Provian NDV is the latest clean label development in Niacet’s range of meat-, poultry- and fish-preservatives. Provian NDV is produced from naturally fermented vinegar and can be labelled as *Neutralized Vinegar or Dry Vinegar*. Due to the natural origin of this raw material, Provian NDV contributes to a cleaner ingredients statement on your packaging. Provian NDV is the only sodium-free neutralized vinegar and reduces the sodium content of your product without compromising on taste, shelf life or food safety. Moreover, Provian NDV helps to meet the recommended daily intake of potassium and benefits human health.

Provian NDV is based on the proven anti-microbial activity of organic acids and is as effective as currently available preservatives. It has excellent antimicrobial properties against pathogenic bacteria of great concern like *Listeria, Salmonella, E. Coli* and increases the shelf life of products, by reducing the growth of lactic acid bacteria and other spoilage flora. Even at a low dosages.
Physical form

As all Provian products, Provian NDV is a dry product. It has a high purity, a pH just above neutral and it is chemically and physically stable. The product is available as an easy to handle (creamy) white granulate which dissolves well and contains no insoluble components.

Dosage & Efficacy

Independent shelf life and challenge studies show that Provian NDV is as effective as a similar product from a chemical origin.

![Graph 1: Growth of Listeria monocytogenes in a Turkey Formulation (as performed by a major US meat producer).](image)

Typically, Provian NDV is used at levels between 0.6% and 0.8% depending on the conditions and demands.

Sensory properties

Several external laboratories and major meat companies tested Provian NDV on its sensory properties. Even at dosage levels up to 1.0% no sensory deviations were observed. Various trials revealed a positive effect on the taste of the final product. Color and texture were not affected.

Clean label

Provian NDV is produced from naturally fermented vinegar and can therefore be labelled as Neutralized Vinegar or Dry Vinegar. FSIS has allowed Provian NDV to be labelled as “Natural”.

This makes the product very suitable when looking for a clean label solution while maintaining protection against pathogens and food spoilage bacteria.

1) According to FSIS and Leatherhead; please check local legislation before use.
2) FDA (May 2016): recommended Daily Value for Potassium increased from 3500mg to 4700mg. Compliance date: July 26, 2018
4) EFSA Journal 2010; 8(2):1469
5) USDA/FSIS Approval letter (July 3, 2017)