

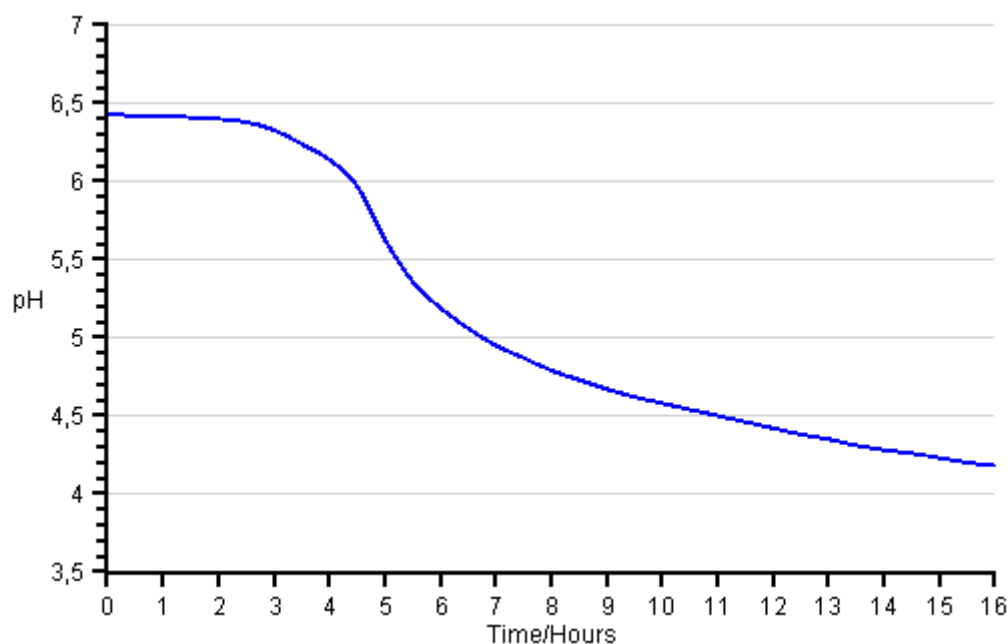
Lyofast SHL 092 F

Description **Lyofast SHL 092 F** consists of specifically selected strains of *Streptococcus thermophilus*, *Lactobacillus delbrueckii* ssp. *lactis*, and *Lactobacillus helveticus* to ensure a uniform and controlled production hard cheese resembling Emmental or Grana.

Application Sprinkle the culture powder directly into process milk under aseptic conditions ensuring that the culture is well dispersed by gentle stirring. The following may be used as inoculation guidelines:

Product	UC/100 l	Product	UC/100 l
Hard cheese	0.5-2.0		

Acidification information Standardised laboratory acidification test is conducted in milk powder, reconstituted at 9%, at defined temperature.
Acidification profile: inoculation level corresponding to 1 UC per 100 litres milk.
Standard activity: expressed as temperature/time/pH relations: 37°C/6 hours/pH 5.2 ± 0.15.



Culture information Data are obtained under standardised laboratory conditions, and consequently, should be considered as guidelines.

Optimal temperature for growth	43°C	Scalding temperature	Max. 55°C
Gas production/citrate/urea	+	Acidification capability	pH 4.1

Storage Unopened pouches should be kept at a temperature below -17°C.

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

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

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

* Analysed 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 M02 (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 M03 (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 21528-1-2; (4)ISO11866-1-2/IDF 170-1-2; (5)ISO 11290-1-2; (6)ISO 6611/IDF 94; (7)ISO 6785/IDF 93.

GMO Sacco microorganisms are not genetically modified (GMO) in accordance with the European Directive 2001/18/EC. The strains are isolated from natural sources. In accordance with Regulation (EC) No. 1829/2003 and Regulation (EC) No. 1830/2003 this product does not require labelling with regard to the use of genetically modified organisms.

Allergens The raw materials used are generally based on dairy ingredients. All materials are free of the following components and their derivatives: cereals containing gluten, crustaceans, eggs, fish, peanuts, soybeans, nuts, celery, mustard, sesame seeds, shellfish, lupine, molluscs, sulphur dioxide and sulphites.

Safety information Material Safety Data Sheet available on www.saccosystem.com.

Certificate Lot certificate available upon request.

Certifications Sacco S.r.l. is UNI EN ISO 9001:2008 certified since 1998, ISO 22000:2005 and FSSC 22000 certified since 2014. Sacco cultures are generally Kosher and Halal 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.