

FIXOLOR®

CULTURED CHARD



9.2

KEY BENEFITS

- Enhances the red-pink color
- Suppresses the growth of foodborne pathogens
- Shelf life extension
- Natural and friendly label

Nitrite is a typical curing agent widely used in meat products because it promotes formation of the bright red-pink color of processed meat products, provides the cured flavor, has a bacteriostatic impact, and acts as an antioxidant for suppressing lipid oxidation. However, the growing preference for natural and organic food products, driven by health-conscious consumer choices, has heightened the demand for natural ingredients in meat processing, leading to a search for natural substitutes for synthetic nitrite.

Fixolor® PK, a cultured reddish chard, provides a natural solution to enhance the bright red-pink color and flavor of processed meat products while inhibiting harmful bacteria like *Listeria*, *Bacillus* and *Clostridium*. **Fixolor® 4K** offers an ideal liquid concentration option for use in cooked cured meats.

OUR PRODUCTS

FIXOLOR® PK
Cultured Chard



FIXOLOR® 4K
Cultured Chard Concentrate



CULTURED CHARD

	Fixolor® PK	Fixolor® 4K
Code	0921	0922
Labelled as	Cultured chard (Vegetal Nitrite), Salt	Cultured chard (Vegetal Nitrite), Salty water
Appearance	Creamy powder	Light brown liquid
Applications	Cured meat (e.g. Bacon, Cooked cured meat (beef), Ham, Luncheon meat, Salami, Sausage)	Raw (Cured) meat (e.g. Bacon, Dry ham)
Dosage	0.3-0.5% (w/w)	0.5-0.1% (w/w)
Regulation	Check with local authorities in each country	

Reddish chard is known for its high nitrate content (~2,700 mg/kg), which can be converted into nitrite using nitrate-reducing cultures like *Staphylococcus xylosus*. It also contains antioxidants such as phenolic acids and flavonoids. Unlike celery, reddish chard is non-allergenic.

9.2.1 Fixolor® PK

Fixolor® PK is a cultured chard powder containing a minimum of 22,500 ppm pre-converted vegetal nitrite, specifically designed to protect cooked (cured) meat products, such as emulsified sausages and cooked ham, from foodborne pathogens while enhancing their red-pink color.

9.2.1.1 Cooked Cured Beef Patties

Figure 9.2.1.1(a) shows that the addition of 0.5% **Fixolor® PK** intensifies the pink color of beef patties after 15 minutes at 80°C, while **Figure 9.2.1.1(b)** demonstrates a reduction in Total Plate Count (TPC) for up to 19 days.

9.2.1.2 Frankfurters

Figure 9.2.1.2(a) illustrates that the addition of 0.5% **Fixolor® PK** enhances the pink color of frankfurters, while **Figure 9.2.1.2(b)** shows effective inhibition of *Listeria monocytogenes* for over 120 days.

9.2.2 Fixolor® 4K

Fixolor® 4K is an ideal cultured chard concentrate containing 6,000 ppm pre-converted vegetal nitrite, 30 ppm phenolic acids and flavonoids, specifically designed to protect raw (cured) meat products, such as bacon and dry ham, from foodborne pathogens while enhancing their red-pink color and authentic flavor.

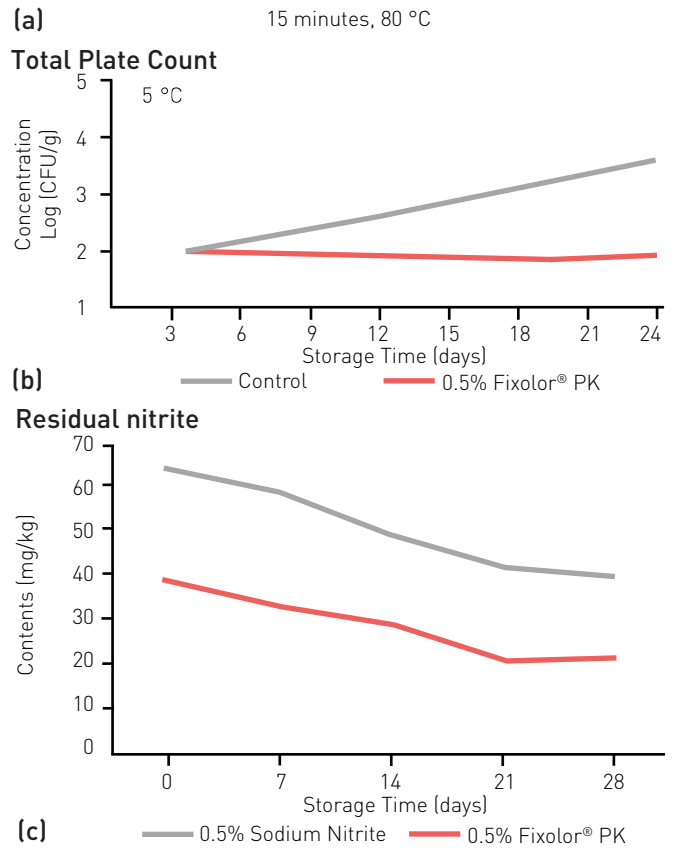
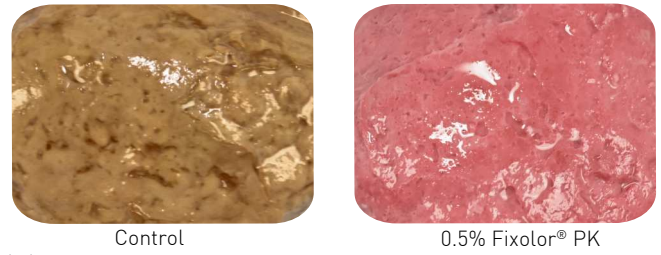


Figure 9.2.1.1 Beef patties

