

Is Freeze-Thaw Stability a requirement for success of your products? We can help!

AFS has been tackling freeze-thaw stability issues for a wide variety of retail frozen-food products for nearly 30 years. As a result, our broad knowledgebase can be applied to your products to ensure that they are freeze-thaw stable.

Controlling damage caused by ice crystal formation in high-water content products or in emulsified food products is the key to maintaining the desired texture of the food product. It is also the key to minimizing the reduction in flavor and color which also can result from freeze-thaw damage. AFS products can successfully handle all of these issues.



AFS can custom-design many of its product systems, such as **Actobind**[®] and **Actoloid**[®], to eliminate freeze-thaw damage to frozen products. Some examples include the following:

Freezer-Burn / Protein Damage

AFS can utilize its hydrocolloid and formulation expertise from a wide range of food products to custom-design freeze-thaw systems. **Actobind®** systems can stabilize internal moisture and **Actoglaze™** systems can stabilize surface moisture to reduce if not eliminate freezer burn. Proper application of these systems can also control texture degradation by minimizing protein damage. These systems are particularly effective in meat and seafood, either fresh or fully-cooked.

Maintaining Emulsion Integrity

Freezing and thawing breaks down most emulsions due to the effects of ice crystallization. These effects can be prevented by using our **Actoloid**[®] systems. These systems can be specifically tailored for emulsion systems, and for customerspecific formulation and processing conditions.

Purge / Shrinkage

Purge and shrinkage can be minimized with both our **Actobind**[®] and **EasyBrown**[™] systems, which are especially helpful for IQF vegetables (plain, grilled, or roasted). These unique systems also can improve texture upon re-heating of the foods.

Please contact us if your business is frozen foods. We have a wealth of experience across many product lines, and have ready-made systems that will increase the value and quality of your product in the kitchen of the consumer.

For additional information on our frozen products, please contact Technical Services at (800)787-3067 or lab@afsnj.com.

Advanced Food Systems, Inc.: developers and manufacturers of custom ingredient systems for the perfect balance of flavor and texture!



Custom Ingredient Systems

21 Roosevelt Avenue Somerset, NJ 08873 732-873-6776 Tel. 732-873-4177 Fax www.afsni.com