


Doc. code	PS0701	
Versie	03	
Datum	02/09/2014	
Doc type	Specificaties eindproducten	

Gherkins (Augurken zoetzuur)

1. GENERAL

Name product	Product name		
	▪ Gherkins Whole	425 ml	Hak
	▪ Gherkins Whole	720 ml	Hak
	▪ Gherkins Sticks	720 ml	Hak
	▪ Gherkins Slices	555 ml	Hak

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2. RAW MATERIAL

Parameter	Norms
Origin	Germany
Colour	Yellowish green gherkins in clear or yellow brine
Looks	Fresh green gherkins Fresh smell without any rotten spots
Grade gherkins for whole gherkins 425 ml	43+ pieces per kg
Grade gherkins for whole gherkins 720 ml	38+ pieces per kg
Diameter gherkins for gherkins sticks	42 – 48 mm
Diameter gherkins for sandwich gherkins	32 – 40 mm
Length gherkins for gherkins sticks and sandwich gherkins	10 – 12 cm
Foreign material	Absent
Rotten	Max 0.5%
Crispiness of the gherkins	With a crispy bite
Damaged	Max 1%
Not clean, brown/black spots	Max 1%
Stalks > 1 cm	Determine
Flowers	Absent

3. RECIPE DETAILS

3.1.1 Gherkins whole 425 ml & 720 ml

Ingredient	Recipe (5.000 l)	Supplier	Article number supplier	Allergens
Water	3.879,5 l			No
Vinegar 18%	450 l			No
Sugar	575 kg			No
Salt	88 kg			No
Flavour GG	7,5 kg			No
Gewürze 425 ml: Mustard seeds, red pepper, onion	1,5 – 3,0 g/jar			Mustard
Gewürze 720 ml: Mustard seeds, red	2,5 – 4,0 g/jar			Mustard

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pepper, onion				
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3.1.2 Gherkins sticks 720 ml

Ingredient	Recipe (5.000 l)	Supplier	Article number supplier	Allergens
Water	3.651,82 l			No
Vinegar 18%	500 l			No
Sugar	750 kg			No
Salt	88 kg			No
Flavour A	5,0 kg			No
Flavour B	5,0 kg			No
Riboflavin	0,18 kg			No
Gewürze: Mustard seeds	2,5 – 3,0 g/jar			Mustard

3.1.3 Sandwich gherkins 555 ml

Ingredient	Recipe (5.000 l)	Supplier	Article number supplier	Allergens
Water	3.651,82 l			No
Vinegar 18%	500 l			No
Sugar	750 kg			No
Salt	88 kg			No
Flavour A	5,0 kg			No
Flavour B	5,0 kg			No
Riboflavin	0,18 kg			No
Gewürze: Mustard seeds	2,0 – 2,5 g/jar			Mustard

4. PROCESS CONTROL

4.1

Check the following aspects each hour during production:

* All varieties gherkins 425 ml:

Caps: HAK 82 TO Silver pop up gherkins specification (acid resistant)

Glass: Ardagh Glass, jar size 425 ml

* All varieties gherkins 555 ml:

Caps: HAK 82 TO Silver pop up gherkins specification (acid resistant)


Glass: Ardagh Glass, jar size 555 ml

* All varieties gherkins 720 ml:

Caps: HAK 82 TO Silver pop up gherkins specification (acid resistant)

Glass: Ardagh Glass, jar size 720 ml

Parameter	Unit	LIL ¹	LSL	LCL	Target	UCL	USL	UIL
Temperature brine (fresh)	°C				Ca. 20			
Refraction brine whole gherkins	°Brix		12		13,5		15	


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Refraction brine gherkins sticks	°Brix		15,5		17,0		18,5	
Refraction brine sandwich gherkins	°Brix		15,5		17,0		18,5	
pH brine all gherkins	pH				<3,5			
Acidity brine whole gherkins	%		1,40		1,55		1,70	
Acidity brine gherkins sticks	%		1,75		1,90		2,05	
Acidity brine sandwich gherkins	%		1,75		1,90		2,05	
Salt content brine whole gherkins	%		1,60		1,75		1,90	
Salt content gherkins sticks	%		1,60		1,75		1,90	
Salt content sandwich gherkins	%		1,60		1,75		1,90	

Per tour through production (each hour) check the following parameters:

Parameter	Unit	LIL	LSL	LCL	Target	UCL	USL	UIL
Filling weight spices whole gherkins 425 ml	g			1,5	2,3	3,0		
Filling weight spices whole gherkins 720 ml	g			2,5	3,2	4,0		
Filling weight mustard seed gherkins sticks 720 ml	g			2,5	2,6	3,0		
Filling weight mustard seed sandwich gherkins 555 ml				2,0	2,3	2,5		
Number of gherkins per jar for whole gherkins 425 ml	number			9		14		
Number of gherkins per jar for whole gherkins 720 ml	number			9		12		
Thickness sandwich gherkins	mm			4	5	6		
Length gherkins sticks and sandwich gherkins	mm			100	115	125		
Dirty gherkins	number per 500g				0			
Rotten gherkins	number per 500g				0	1		
Soft / wrinkled	number per 500g				0	1		
Damaged	number per 500g				0	1		
Stalks > 1 cm	number per 500g				0	1		
Crispiness of the gherkins	sensorary				crispy			
Flowers	number per				0			0

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	500g							
Foreign material					Absent			
Head space	mm	2	4	5	6	7	8	
Vacuum after closing	bar		0,20	0,25	0,30	0,50		
Security after closing	mm	2	3	4	5	6	8	

Also checks on:

- Product between cap and jar : no product
- Lacquer damage after closing : no damage
- Operation dud-detector : good
- Registration of batch numbers of raw materials
- Registration of batch numbers of jars
- Registration of batch numbers of caps
- Damage / colour of the caps
- Refreshing of the blanching water
- At the start and during production check the covering of the jar feeding system and the operation of the jar-twister
- Removal of jars and fragments in case of glass breakage
- Mentioning of deviation of general hygiene
- Cleaning / dry blowing of the jars after pasteurisation

4.2 Production- & BBE code

- Side of the cap: production code
Example LT 23815:00267014 2017

4.2.1 Best before end code

Explanation cap code:

Side of the cap: Position 1 indication lot LT
 Position 2 year of production 2014
 Position 3-5 day code 26th of August = 238
 Position 6-9 production time 15:00
 Position 10-11 producer code 26 (code for Stangl)
 Position 12-15 product code Whole gherkins 440 ml: 7014
 Whole gherkins 720 ml: 7017
 Gherkins sticks 720 ml: 7027
 Sandwich gherkins 555 ml: 7035


2017: BBE = year of production + 3 years

4.3 Sterilisation

Pasteurisation whole gherkins 425 ml: 84-88°C / 35-40 min
 Cooling: 18-22 min
 F0-value: 0,5 – 1,2 (B = 93,3°C, z = 8,9)

Pasteurisation whole gherkins 720 ml: 84-88°C / 35-40 min
 Cooling: 18-22 min
 F0-value: 0,5 – 1,2 (B = 93,3°C, z = 8,9)

Pasteurisation gherkins sticks 720 ml: 84-88°C / 35-40 min

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Cooling: 18-22 min
 F0-value: 0,5 – 1,2 (B = 93,3°C, z = 8,9)

Pasteurisation Sandwich gherkins 555 ml: 84-88°C / 35-40min
 Cooling: 18-22 min
 F0-value: 0,5 – 1,2 (B = 93,3°C, z = 8,9)

Resulting sterility:

F0-Value $\geq 0,5$

Acc. to the French Standards: incubation 7 days 37°C and 55°C

After incubation colour and smell normal; pH after incubation same as specs of finished product

4.4 Residu pesticides

The producer monitors the product with a planned analytical plan. Per season a analysis will be performed on raw material that has been used for Hak production **product name**. The results of these analysis will be sent to Hak.

4.5 Process data and sample size

All production records are when required available for Hak. Every 10.000 units 2 jars will be collected as sample to be sent to Hak.


4 Weight / Volume

Volume jar	Unit		Tolerance
425ml Gherkins Whole	gram	380g (e-sign)	-
720ml Gherkins Whole	gram	670g (e-sign)	-
720ml Gherkins Sticks	gram	670g (e-sign)	-
555ml Gherkins Slices	gram	510g (e-sign)	-
Declared weight			
425ml Gherkins Whole	gram	≥ 215	-
720ml Gherkins Whole	gram	≥ 360	-
720ml Gherkins Sticks	gram	≥ 360	-
555ml Gherkins Slices	gram	≥ 285	-
Drained weight			
425ml Gherkins Whole	gram	≥ 215	-
720ml Gherkins Whole	gram	≥ 360	-
720ml Gherkins Sticks	gram	≥ 360	-
555ml Gherkins Slices	gram	≥ 285	-

5 PRODUCT STANDARDS

5.1

Volume jars	Unit		Tolerance
425ml Gherkins Whole	gram	380g (e-sign)	-
720ml Gherkins Whole	gram	670g (e-sign)	-

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720ml Gherkins Sticks	gram	670g (e-sign)	-
555ml Gherkins Slices	gram	510g (e-sign)	-
Ph		3,8	<4,0
Hart Temperature	°C	25 - 40	-
Vacuum	bar	0,25 - 0,60	-

6 MICROBIOLOGICAL CHARACTERISTICS

Parameter	Unit	LIL	LSL	LCL	Target	UCL	USL	UIL
Acidity brine whole gherkins	%		0,60		0,75		0,90	
Acidity gherkins sticks	%		0,65		0,80		0,95	
Acidity gherkins sandwich gherkins	%		0,65		0,80		0,95	
Salt content whole gherkins	%		0,60		0,75		0,90	
Salt content gherkins sticks	%		0,60		0,75		0,90	
Salt content sandwich gherkins	%		0,60		0,75		0,90	
Brix whole gherkins	°Brix		6,5		8,2		9,5	
Brix gherkins sticks	°Brix		7,0		8,5		10,0	
Brix sandwich gherkins	°Brix		7,0		8,5		10,0	


Explanation abbreviations:

LIL en UIL: (if n > 2)	No single jar may be higher or lower than this value. But when a jar is higher or lower than this value, this means disapproval, the production has to be stopped and the problem needs to be solved before further production.
LSL en USL:	Specification limits: No (average at n=>1) value can be higher or lower than this norm. But when a jar is higher or lower than this value, this means disapproval, the production has to be stopped and the problem needs to be solved before further production.
LCL en UCL:	Control limits: When 2 or more measurements exceed these values, the process needs to be adjusted.
Target:	Norm where the target is aimed at, so this is the adjustment of the machine.

Commercially sterile.
See 4.3

7 STORAGE CONDITIONS

Temperature: 10 – 30 °C
Rel. humidity: < 80 %

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8 GOVERNMENTAL LAW

European food law
General Food Law

9 INGREDIENT LIST

9.1 Ingredient declaration on the label

- Gherkins whole:
Ingredients: gherkins, water, vinegar, sugar, salt, onion, mustard seed, pepper, natural flavour.
- Gherkins sticks:
Ingredients: gherkins, water, vinegar, sugar, salt, mustard seed, natural flavour, colour (riboflavin).
- Gherkins slices:
Ingredients: gherkins, water, vinegar, sugar, salt, mustard seed, natural flavour, colour (riboflavin).

10 NUTRITION INFORMATION


Analyses per 100 g

	Gherkins whole 425ml	Gherkins whole 720ml	Gherkins sticks 720ml	Gherkins slices 555ml
Energy kJ	119	123	150	150
Energy kcal	28	29	36	36
Totaal Fat	0,1 g	0,1 g	0,1 g	0,1 g
Of which saturated fat	< 0,1 g	< 0,1 g	< 0,1 g	< 0,1 g
Total Carbohydrates	6,0 g	6,2 g	7,8 g	7,8 g
Of which sugar	6,0 g	6,2 g	7,8 g	7,8 g
Fibres	0,3 g	0,3 g	0,3 g	0,3 g
Total Protein	0,30 g	0,30 g	0,32 g	0,32 g
Salt	0,7 g	0,7 g	0,7 g	0,7 g

10.1 Final product control in the factory

Visual / sensory:

- Filling vegetables: Visually well filled
- Colour : in the whole jar uniform in colour (yellowish green) and uniform in colour with respect to other batches
- Texture: crispy texture (gherkins) / with a bite (gherkins sticks, sandwich gherkins)
- Taste: sweet-sour taste, no off odour of off taste
- Clear, pale clear or yellow brine fluid

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11 SPECIAL DIETARY INFORMATION

Directive 2003/89/EG:

Cereals containing gluten (i.e. wheat, rye, barley, oats, spelt, kamut or their hybridized strains) and products thereof	-
Crustaceans and products thereof	-
Eggs and products thereof	-
Fish and products thereof	-
Peanuts and products thereof	-
Soybeans and products thereof	-
Milk and products thereof (including lactose)	-
Nuts i. e. Almond (<i>Amygdalus communis L.</i>), Hazelnut (<i>Corylus avellana</i>), Walnut (<i>Juglans regia</i>), Cashew (<i>Anacardium occidentale</i>),	-
Pecan nut (<i>Carya illinoiesis (Wangenh.) K. Koch</i>), Brazil nut (<i>Bertholletia excelsa</i>), Pistachio nut (<i>Pistacia vera</i>), Macadamia	-
Nut and Queensland nut (<i>Macadamia Terni folia</i>) and products thereof	-
Celery and products thereof	-
Mustard and products thereof	+
Sesame seeds and products thereof	-
Sulphur dioxide and sulphites at concentrations of more than 10 mg/kg or 10 mg/liter expressed as SO ₂ .	-

+ = presence

- = absent


Alba-list:

Cows milk protein	-	Nut products	-
Lactose	-	Peanut	-
Egg, Egg products	-	Peanut oil	-
Soya	-	Sesame	-
Soya-oil	-	Sesame-oil	-
Gluten	-	Glutamate	-
Wheat	-	Sulphite (E220 t/m E228)	-
Rye	-	Coriander	-
Cow meat	-	Celery	-
Pork meat	-	Carrot	-
Chicken meat	-	Lupine	-
Fish	-	Mustard	+
Shell fish	-		
Corn	-		
Cacao	-		
Pulses	-		

+ = present

- = absent

12 REST

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Genetically modified ingredients Absent
 Ionised ingredients Absent


13 PACKAGING / LABELING

13.1

- Clean dry undamaged jars
 - Label straight, on label level, undamaged and clean, no loose corners
 - Trays: good fold straight, good shrunk, clean, dry, good stack
- One barcode label per tray

13.2

Product	Whole gherkins 425 ml	Whole gherkins 720 ml	Gherkins sticks 720 ml	Sandwich gherkins 555 ml
Brand	HAK Augurken zoetzuur	HAK Augurken zoetzuur	HAK Augurken Sticks zoetzuur	HAK Augurken Schijven zoetzuur
Hak article-number	NL: 72400740 Belgium: 72400741	NL: 72400745 Belgium: 72400746	NL 72400303	NL 72400410
Net weight (gram)	380	670	670	510
Drained weight (gram)	215	360	360	285
EAN-number product	CE 8720600612343	CE 8720600612329	CE 8720600612305	CE 8720600612381
Jar				
Volume	425 ml	720 ml	720 ml	555 ml
Material	Glass	Glass	Glass	Glass
Weight	215	343g	343 g	275 g
Size	96*86mm	144*89 mm	144*89 mm	122 * 86 mm
Cap				
Type	Twist off	Twist off	Twist off	Twist off
Colour	Silver	Silver	Silver	Silver
Material	Metal	Metal	Metal	Metal
Weight	12,1 g	12,1 g	12,1 g	12,1 g
Size	T.O. 82	T.O. 82	T.O. 82	T.O. 82
Label				
Label number	-	-	-	-
Languages	NL + NL/F	NL + NL/F	NL	NL
Tray				
Units per tray	6	6	6	6
Size	260x172x100	269x181x149	269x181x149	260 x172x128
Colour	White	White	White	White
Shrink-wrap	Yes	Yes	Yes	Yes
Print position				
Print on the side				
EAN-number tray	8720600612350	8720600612336	8720600612312	8720600612398

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14 REMARKS

These products are not especially suitable for diabetics or people with a low in sodium diet.
The safety and quality of these products are guaranteed by a certified quality end food safety system.

Date:

H. Sonnemans
QA departement