

# Lyofast ABC 1

**Description** **Lyofast ABC 1** consists of *Lactobacillus acidophilus*, *Lactobacillus casei*, and *Bifidobacterium animalis* ssp. *lactis* in the ratio 1:1:1. Lyofast ABC 1 may be applied in generic dairy products such as fermented milk products, and cheese. The culture develops a weak acidity and aroma from slow citrate fermentation depending on processing.

**Application** Inoculation guideline for dairy application: sprinkle the culture powder directly into process milk under aseptic conditions ensuring that the culture is well dispersed by gentle stirring.

Product	Dose/100 l	Product	Dose/100 l
Fresh cheese	0.8-2.5	Soft cheese	0.7-2.0
Semi-hard cheese	0.5-1.5	Hard cheese	0.3-1.0
Fermented milk, mesophilic	2.0-10.0	Fermented milk, thermophilic long set	1.0-5.0
Fermented milk, thermophilic short set	2.0-10.0		

**Culture information** Inoculated in 100 l milk 1 dose gives approx.  $10^6$  CFU/ml milk.

Optimal temperature for growth	25-45 °C	Adhesion test	++
Bile tolerance	+++	Acid tolerance	+++

**Storage** Unopened pouches should be kept below -17°C.

**Package data** The freeze-dried culture is packed in waterproof and airproof aluminium pouches. The packaging material is food grade. Lyofast ABC 1 is available in 10 and 50 UC.

**Shelf life** 18 months when stored below -17°C.

**Heavy metal specification**

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

\* Level of heavy metal is controlled on regular basis.

**Microbiological specification**

<i>Bacillus cereus</i>	<100 CFU/g	Method: Sacco M10 (1)
Coagulase positive staphylococci*	<10 CFU/g	Method: Sacco M11(2)
Enterobacteriaceae	<10 CFU/g	Method: Sacco M2 (3)
<i>Escherichia coli</i>	<1 CFU/g	Method: Sacco M27 (4)
<i>Listeria monocytogenes</i> *	Not detected in 25 g	Method: Sacco M13 (5)
Moulds & yeasts	<10 CFU/g	Method: Sacco M3 (6)
<i>Salmonella</i> spp*	Not detected in 25 g	Method: Sacco M12 (7)

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

(1)ISO 7932; (2)ISO 6888-1-2; (3)ISO 215281-2; (4)ISO 11866-1-2/IDF 170-1-2; (5)ISO 11290-1-2; (6)ISO 6611/IDF 94; (7)ISO 6785/IDF 93.

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- GMO** The microbial strains are not genetically modified (GMO) in accordance with the European Directive 2001/18/CE. 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.
- Allergens** The raw materials used are generally based on dairy ingredients. All materials are free of the following components and their derivatives: peanut, tree nut, sesame, egg, fish, shellfish, mollusc, crustacean, sulphite, cereals containing gluten, celery, mustard, soy and lupine. Statement available upon request.
- Safety information** Material Safety Data Sheet available on [www.saccosrl.it](http://www.saccosrl.it)
- Certificate** Lot certificate available upon request.
- ISO  
Kosher approval** Sacco S.r.l. is UNI EN ISO 9001:2008 certified since 1998. Sacco cultures are generally Kosher approved except for surface ripening cultures.
- 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.