

Lactic Casein 720 from Fonterra is a granular milk protein suitable for incorporation into a wide range of foods. Lactic Casein 720 is an acid casein produced by controlled natural fermentation of pure, pasteurised skim milk, resulting in precipitation of casein curd. Using a continuous and hygienic process, the curd is extensively washed, then dried and ground to a consistent particle size.

FEATURES

- Completely soluble in alkali
- Versatile and heat stable
- Very good nutritive value
- Low fat and cholesterol levels

SUGGESTED USES

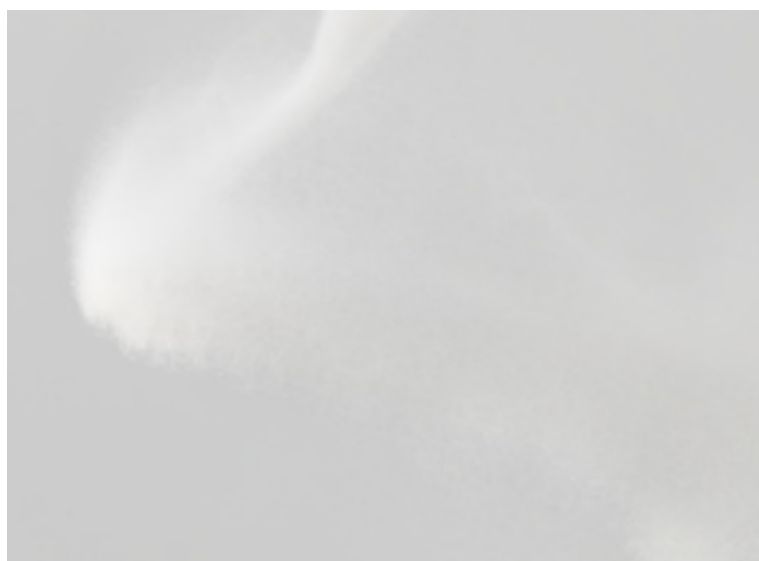
- Coffee whiteners
- Protein fortification
- In-line caseinate conversion

CERTIFICATION

- Halal
- Kosher

ORIGIN

- Product of New Zealand



NUTRITIONAL INFORMATION

TYPICAL

(per 100g of product)

Energy (kJ)	1520
Protein (N x 6.38) (g)	86.9
Moisture (g)	11.5
Fat (g)	1.2
Carbohydrate (g)	0.1

INGREDIENTS (ALLERGENS IN BOLD)

Pasteurised **Cows' milk** from New Zealand.

Country regulations for product labelling vary. Fonterra advises customers that they need to check local regulations to determine the correct labelling of this ingredient.

PACKAGING

Multi-ply paper which incorporates a moisture barrier and contains the product within an inner polyethylene bag. No staples or metal fasteners are used.

- Net Weight: 25 kg
- Gross Weight: 25.36 kg
- Typical Bag Dimension: 79 x 53 x 14 cm



STORAGE AND HANDLING

Caseins are hygroscopic and can absorb odours. Therefore adequate protection is essential. It is recommended that product is stored at temperatures below 25°C, relative humidity below 65% and in an odour free environment. Stocks should be used in rotation preferably within 24 months of manufacture.



Handle
with
care



Store in a
cool, dry
place



Keep
away from
odours

TRUSTED QUALITY

COMPLIANCE:

- Codex STAN 290

Our manufacturing facilities adhere to the highest global standards in food safety and quality, verified through regular internal and external audit programs and accredited with FSSC22000 certification.

Our products and ingredients are tested throughout the supply chain, from milk collection through to final product release, using internationally recognised test methods to verify quality and compliance.

Our products are securely packed in multi-wall bags with three layers of protection and labelled to enable full trace back, so you can trust in the knowledge it was made with care.

HOW TO BUY:

For further information or to purchase NZMP Lactic Casein, please contact your NZMP Account Manager.

NUTRITIONAL ANALYSIS
TYPICAL

(per 100g of product)

Energy	1520 kJ
<i>Calories</i>	365 kcal
Fat	1.2 g
<i>Energy from fat</i>	44 kJ
<i>Calories from fat</i>	11 kcal
<i>Cholesterol</i>	20 mg
<i>Saturated fatty acids</i>	0.8 g
<i>Trans fatty acids</i>	0.06 g
Total Carbohydrate	0.1 g
<i>Lactose</i>	0.1 g
Dietary Fibre	0 g
Ash	1.8 g

VITAMIN ANALYSIS
TYPICAL

(per 100g of product)

Vitamin A	<6	µg
Vitamin C	<0.4	mg
Vitamin D	<0.2	µg

MINERAL ANALYSIS
TYPICAL

(per 100g of product)

Aluminium	0.09	mg
Cadmium	<0.0002	mg
Calcium	21	mg
Chloride	15	mg
Copper	0.1	mg
Inorganic Phosphate	315	mg
Iodine	0.009	mg
Iron	0.2	mg
Magnesium	1.2	mg
Manganese	0.01	mg
Potassium	1.9	mg
Selenium	0.03	mg
Sodium	5.0	mg
Sulphur	674	mg
Total Phosphorous	659	mg
Zinc	3.4	mg

Fonterra does not recommend using the typical vitamin and mineral values that are stated in this Bulletin as a basis for formulating a nutritional product.

The typical values are an average of representative samples taken from across the manufacturing season, and are based on the typical composition.

TYPICAL PHYSICAL PROPERTIES

Bulk Density	0.67 g/ml
Colour	Cream
Flavour	Clean
Particle size	30 mesh

AMINO ACID PROFILE

TYPICAL

(g/100g of protein)

Essential Amino Acids	
Isoleucine	5.3 g
Leucine	9.4 g
Lysine	8.2 g
Methionine	3.1 g
Phenylalanine	5.2 g
Threonine	4.3 g
Tryptophan	1.3 g
Valine	6.6 g
Non-Essential Amino Acids	
Histidine	2.8 g
Alanine	3.0 g
Arginine	3.9 g
Aspartic acid	7.3 g
Cysteine/Cystine	0.6 g
Glutamic acid	22.6 g
Glycine	1.9 g
Proline	10.9 g
Serine	5.9 g
Tyrosine	5.9 g

CHEMICAL	UNITS	TYPICAL	MIN	MAX	REFERENCE METHOD
Protein (N x 6.38) Dry Basis	% m/m	98.0	95.0		Calculation
Moisture	% m/m	11.5		12.0	ISO 5550
Fat	% m/m	1.2		1.5	ISO 5543
Ash	% m/m	1.8		2.2	Gravimetric 600°C
Lactose	% m/m	0.1		0.2	ISO 5548

MICROBIOLOGICAL	UNITS	TYPICAL	MIN	MAX	REFERENCE METHOD
Aerobic Plate Count	cfu/g	<5,000		30,000	ISO 4833-1
Escherichia coli	/g	Not Detected		Not Detected	ISO 11866-1
Yeast and Mould	cfu/g	<10		100	ISO 6611
Coagulase Positive Staphylococci	cfu/g	Not Detected		10	ISO 6888-1
Listeria	/125g	Not Detected		Not Detected	AOAC 051603/ISO 11290-1
Salmonella	/750g	Not Detected		Not Detected	AOAC 061504/ISO 6579

PHYSICAL	UNITS	TYPICAL	MIN	MAX	REFERENCE METHOD
Foreign matter	/50g		Pass		Fonterra
Scorched particles	/50g	A		B	ADPI
Free acidity	ml 0.1N NaOH/g			0.2	
Appearance	Score			Accept	

SENSORY	UNITS	TYPICAL	MIN	MAX	REFERENCE METHOD
Flavour and odour	Typical/ATypical	Typical	Typical		Sensory Analysis

CONTAMINANTS	UNITS	TYPICAL	MIN	MAX	REFERENCE METHOD
Inhibitory Substances	/ml	Not Detected		Not Detected	DELVO SP-NT

Rennet Casein 771 from Fonterra is produced by controlled precipitation of casein from pure, pasteurised skim milk by the action of microbial rennet enzymes. Using a continuous and hygienic process, the curd is extensively washed, thendried and ground to a consistent particle size.

FEATURES

- Very good nutritive value
- Excellent flavour stability
- Low fat and cholesterol levels
- Insoluble in water

SUGGESTED USES

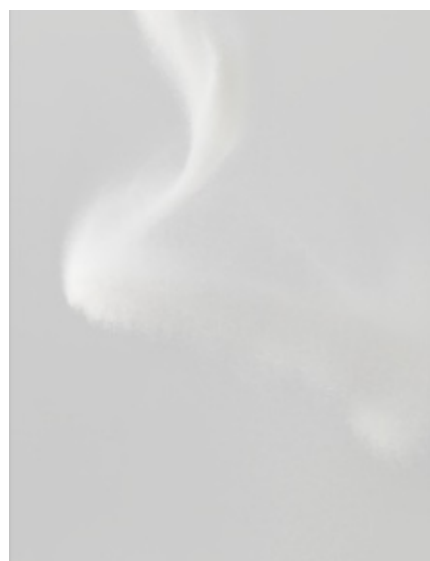
- Imitation cheeses
- Processed cheeses

CERTIFICATION

- Halal

ORIGIN

- Product of New Zealand



NUTRITIONAL INFORMATION

TYPICAL

(per 100g of product)

Energy (kJ)	1420
Protein (N x 6.38) (g)	82.4
Moisture (g)	10.8
Fat (g)	0.5
Carbohydrate (g)	0.1

INGREDIENTS (ALLERGENS IN BOLD)

Pasteurised **Cows' milk**

Country regulations for product labelling vary. Fonterra advises customers that they need to check local regulations to determine the correct labelling of this ingredient.

This dairy ingredient contains the milk of New Zealand cows that graze outdoors on the grass of open pastures, as nature intended.

PACKAGING

Multi-ply paper which incorporates a moisture barrier and contains the product within an inner polyethylene bag. No staples or metal fasteners are used.

- Net Weight: 25.0 kg
- Gross Weight: 25.35 kg
- Typical Bag Dimension: 84 x 53 x 14 cm



STORAGE AND HANDLING

Caseins are hygroscopic and can absorb odours. Therefore adequate protection is essential. It is recommended that product is stored at temperatures below 25°C, relative humidity below 65% and in an odour free environment. Stocks should be used in rotation preferably within 24 months of manufacture.



Handle
with
care



Store in a
cool, dry
place



Keep
away from
odours

TRUSTED QUALITY

COMPLIANCE:

- Codex STAN 290

Our manufacturing facilities adhere to the highest global standards in food safety and quality, verified through regular internal and external audit programs and accredited with FSSC22000 certification.

Our products and ingredients are tested throughout the supply chain, from milk collection through to final product release, using internationally recognised test methods to verify quality and compliance.

Our products are securely packed in multi-ply bags with three layers of protection and labelled to enable full trace back, so you can trust in the knowledge it was made with care.

HOW TO BUY:

For further information or to purchase NZMP Rennet Casein, please contact your NZMP Account Manager.

NUTRITIONAL ANALYSIS

TYPICAL

(per 100g of product)

Energy	1420 kJ
<i>Calories</i>	340 kcal
Fat	0.5 g
<i>Energy from fat</i>	19 kJ
<i>Calories from fat</i>	4 kcal
<i>Cholesterol</i>	20 mg
<i>Saturated fatty acids</i>	0.3 g
<i>Trans fatty acids</i>	0.02 g
Total Carbohydrate	0.1 g
Added sugars	0 g
<i>Lactose</i>	0.1 g
Dietary Fibre	0 g
Ash	8.2 g

MINERAL ANALYSIS

TYPICAL

(per 100g of product)

Aluminium	0.1 mg
Cadmium	<0.0005 mg
Calcium	2935 mg
Chloride	<25 mg
Copper	0.1 mg
Inorganic Phosphate	119 mg
Iodine	0.02 mg
Iron	0.36 mg
Magnesium	96 mg
Manganese	0.12 mg
Potassium	14 mg
Selenium	0.02 mg
Sodium	7.9 mg
Sulphur	645 mg
Total Phosphorous	1721 mg
Zinc	12 mg

VITAMIN ANALYSIS

TYPICAL

(per 100g of product)

Vitamin A	<6	µg
Vitamin C	<0.4	mg
Vitamin D	<0.2	µg

Fonterra does not recommend using the typical vitamin and mineral values that are stated in this Bulletin as a basis for formulating a nutritional product.

The typical values are an average of representative samples taken from across the manufacturing season, and are based on the typical composition.

TYPICAL PHYSICAL PROPERTIES

Bulk Density	0.63 g/ml
Colour	Cream
Flavour	Clean
Particle size	30 mesh

AMINO ACID PROFILE

TYPICAL

(g/100g of protein)

Essential Amino Acids	
Isoleucine	5.1 g
Leucine	9.6 g
Lysine	8.2 g
Methionine	3.1 g
Phenylalanine	5.4 g
Threonine	3.8 g
Tryptophan	1.4 g
Valine	6.6 g
Non-Essential Amino Acids	
Histidine	3.0 g
Alanine	2.9 g
Arginine	4.0 g
Aspartic acid	7.0 g
Cysteine/Cystine	0.7 g
Glutamic acid	22.6 g
Glycine	1.9 g
Proline	11.0 g
Serine	5.7 g
Tyrosine	6.1 g

CHEMICAL	UNITS	TYPICAL	MIN	MAX	REFERENCE METHOD
Protein (N x 6.38) Dry Basis	% m/m	92.1	89.0		Calculation
Moisture	% m/m	10.8		12.0	ISO 5550
Fat	% m/m	0.5		1.5	ISO 5543
Ash	% m/m	8.2	7.5		Gravimetric 825°C
Lactose	% m/m	0.1		0.2	ISO 5548
pH (5% at 20°C)	pH		6.9	7.5	Fonterra

MICROBIOLOGICAL	UNITS	TYPICAL	MIN	MAX	REFERENCE METHOD
Aerobic Plate Count	cfu/g	<5,000		30,000	ISO 4833-1
Escherichia coli	/g	Not Detected		Not Detected	ISO 11866-1
Yeast and Mould	cfu/g	<10		100	ISO 6611
Coagulase Positive Staphylococci	/g	Not Detected		Not Detected	ISO 6888-3
Listeria	/125g	Not Detected		Not Detected	AOAC 051603/ISO 11290-1
Salmonella	/750g	Not Detected		Not Detected	AOAC 061504/ISO 6579

PHYSICAL	UNITS	TYPICAL	MIN	MAX	REFERENCE METHOD
Foreign matter	/50g		Pass		Fonterra
Scorched particles	/50g	A		B	ADPI
Appearance	Score			Accept	

SENSORY	UNITS	TYPICAL	MIN	MAX	REFERENCE METHOD
Flavour and odour	Typical/ATypical	Typical	Typical		Sensory Analysis

CONTAMINANTS	UNITS	TYPICAL	MIN	MAX	REFERENCE METHOD
Inhibitory Substances	/ml	Not Detected		Not Detected	DELVO SP-NT

SaputoProductos
lácteos
(Argentina)

Molfino Hermanos S.A.

Especificación de Producto – Product Specification**XXXXXX**
General**Caseína al cuajo - marca Saputo x 25 kg**
Rennet Casein - Saputo brand x 25 kg**INGREDIENTES** Leche desnatada pasteurizada, cuajo microbiano.**INGREDIENTS** *Skimmed pasteurized milk, microbial enzyme.***CALIDAD FISICOQUÍMICA / PHYSICAL – CHEMICAL PARAMETERS****Valores típicos / Typical values**

Humedad / Moisture %	Max. 12.0
Proteínas base seca / Protein dry basis %	Min. 84
Materia Grasa / Fat %	Max. 2
Sales Minerales, 500/550°C / Ash %	Min. 7.5
Acidez Libre / Free Acidity (ml NaOH 0,1 N / g)	Max. 0.27
pH	6.6 – 7.5
Partículas quemadas en 25 g (Disco) / Scorched particles in 25 g (Disc).	B

CALIDAD MICROBIOLÓGICA / MICROBIOLOGICAL PARAMETERS

Aerobios Mesófilos viables / Total plate count	Max. 30.000 CFU / g
Coliformes / Coliforms (30°C)	Max. 10 CFU / g
Coliformes / Coliforms (45°C)	< 10 CFU / g
Estafilococos aureus cuagulasa positiva / Staphylococcus aureus coagulase positive	Max. 10 CFU / g
Hongos y levaduras / Yeast and molds	Max. 100 CFU / g
Salmonella spp. en 125 g / Salmonella spp. in 125 g	Negativo / Negative


ALMACENAMIENTO / STORAGEConservar en lugar fresco y seco
*Keep in a cool and dry place***VIDA UTIL / SHELF LIFE**

Fecha revisión

2019-08-27

Date revised

Saputo Productos Lácteos (Argentina) - Molfino Hermanos S.A. Valentín Virasoro 2656, 1º Piso, Beccar (B1643HDB) Buenos Aires, Argentina

 Productos lácteos (Argentina)	Especificación de Producto – Product Specification
	Molfino Hermanos S.A.
XXXXXX General	Caseína al cuajo - marca Saputo x 25 kg Rennet Casein - Saputo brand x 25 kg

Para una calidad optima, consumir preferentemente antes de los 24 meses.
 For optimal quality, consume before 24 months.

CARACTERISTICAS ORGANOLÉPTICAS / ORGANOLEPTIC DESCRIPTION

Polvo amorfo, libre de grumos, color blanco libre de partículas extrañas, aroma lácteo.
 Powder free from lumps white colour, without foreign particles, dairy flavor.

PRESENTACION / PACKAGING

25 kg; bolsa interior de polietileno 90 micrones y bolsa exterior 3 pliegos papel kraft (cód 4007552).
 25 kg; interior polyethylene bag 90 microns and exterior bag 3 layers paper kraft (code 4007552).


DESCRIPCIÓN DEL # DE LOTE / LOT # DESCRIPTION

SOBRE EL ENVASE / ON THE CONTAINER	SOBRE LE CAJA / ON THE CASE
Production date: dd / mm / yy	NA
Expiration date: dd / mm / yy	
Lot N°: TP X A 000 ZZZ, donde	
TP: Planta Tío Pujio / Tío Pujio Plant	
X: Línea de envasado / Packaging line	
A: Año / Year	
000: Día juliano / Julian date	
ZZZ: Número de tina-bach / Number of tina-bach	

Dimensión de la bolsa (cm) <i>Bag dimensions (cm)</i>				Configuración del pallet <i>Pallet configuration</i>		
Largo	Ancho	Alto	Diámetro	# de caja/ fila	# de filas	# de cajas
<i>Length</i>	<i>Width</i>	<i>Height</i>	<i>Diameter</i>	<i># of cases / tier</i>	<i># of tiers</i>	<i># of cases</i>
82	45	15	NA	8	7	56

Contacto / Contact	Aseguramiento de Calidad / Quality Assurance
Tel:	(0353) 488 1800
Fax:	(0353) 488 1886
Email	calidad@saputo.com.ar

Fecha revisión	2019-08-27	Date revised
Saputo Productos Lácteos (Argentina) - Molfino Hermanos S.A. Valentín Virasoro 2656, 1º Piso, Beccar (B1643HDB) Buenos Aires, Argentina		

 Productos lácteos (Argentina)	Especificación de Producto – Product Specification
Molfino Hermanos S.A.	
	Caseína al ácido – marca Saputo Acid Casein – Saputo brand

INGREDIENTES Leche desnatada pasteurizada, ácido clorhídrico.

INGREDIENTS Skimmed pasteurized milk, hydrochloric acid.

CALIDAD FISICOQUÍMICA / PHYSICAL – CHEMICAL PARAMETERS

Valores típicos / Typical values

Humedad / Moisture %	Max 12.0
Proteínas base seca / Protein dry basis %	Min. 90.0
Materia Grasa / Fat %	Max. 2.0
Sales Min., 500/550°C / Ash %	Max. 2.2
Acidity (ml of 0.1 N NaOH per gram)	Max.0.27
Partículas tostadas / Scorched particles (Disco)	Max. B
Medida de malla / Mesh size	30

CALIDAD MICROBIOLÓGICA / MICROBIOLOGICAL PARAMETERS

Aerobios Mesófilos viables / Total plate count ufc/g	30.000 Máx
Coliformes / Coliforms (30°C) ufc/g	20 Máx.
Coliformes / Coliforms (45°C) ufc/g	<10
Estafilococos coagulasa positivos ufc/g	<10
Staphylococcus coagulase positive ufc/g	
Hongos y levaduras / Yeast and molds ufc/g	50 Máx.
Salmonella spp./ 125 g	Negativo/Negative
Listeria monocytogenes / 25 g (*)	Negativo/Negative


(*) Analizado semanalmente/weekly analyzed

ALMACENAMIENTO/ STORAGE

Conservar almacenado entre 20 y 25 °C.
Keep in a storage between 20 and 25 °C.

MÉTODO DE DISTRIBUCIÓN/ DISTRIBUTION METHOD

Fecha revisión	2019-01-10	Date revised
Saputo Productos Lácteos (Argentina) - Molfino Hermanos S.A. Valentin Virasoro 2656, 1° Piso, Beccar (B1643HDB) Buenos Aires, Argentina		

 Productos Lácteos (Argentina)	Especificación de Producto – Product Specification
Molfino Hermanos S.A.	
	Caseína al ácido – marca Saputo Acid Casein – Saputo brand

El producto es distribuido en envases herméticamente cerrados, entre 20°C y 25°C hasta la recepción por parte del cliente.

The product is distributed in hermetically closed packages, between 20°C and 25°C until the reception by the client.

VIDA UTIL/ SHELF LIFE

Para una calidad optima, consumir preferentemente antes de los 12 meses.

For optimal quality, consume before 12 months.

CARACTERISTICAS ORGANOLÉPTICAS / ORGANOLEPTIC DESCRIPTION

Polvo amorfo, libre de grumos, color blanco libre de partículas extrañas, aroma lácteo.

Powder free from lumps white colour, without foreign particles, dairy flavor.

INSTRUCCIONES DE USO/ INSTRUCTIONS FOR USE

No aplicable / *Not applicable*

USO PRETENDIDO/ PRETENDEED USE

Producto para uso industrial. Puede utilizarse como ingrediente en otros alimentos.

Product for industrial use. To be used as ingredient for foods.

PRESENTACION/ PACKAGING

Bolsa de papel kraft 3 pliegos con polietileno interior de 90 micrones (código 4000461), con etiqueta, conteniendo 25 kg de producto marca Saputo.


Bag of paper kraft 3 sheet with internal polyethylene 90 micron (code 4000461), with label, containing 25 kg product Saputo marks.

ETIQUETADO/ LABELLING

Datos obligatorios:

- Registro Nacional del Establecimiento (RNE)
- Número de Registro de Senasa
- País de Origen
- Número de Lote
- Fecha de elaboración y/o vencimiento
- Temperatura de Conservación
- Contenido Neto

Fecha revisión	2019-01-10	<i>Date revised</i>
<i>Saputo Productos Lácteos (Argentina) - Molfino Hermanos S.A. Valentin Virasoro 2656, 1º Piso, Beccar (B1643HDB) Buenos Aires, Argentina</i>		

 Productos lácteos (Argentina)	Especificación de Producto – Product Specification
Molfino Hermanos S.A.	
	Caseína al ácido – marca Saputo Acid Casein – Saputo brand

Obligatory Information:

- National Registry of the Establishment (RNE)
- Veterinary Registration Number (Senasa)
- Lot Number
- Production and/or expiry date
- Country of origin
- Conservation temperatura
- Net Weight


DESCRIPCIÓN DEL # DE LOTE/ LOT # DESCRIPTION

SOBRE EL ENVASE / ON THE CONTAINER	SOBRE LE CAJA/ ON THE CASE
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Ejemplo <p style="text-align: center;">L: TP X A 000 ZZZ</p> <p>TP: Planta Tío Pujio/ Tío Pujio Plant X: Línea de envasado/Packaging line A: Año/Year 000: Día juliano/Julian date ZZZ: Número de tina-bach/Number of tina-bach</p>	<p style="text-align: center;">NA</p>
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Dimensión de la bolsa (cm) <i>Bag dimensions (cm)</i>				Configuración del pallet <i>Pallet configuration</i>		
Largo <i>Length</i>	Ancho <i>Width</i>	Alto <i>Height</i>	Diametro <i>Diameter</i>	# de caja/ fila <i># of cases / tier</i>	# de filas <i># of tiers</i>	# de cajas <i># of cases</i>
88	53	14	NA	6	7	42

Fecha revisión	2019-01-10	Date revised
Saputo Productos Lácteos (Argentina) - Molfino Hermanos S.A. Valentin Virasoro 2656, 1º Piso, Beccar (B1643HDB) Buenos Aires, Argentina		

 Productos lácteos (Argentina)	Especificación de Producto – Product Specification
Molfino Hermanos S.A.	
	Caseína al ácido – marca Saputo Acid Casein – Saputo brand

INFORMACION NUTRICIONAL / NUTRITION INFORMATION Porción 30g (2 cucharas de sopa)/Portion 30g (2 soup spoon)

	Cantidad por porción / Per portion	%VD (*)/ %DV (*)	Cantidad por 100 gramos/ Per 100 g
Valor energético/ <i>Energy</i>	106 kcal = 452 kJ	5	355 kcal = 1505 kJ
Carbohidratos/ <i>Carbohydrates</i>	0 g	0	0.4 g
Proteínas / <i>Proteins</i>	26 g	29	85 g
Grasas totales / <i>Fat</i>	0.5 g	1	1.6 g
Grasas saturadas/ <i>Saturated Fat</i>	0.4 g	2	1.5 g
Grasas trans / <i>Trans Fat</i>	0 g	-	0.0 g
Fibra alimentaria/ <i>Fibre</i>	0 g	0	0 g
Sodio / <i>Sodium</i>	3.0 mg	0	9.9 mg

(*) % Valores Diarios con base a una dieta de 2000 kcal u 8400 kJ.

Sus valores diarios pueden ser mayores o menores dependiendo de sus necesidades energéticas.

(*) % of Daily Values are based on a diet of 2000 kcal or 8400 kJ. Its Daily Values can be higher or lower depending on its energetic needs.

Contacto/ Contact	Aseguramiento de Calidad / Quality Assurance
Tel:	(0353) 488 1800
Fax:	(0353) 488 1886
Email	calidad@saputo.com.ar

Fecha revisión	2019-01-10	Date revised
<small>Saputo Productos Lácteos (Argentina) - Molfino Hermanos S.A. Valentin Virasoro 2656, 1º Piso, Beccar (B1643HDB) Buenos Aires, Argentina</small>		