Dosages

The approved dosage level of Provian A depends on local legislation, meat type and shelf life requirements. In the US the recommended dosage is 0.5% based on the total meat weight. In Europe and Canada, its usage should be in line with the quantum satis principle, meaning at levels not higher than necessary to achieve the intended purpose. For optimal effects, we recommend a dosage level of 1% Provian A based on the total weight of the meat formulation. Lower dosages can also be used when the requirements for shelf life are less stringent.

Powder form offers significant advantages

Provian A is a novel co-spray dried product composing of equal amounts of sodium acetate and sodium lactate, delivered in a free flowing powder form. It can be applied either as a powder (e.g. in meat mass or spice blends) or as an aqueous solution at appropriate concentrations. Being a dry product makes Provian A easy to handle, convenient to store, and more cost effective than liquid alternatives.

Dosages

The approved dosage level of Provian A depends on local legislation, meat type and shelf life requirements. In the US the recommended dosage is 0.5% based on the total meat weight. In Europe and Canada, its usage should be in line with the quantum satis principle, meaning at levels not higher than necessary to achieve the intended purpose. For optimal effects, we recommend a dosage level of 1% Provian A based on the total weight of the meat formulation. Lower dosages can also be used when the requirements for shelf life are less stringent.
Intensive scientific research, including microbiological and sensory analyses, has been carried out in our own laboratories and independent research institutes to verify the effectiveness of Provian A.

**Extending shelf life**
Provian A effectively extends shelf life through significant growth inhibition of total aerobic bacteria (Fig. 1). This study carried out by an independent research institute indicates the bacteriostatic effect of Provian A in vacuum packed cooked sausages, stored at approximately 5°C for a period of 90 days.

**Enhancing food safety**
Provian A is an effective safeguard against pathogens commonly found in meat products and reduces the risk of food borne diseases. Figure 2 indicates its effectiveness in inhibiting the growth of *Listeria monocytogenes* in vacuum packed cooked sausages during a 90 day period. For effective *Listeria* control, 1% Provian A is recommended.

Better flavor and minimized cooking losses
Provian A has no adverse effects on sensory parameters such as taste, after-taste, odor and appearance. Based on sensory analyses carried out by experienced taste panels, Provian A with its mild salty profile, actually enhances flavor. In addition, due to its neutral pH and buffering capacity, Provian A does not change the pH of cooked meat products resulting in less cooking losses.

---

**Fig 1:** Effect of Provian A on Total Aerobic Bacteria in cooked sausages

**Fig 2:** Effect of Provian A on *Listeria monocytogenes* in cooked sausages

---

**Provian® A a cost effective product with superior performance**

- Enhances food safety and extends shelf life
- Powder form is logistically economical and easy to handle
- Can also be applied in dry blends
- Cost effective due to low dosages in comparison to liquid lactate based alternatives
- No adverse effects on organoleptic characteristics
- Mild salty taste profile enhances flavor
- No changes in pH or cooking yield

---

*Niacet is a leading producer of organic salts, including propionates and acetates, serving the Food and Pharmaceutical industries. With two longstanding and fully automated manufacturing sites, located in Niagara Falls, NY USA, and Tiel, The Netherlands, Niacet offers world-class quality products to a global market.*

*Niacet makes this information available as an accommodation to its customers and it is intended to be solely a guide in customer’s evaluation of the products. You must test our products, to determine if they are suitable for your intended uses and applications, as well as from the health, safety and environmental standpoint. You must also instruct your employees, agents, contractors, customers or any third party which may be exposed to the products about all applicable precautions. All information and technical assistance is given without warranty or guarantee and is subject to change without notice. You assume full liability and responsibility for compliance with all information and precautions, and with all laws, statutes, ordinances and regulations of any governmental authority applicable to the processing, transportation, delivery, unloading, discharge, storage, handling, sale and use of each product. Nothing herein shall be construed as a recommendation to use any product in conflict with patents covering any material or its use.*

---

06/2013