



Bactoform™ Meat Starter Cultures Table

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CULTURE NAME	TEMP. RANGE	ACID PRODUCING	COLOR & FLAVOR	SURFACE COVERAGE	Bio PROTECT	FERMENTATION TIME			ACIDIFICATION		CULTURE COMPOSITION & PURPOSE	Growth Temp Opt/Max/Min
						X FAST	FAST	SLOW	MILD	SOUR		
T-SPX	64° F To 75° F	MILD	X					X	X		<u>PEDIOCOCCUS PENTOSACEUS</u> - LACTIC ACID PRODUCTION <u>STAPHYLOCOCCUS XYLOSUS</u> - COLOR & FLAVOR	95/118/59° F 86/104/50° F
	T-SPX is particularly good for the production of Southern European type of sausages, low in acidity with an aromatic flavor such as Italian Salami or French Saucisson. Does not provide food safety through lowering pH level but does help lower aW. Use for products needing at least one month's time for drying. Ferment under 75°F.											
F-LC	< 77° F	MILD	X		X			X	X		<u>STAPHYLOCOCCUS XYLOSUS</u> - COLOR & FLAVOR <u>LACTOBACILLUS CURVATUS</u> - SUPPRESSES LISTERIA <u>PEDIOCOCCUS ACIDILACTICI</u> - RELIABLE ACIDIFICATION & SUPPRESSES LISTERIA	86/104/50° F 98/104/39° F 109/126/59° F
	95° F	SOUR			X					X		
	115° F				X							
F-LC meat culture with bio-protective properties for production of fermented sausages with short or traditional production times. F-LC is recommended for the production of all types of fermented sausages – molded or smoked. Depending on fermentation temperature, acidification is either traditional (slow), fast or extra fast												
F-RM-52	70° F To 90° F	SOUR	X				Fast 5.0 pH drop in 4 days		X		<u>LACTOBACILLUS SAKAI</u> - LACTIC ACID PRODUCTION <u>STAPHYLOCOCCUS CARNOSUS</u> - COLOR & FLAVOR	86/111/50° F 86/113/50° F
	F-RM-52 is a culture well suited for all fermented sausages where medium to fast acidification is desired. The culture is recommended for the production of traditional North European types of fermented, dry sausages with a sourly flavor note such as German Mettwurst and Danish Salami. When the culture is applied in a sausage mince with excess glucose (dextrose) at 75° F (24°C) it is possible to achieve a pH as low as 4.4. Will not ferment sucrose.											
LHP	80° F To 100° F	SOUR				X Fast - (5.3 in 30 hrs.)	Fast 5.0 pH drop in 48 hrs.			X	<u>PEDIOCOCCUS ACIDILACTICI</u> - RELIABLE ACIDIFICATION & SUPPRESSES LISTERIA <u>PEDIOCOCCUS PENTOSACEUS</u> - LACTIC ACID PRODUCTION	109/126/59° F 95/118/59° F
	LHP is a culture well suited for all fermented sausages where a extra fast acidification is desired. The culture is recommended for the production of fermented, dry sausages with a sourly flavor note, such as American Pepperoni and Summer Sausage.											
MOLD 600	68-75° F		X	X		Produces White Mold - Use With Less Than 93% Humidity			<u>PENICILLIUM NALGIOVENSE</u> - WHITE MOLD PRODUCTION			
	MOLD 600 is for production of molded dried sausages with a white/cream colored appearance. Mold-600 is a fast growing single strain culture containing spores of <u>Penicillium Nalgiovense</u> . This item is a traditional white mold culture for controlling the surface flora. Mold-600 is particularly recommended for the production of traditional sausages dried at low temperature and/or low humidity.											



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Note: Cultures must be stored in freezer (under 5° F). Frozen, they will keep for up to 6 months. Un-refrigerated they have a shelf life of 14 days. In a convenient freeze-dried form

Bactoform™ LHP - Fast: 5.0 pH drop in 2 days)

LHP is a freeze-dried culture well suited for all fermented sausages where extra fast acidification is desired. This culture is recommended for the production of fermented, dry sausages with a pronounced sourly flavor note needing about 3 weeks or less to complete..

Each 42-gram packet of LHP will do 500 pounds (225 kilo) of meat. You can use half of the packet in 100 pounds of meat, and refreeze remaining culture. Use at least 1/4 of the packet in any production under 100 pounds of meat.

Bactoform™ F-RM-52 - Medium: 5.0 pH in 4 days)

F-RM-52 is a freeze-dried culture well suited for all fermented sausages where a relatively fast acidification is desired. The culture is recommended for the production of North European types of fermented, dry sausages with a sourly flavor note.

Each 25-gram packet of Bactoform™ F-RM-52 will do 220 pounds (100 kilo) of meat. You can use the whole packet in 100 pounds of meat or use half of the packet and refreeze remaining culture.

Bactoform™ T-SPX - Slow - Assists with drying a month or more) Also: Semi Dry Cured

T-SPX is a freeze-dried culture well suited for all fermented sausages where a relatively mild acidification is desired. T-SPX is particularly recommended for the production of Southern European type of sausages, low in acidity with an aromatic flavor. The culture is suitable for molded as well as smoked fermented sausages. (Semi Dry Cured)

Each 25-gram packet of Bactoform™ T-SPX will do 440 pounds (200 kilo) of meat. You can use the whole packet in 100 pounds of meat or use half of the packet and refreeze remaining culture. Use ¼ of a packet in any production under 50 pounds of meat.

Bactoform™ F-LC - Fast, extra fast or slow - Fermentation time is temperature dependent – With added Listeria protection

F-LC meat culture with bio-protective properties for production of fermented sausages with fast or slow production times. F-LC is recommended for the production of all types of fermented sausages. Depending on fermentation temperature, acidification is slow, fast or extra fast. Can be used for slow, traditional fermentation when environment is near 80F and will also rapidly acidify in high fermentation (US Style) temperatures of near 115 F. F-LC is a mixed culture containing *Pediococcus acidilactici*, *Lactobacillus curvatus* and *Staphylococcus xylosus*. *P. acidilactici* ensures reliable acidification whereas *S. xylosus* results in strong flavor development and a good, stable color. Due to bacteriocin production both *L. curvatus* and *P. acidilactici* contribute to suppressing growth of *Listeria monocytogenes*.

Each 25-gram packet of Bactoform™ F-LC will treat 220 pounds (100 kilo) of meat. You can use the whole packet in 100 pounds of meat or use half of the packet and refreeze remaining culture. Use ¼ of a packet in any production under 50 pounds of meat.

Mold 600 Bactoform - Previously M-EK-4)

Meat culture for production of molded dried sausages with a white/cream colored appearance. Mold-600 is a single strain culture containing spores of *Penicillium nalgiovense* in a convenient freeze-dried form. *P. nalgiovense* is a fast growing, traditional white mold culture for controlling the surface flora.

Mold-600 is particularly recommended for the production of traditional sausages dried at low temperature and/or low humidity. Mold-600 suppresses the growth of undesirable organisms such as indigenous molds, yeasts and bacteria. The culture has a positive effect on the drying process by preventing the emergence of a dry rim. Furthermore, the mold degrades lactic acid during maturation resulting in a pH increase and a less sourish flavor. One pouch of freeze-dried culture is mixed into 1-2 liters of tap water at approximately 20°C (68°F) and equilibrated for 2 hours at room temperature. The suspension is diluted in 10 liters of tap water and is then ready for use. The mold is inoculated after the stuffing (and eventually acclimatization process), either by dipping or spraying or shower. The spore suspension should be stirred continuously to prevent settling of the spores, and the suspension should only be used on day of preparation to prevent contamination.