



NEOTAME

STABILITY OVERVIEW

Neotame has excellent stability as a Dry Ingredient. It can also be used successfully in a wide range of Diet Foods, Reduced-sugar or Mainstream Foods and Beverage products.

Neotame, when used alone, or in combination with other High Intensity Sweeteners or Nutritive Sweeteners, it provides acceptable sweetness throughout the expected shelf life of the products tested.

Similar to many other Food Ingredients such as Flavors, Neotame will break down over time. The degradation products of Neotame contribute no off-Flavors or Odors.

Neotame as a Dry Ingredient has been evaluated for five years. When stored under conditions, relevant to commercial use (25°C and 60% Relative Humidity), virtually no loss of Neotame occurred. The Product was stored in both Glass and Sealed Polyethylene storage bags.

Carbonated Soft Drinks and Ready-to-Drink Beverages

Neotame is functional as a sweetener in Carbonated Soft Drinks at pH values between 2.9 and 4.5.

Beverages consumed within 4 to 5 months after Manufacturing, exhibit acceptable sweetness, provided exposure to high Temps. and Sunlight is minimized.

The presence of other sweeteners does not adversely affect the stability of Neotame. In most products, the presence of other sweeteners can increase the perception of sweetness over time, which increases the shelf life of products, containing Neotame.

Even during Pasteurization (Thermal processing) and exposure to HTST (High Temp. Short Time) of 88°C, there is no significant loss of Neotame.

Powdered Soft Drinks (PSDs) : When packed & stored at approx. 25°C temp. & 60% RH (Relative Humidity), Neotame exhibit acceptable shelf life in most PSD products.

Bakery Products :

In all Baked preparations, Neotame exhibits excellent stability.

For example,

85% of Neotame remains at the end of Baking ; and
81% is retained at the end of 5 days at RT.

Dairy Products :

Neotame withstands Pasteurization in Dairy products. It is also not metabolized by the usual Yogurt culture.

For example,

99% of Neotame was present after UHT (Ultra High Temp.) Pasteurization.
No degradation occurred after Fermentation, followed by storage (Refrigerated) for 5 weeks.

Chewing Gum :

In peppermint- flavoured Chewing Gum, encapsulated Neotame was found to be stable for at least 52 weeks (81% remaining).

Non-encapsulated Neotame was shown to provide acceptable sweetness level till 26 weeks.