

# Lyoflora V-3

**Description** Lyoflora V-3 consists of *Lactobacillus plantarum* which enhances the processing of fermented vegetable products by suppressing and controlling the indigenous flora. Additionally, Lyoflora V-3 is a protective culture inhibiting some unwanted bacteria due to bacteriocin production.

**Application** In the production of fermented vegetables >10<sup>8</sup> CFU/l product (brine and vegetable) is recommendable. The inoculation level should be correlated to the initial load of indigenous bacteria in the food product and the requested activity.

Rehydrate the culture for approx. 30 min. in 2 litres of water in which 90 g salt (NaCl) and 40 g sugar\* are dissolved. Hereafter the solution can be mixed with the brine and vegetables.

\*Fermentable sugars: fructose, galactose, glucose/dextrose, lactose and maltose whereas sucrose/saccharose and starch are not fermentable.

**Storage** Unopened pouches should be kept below -17°C. If not stored below -17°C the shelf life will be reduced.

**Package data** Freeze-dried culture is packed in waterproof and airproof aluminium pouches. The packaging material is food grade.

Lyoflora V-3 is available with 10<sup>11</sup> CFU per 1000 l product.

**Shelf life** 18 months when stored below -17°C.  
Shelf life includes up to 14 days of shipment at temperatures below 30°C.

**Heavy metal specification**

Pb (lead)	<1 ppm (mg/kg)
Hg (mercury)	<0.03 ppm
Cd (cadmium)	<0.1 ppm

*Level of heavy metals is controlled on regular basis.*

**Microbiological specification**

<i>Bacillus cereus</i>	<100 CFU/g	Method: Sacco M10
Coagulase positive staphylococci*	<10 CFU/g	Method: Sacco M11
<i>Enterobacteriaceae</i>	<10 CFU/g	Method: Sacco M22
<i>Enterococcus</i> spp.	<10 <sup>3</sup> CFU/g	Method: Sacco M05
<i>Listeria monocytogenes</i> *	Not detected in 25 g	Method: Sacco M13
Mould and yeasts	<10 CFU/g	Method: Sacco M03
<i>Salmonella</i> spp.*	Not detected in 25 g	Method: Sacco M12

\* Analysed on regular basis. All analytical methods are available upon request.

**GMO** Sacco strains are not genetically modified (GMO) in accordance with the European Directive 2001/18/EC. The strains are isolated from natural sources. The raw materials used are also GMO free in accordance with Regulation (EC) No. 1829/2003 and Regulation (EC) No. 1830/2003. Statement available upon request.

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## Allergens

All materials are free of the following components and their derivatives: peanut, tree nut, sesame, egg, fish, mollusc, crustacean, sulphite, cereal containing gluten, celery, mustard, soy, milk\* and lupine. Statement available upon request.

*\*In a letter to EFFCA dated July 16th 2004, the European Commission stated that ingredients used in the fermentation of microbial cultures are outside the scope of the above mentioned Directive 2003/89. This interpretation is confirmed by the Standing Committee of the Food Chain and Animal Health (SCFAH) guidelines relating to the provisions on allergen labelling (3). This means that: if any of the listed allergenic ingredients is used in the fermentation of a microbial culture, there is no legal obligation to list it on the label of the final consumer foodstuff.*

**Safety information** Material Safety Data sheet available on [www.saccosrl.it](http://www.saccosrl.it).

**Certificate** Lot certificate available upon request.

**ISO approval** Sacco S.r.l. is UNI EN ISO 9001:2008 certified since 1998, ISO22000:2005 and FSSC 22000 certified since 2014.

**Service** Please contact your distributor for guidance and instructions for your choice of culture and processing. Information about additional package sizes and sales units is also available upon request.

**Liability** This information is based on our knowledge trustworthy and presented in good faith. No guarantee against patent infringement is implied or inferred.