods, including frostings, icings, cakes, etc.
- Prepared Salads (potato, macaroni, etc.)
- Dressings and Sauces
- Cultured Dairy Products
- Juice-based Drinks/ “Bellywash”
- Milk

Typical Usage Levels

NS-1017S is typically added at a rate of 0.05% to 0.20% of the weight of the food product. A ratio of 1 to 10 for liquids.

Product Features

- Color: White (free from other discoloration)
- Form: Powder (dissolves easily with water)
- GRAS (Generally Recognized As Safe)
- Kosher Certified
- BioTerrorism Registration # 11980927702

Packaging & Storage

- A heat sealed, multi-wall plastic bag.
- 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: sodium propionate, potassium sorbate, calcium acetate (preservatives).

Nutrition labeling is not required for this system.

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