

## Delicious and safe Food cultures

## Reliable & safe BITEC<sup>®</sup> Small cause – large effect

Starter cultures are specifically selected microorganisms that significantly control the maturing process of fermented sausage and raw cured products. They not only influence the aroma and color, but are also responsible for the formation of the desired structure (sliceability or spreadability) and for stabilizing the microflora. In addition, some food cultures stabilize injection brines and fish products.

### **Production at highest level**

Our competence center for cultures and fermented sausage combines research, development and application of food cultures. We run challenge and storage tests at our site in Holdorf. Since 2014, we have been managing one of the few laboratories in the entire industry with safety level 2, which allows us to work with pathogenic germs such as *Listeria monocytogenes*. Holdorf is also home to product development and the research area for food cultures. We also have a 250 m<sup>2</sup> technical center for a wide range of application tests. Our food cultures have been produced in Stuttgart since 1989. Customers can rely on the best quality "Made in Germany".

### Everything from a single source

NovaTaste offers everything necessary for the production of fermented sausage, raw cured products and other food products from a single source. The in-house production of microbial strains enables us to offer a particularly efficient and coordinated range for the industry and butchery.

### The most important advantages of using food cultures:

- Increase of product safety (reduction of hygienic risks)
- Ensuring consistently high product quality
- Control of the fermentation process and the development of color, taste and flavor
- Cost reduction through shorter fermentation times
- Decrease in rejection rate

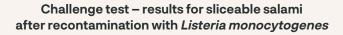
#### We are here for you

Decades of experience guarantee not only excellent cultures and seasonings, but also professional support. Ask our technical sales engineers for support at your production site in case of problems, new product implementation, process optimization and more!



### The BITEC<sup>®</sup> B Range – food cultures with protective properties against listeria

With the B-Range, NovaTaste has created a solution that goes beyond the effect of a standard food culture. By combining the ripening cultures with a lactic acid bacterium that is able to form specific inhibitors, a protective function against *Listeria monocytogenes* has been integrated. This additional hurdle ensures optimum product safety.



10

starter culture with protective properties

20

15

Time (days)

25

30

1,0E+03

1,0E+02

1,0E+01

1,0E-00

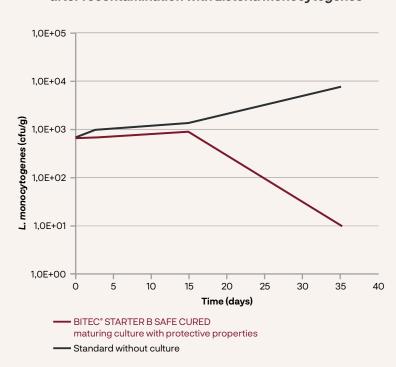
0

5

**BITEC® STARTER B 3** 

Reference culture

L. monocytogenes (cfu/g)



### Challenge test – results raw ham after recontamination with *Listeria monocytogenes*



### Fermented Sausages

#### Fast ripening

Product description	Dosage	ltem no.
<ul> <li>protective function against <i>Listeria monocytogenes</i></li> <li>fast decrease in pH-value</li> <li>strong fermentation flavor</li> <li>for sliceable and fresh fermented sausage, especially for sliced products</li> </ul>	25 g for 100 kg mass	<b>241175</b> 0.025 kg
<ul> <li>protective function against <i>Listeria monocytogenes</i></li> <li>very fast decrease in pH-value</li> <li>balanced fermentation aroma with distinctive acid character</li> <li>for sliceable and fresh fermented sausage, especially for sliced products</li> </ul>	25 g for 100 kg mass	<b>241193</b> 0.025 kg
<ul> <li>protective function against Listeria monocytogenes</li> <li>fast decrease in pH-value</li> </ul>	25 g for 50 kg mass	<b>266305</b> 0.025 kg
<ul> <li>mild, harmonious fermentation aroma</li> <li>for sliceable fermented sausage, especially for sliced products</li> </ul>	25 g for 100 kg mass	<b>249273</b> 0.025 kg
• fast decrease in pH-value • firm texture	25 g for 50 kg mass	<b>241100</b> 0.025 kg
<ul> <li>mild fermentation aroma</li> <li>all-round culture, especially for sliceable fermented sausage</li> </ul>	25 g for 100 kg mass	<b>241187</b> 0.025 kg
<ul> <li>very fast decrease in pH-value</li> <li>medium firm to firm texture</li> </ul>	25 g for 50 kg mass	<b>241119</b> 0.025 kg
<ul> <li>strong fermentation aroma</li> <li>all-round culture, especially for sliceable fermented sausage</li> </ul>	25 g for 100 kg mass	<b>241172</b> 0.025 kg
<ul> <li>fast decrease in pH-value</li> <li>medium firm to firm texture</li> </ul>	25 g for 50 kg mass	<b>241150</b> 0.025 kg
<ul> <li>mild fermentation aroma</li> <li>all-round culture, especially for snacking products</li> </ul>	25 g for 100 kg mass	<b>241104</b> 0.025 kg
protective function against <i>Listeria monocytogenes</i> slow decrease in pH-value     strong formontation groups	25 g for 50 kg mass	<b>245206</b> 0.025 kg
<ul> <li>for spreadable/soft fermented sausage and traditionally ripened, sliceable fermented sausage</li> </ul>	25 g for 100 kg mass	<b>241080</b> 0.025 kg
<ul> <li>slow decrease in pH-value</li> <li>distinctive, harmonious fermentation aroma</li> <li>very good color development</li> <li>all-round culture, especially for sliceable fermented sausage</li> </ul>	25 g for 100 kg mass	<b>241145</b> 0.025 kg
<ul> <li>STARTER LK 30</li> <li>slow decrease in pH-value</li> <li>mild, harmonious fermentation aroma</li> <li>all-round culture, especially for products with surface cultures</li> </ul>		<b>241158</b> 0.025 kg
	<ul> <li>protective function against <i>Listeria</i> monocytogenes</li> <li>fast decrease in pH-value</li> <li>strong fermentation flavor</li> <li>for sliceable and fresh fermented sausage, especially for sliced products</li> <li>protective function against <i>Listeria</i> monocytogenes</li> <li>very fast decrease in pH-value</li> <li>balanced fermentation aroma with distinctive acid character</li> <li>for sliceable and fresh fermented sausage, especially for sliced products</li> <li>protective function against <i>Listeria</i> monocytogenes</li> <li>fast decrease in pH-value</li> <li>firm texture</li> <li>mild, harmonious fermentation aroma</li> <li>for sliceable fermented sausage, especially for sliced products</li> </ul> • fast decrease in pH-value <ul> <li>firm texture</li> <li>mild fermentation aroma</li> <li>all-round culture, especially for sliceable fermented sausage</li> </ul> • fast decrease in pH-value <ul> <li>infine texture</li> <li>medium firm to firm texture</li> <li>strong fermentation aroma</li> <li>all-round culture, especially for sliceable fermented sausage</li> </ul> • fast decrease in pH-value <ul> <li>infine texture, especially for sliceable fermented sausage</li> </ul> • all-round culture, especially for sliceable fermented sausage • all-round culture, especially for sliceable fermented sausage • all-round culture, especially for snacking products • protective function against <i>Listeria</i> monocytogenes <ul> <li>slow decrease in pH-value</li> <li>all-round culture, especially for sliceable fermented sausage</li> </ul>	• protective function against Listeria monocytogenes       25 g for 100 kg mass         • for silocable and fresh fermented sausage, especially for siloced products       25 g for 100 kg mass         • protective function against Listeria monocytogenes       25 g for 100 kg mass         • protective function against Listeria monocytogenes       25 g for 100 kg mass         • very fast decrease in pH-value       25 g for 100 kg mass         • protective function against Listeria monocytogenes       25 g for 100 kg mass         • protective function against Listeria monocytogenes       25 g for 100 kg mass         • for silocable and fresh fermented sausage, especially for siloced products       25 g for 100 kg mass         • protective function against Listeria monocytogenes       18 t decrease in pH-value         • for silocable fermented sausage, especially for siloced products       25 g for 100 kg mass         • fast decrease in pH-value       25 g for 100 kg mass         • firm texture       25 g for 100 kg mass         • all-round culture, especially for silocable fermented sausage       25 g for 100 kg mass         • very fast decrease in pH-value       25 g for 100 kg mass         • slow decrease in pH-value       25 g for 50 kg mass         • fast docrease in pH-value       25 g for 50 kg mass         • fast docrease in pH-value       25 g for 50 kg mass         • slow decrease in pH-value

Product name	Product description	Dosage	ltem no.	
BITEC® STARTER RP 3	<ul> <li>moderate acidification</li> <li>mild, harmonious fermentation aroma</li> </ul>	25 g for 50 kg mass	<b>241102</b> 0.025 kg	
Food culture	<ul> <li>for raw ham – efficient reduction of nitrate</li> <li>recommended for dry curing, also for curing by injection</li> </ul>	50 g for 200 kg mass	<b>241074</b> 0.050 kg	
BITEC® STARTER B SAFE CURED Food culture with protective function for reduction of listeria during the fermentation process	<ul> <li>with protective function against <i>Listeria monocytogenes</i></li> <li>moderate acidification</li> <li>mild fermentation aroma</li> <li>improved color formation</li> <li>recommended for curing by injection and dry curing</li> </ul>	25 g for 100 kg mass	<b>259687</b> 0.025 kg	
General use				
BITEC® STARTER SM 96	<ul> <li>no acidification</li> <li>intensive fermentation aroma</li> <li>good color development</li> </ul>	25 g for 50 kg mass	<b>241170</b> 0.025 kg	
Food culture	<ul> <li>for spreadable, soft and sliceable fermented sausage produced with GdL</li> </ul>	25 g for 100 kg mass	<b>241142</b> 0.025 kg	
Special culture				
Add-on culture				
BITEC® B BACTO SAFE PLUS Add-on culture, protective function for reduction of listeria during the fermentation process	<ul> <li>add-on culture usage only in combination with a maturing culture</li> <li>protective function against <i>Listeria monocytogenes</i></li> <li>no flavor formation</li> <li>for all kind of raw fermented sausages and raw cured meat products</li> </ul>	25 g for 50 kg mass	<b>269258</b> 0.025 kg	
Mold				
BITEC® SCHIMMEL SK 40 Mold culture for the treatment of salami surface	• aromatic fermentation aroma • thin powdery layer of mold		<b>292764</b> 0.050 kg	
BITEC® SCHIMMEL SK 20 AF Mold culture for the treatment of salami surface	d culture for the treatment of			
Zwiebelmettwurst – German spr	eadable mettwurst with onions			
BITEC® STARTER B C3 Food culture with protective function for reduction of listeria during the fermentation process	<ul> <li>protective function against <i>Listeria monocytogenes</i></li> <li>for cold ripening of Zwiebelmettwurst produced with NCS</li> <li>in this application only use in combination with Lactalin ZM (241358)</li> <li>also suitable for Filet Americain</li> </ul>	25 g for 50 kg mass	<b>241107</b> 0.025 kg	

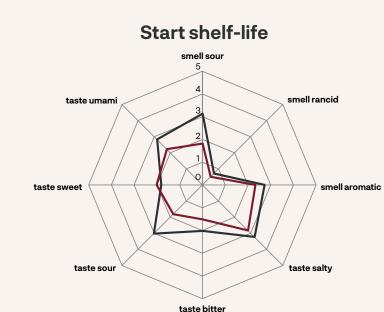


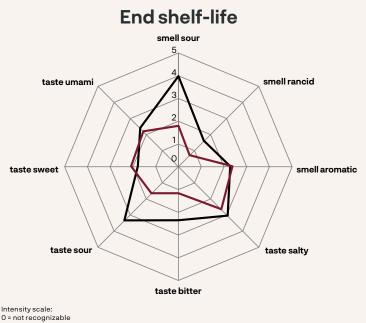
## No chance for undesirable bacteria **BITEC® INJECT SAFE for injection brines**

Brine is injected into the meat during the production of cooked cured meat products. In doing so, unwanted microorganisms can move from the surface into the meat. This is where BITEC® INJECT SAFE comes in: The product stabilizes the brine during the injection process and suppresses unwanted bacteria even at low temperatures. This helps to prevent gas holes in the end product and ensures a consistently high product quality. Cooked cured meat products remain fresh, tasty and color-stable for longer.

#### **Brine stabilization**

Product name	Product description	Dosage	ltem no.
<b>BITEC® INJECT SAFE</b>	<ul> <li>for stabilization of injection brine</li> <li>effective even at low temperatures</li> <li>improves freshness, taste and color during shelf-life</li> <li>prevents potential gas holes for all kind of cooked cured meat</li></ul>	45 g for 50 l brine	<b>259641</b>
Food culture	applications		0.050 kg





1 = very weakly recognizable (recognition threshold) 2 = weakly recognizable 3 = recognizable

4 = strongly recognizable 5 = very strongly recognizable

Cooked ham BITEC® INJECT SAFE Cooked ham standard



## BITEC® Starter cultures Application guide fermented sausage

	Product name						final pro	duct			
maturing				spreadable fermented sausage		soft fermented sausage				sausage	
		maturing flavor	taste	Zwiebel- mettwurst	"Teewurst/ Coarse Mettwurst"	"Pfeffer- beißer/ Rohpol- nische/ Mettenden etc."	snacking sausage	smoked	air dried	matured with mold	pizza salami (Ameri- can pep- peroni)
fast ripening	BITEC° STARTER B MILD & FAST*	•	•	x	x	x	x	хх	xx		x
	BITEC° STARTER B2*	••	••	x	x	x	x	хх	xx	x	
	BITEC° STARTER B3*	••	•••	xx	x	хх	хх	хх	x		хх
	BITEC <sup>®</sup> STARTER LD 20	••	••	x	x	x	xx	хх	x	x	
	BITEC* STARTER LS 25	••	•••	x	x	x	хх	хх	x		хх
	BITEC* STARTER LS 25A	••	••	x	x	хх	хх	x	x	x	
traditional ripening	BITEC® STARTER B1*	•••	••	x	хх	x		x	x	x	
	BITEC® STARTER GM1	•••	•		x	хх		x	xx	хх	
	BITEC® STARTER LK 30	•••	•		xx	xx		x	xx	xx	
special cultures	BITEC® STARTER B C3*	••	••	<b>XX</b> (cold ripening)							
	BITEC® B BACTO SAFE PLUS*			xx	xx	xx	хх	xx	xx	xx	хх
	BITEC® SCHIMMEL SK 20 AF	•••					x		xx	xx	
	BITEC® SCHIMMEL SK 40	••					xx		xx	xx	

# Our Services at a glance

Are you interested in our products and services? We are your partner for customer-specific solutions – simply ask your contact person!



#### Quality Our guiding principle

We define ourselves through the high quality of our products; they provide us with the incentive to offer our customers optimal solutions. You can recognize the importance of this claim in every step of our work, from incoming raw materials inspection to the finished product – a team that works hand in hand!



#### Food law Paragraphs, made easy

We are happy to support you with advice and assistance on labeling issues, the preparation and review of product designations and declarations. Do you need expert opinions, certificates or simply competent support in the complex field of food law for your production or further processing? Contact us with confidence.



#### Technical sales team Service has a face

Our creative butchers, technologists and application specialists can provide support at any time with efficient, innovative and individually tailored product solutions, practical tips in the field of industrial manufacturing processes as well as manual applications.



#### Laboratory At the heart of the best quality

At NovaTaste we have three sites at our disposal where research and daily tasks are carried out in our own laboratories. The Holdorf site in Germany has one of the few laboratories in the entire industry with safety level 2, which has the possibility to carry out microbiological tests with pathogenic germs such as Listeria monocytogenes. In addition to the laboratory unit and its ability to carry out challenge and storage tests, this site also includes a product development department, a research facility for food cultures and a 250 m<sup>2</sup> pilot plant that is available for a wide range of customer application tests.

