



# Processed Cheese Solutions

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## Factsheet

### High quality starch solutions for processed and analogue cheese

The cheese industry is booming with the production and popularity of processed cheese and analogue pizza cheese rising across the entire EMEA region, especially in the Middle East, North Africa and Eastern Europe. We can help manufacturers and retailers make the most of this growth with our range of cost-effective, high quality ingredients solutions.



## High quality starch solutions for processed and analogue cheese

We cater to a range of different consumer and manufacturer needs; from fast-melting processed cheeses for pizza, to high quality spreadable processed cheese preparations for soft-set cheese triangles. From expert support on ingredient selection to formulation advice, Ingredion can help manufacturers perfect a specific texture characteristic or quality needed for market success. Ingredion's range of cost-effective, high quality ingredient solutions for processed and analogue cheese enables manufacturers to formulate affordable products without compromising eating quality. Our products can help you enhance texture, reduce costs, improve quality and increase health appeal.

### OVERVIEW OF BENEFITS OF INGREDION'S CHEESE SOLUTIONS:

#### COST OPTIMISATION:

- Casein replacement
- Fat replacement
- Yield improvement

#### TEXTURE IMPROVEMENT:

- Improved shredability/cutability
- Better meltability
- Good spreadability of a soft set texture
- Enhanced creaminess
- Texture differentiation

#### PASSIVE NUTRITION:

- Fat replacement

### OUR CAPABILITIES

Ingredion's experts can work with you to build back desired textures after replacing ingredients in a formulation without compromising deliciousness.

We can help you through our:

- Technical know-how and recipe formulation expertise
- Sensory analysis and texture profiling abilities using texture measurements
- CULINOLOGY® expertise - combining the culinary arts with food science to help manufacturers scale up kitchen recipes to mass-produced product formulations
- Extensive texture expertise including the TEXICON®, a unique tool to help understand consumers' texture needs





## Analogue block cheese and processed block cheese

### ANALOGUE BLOCK CHEESE AND PROCESSED BLOCK CHEESE **PRODUCT GUIDE**

**Applications include:** Cheese for pizza and other prepared foods

Cheese slices for burgers

Cheese for salads

Our products in this range provide firmness, shredding, melting, stretching, blistering, gelling, elasticity and flexibility:

PRODUCT	FEATURES	BENEFITS
<b>GEL'N'MELT™ starch</b>	<ul style="list-style-type: none"> <li>Modified starch texturiser for analogue block pizza cheese (E1450)</li> <li>Casein replacer</li> <li>Waxy maize based</li> <li>Helps to build emulsions and meltable gels</li> </ul>	<ul style="list-style-type: none"> <li>Replaces casein for cost reduction</li> <li>High melting and medium gelling properties</li> <li>Provides medium gratability</li> <li>Forms thermo-reversible gels</li> <li>Offers high process flexibility</li> <li>Provides good balance of firmness and meltability in combination with FLOJEL® 60 starch</li> </ul>
<b>FLOJEL® 60 starch</b>	<ul style="list-style-type: none"> <li>Modified starch gelling agent for analogue block pizza and sandwich cheese</li> <li>Protein replacer</li> <li>Maize based</li> <li>Builds fast setting, strong gels</li> </ul>	<ul style="list-style-type: none"> <li>Replaces protein for cost reduction</li> <li>Develops fast setting, strong gels</li> <li>Provides superior gratability</li> <li>Suitable for higher temperature processes</li> <li>Offers stable texture over shelf-life</li> <li>Provides good balance of firmness and meltability in combination with GEL'N'MELT™ starch</li> </ul>
<b>ELASTIGEL™ 1000J starch</b>	<ul style="list-style-type: none"> <li>Modified starch gelling agent for analogue pizza and sandwich cheeses</li> <li>Protein replacer</li> <li>Sago based</li> <li>Builds fast setting, strong gels</li> </ul>	<ul style="list-style-type: none"> <li>Replaces protein for cost reduction</li> <li>Develops fast setting, strong gels</li> <li>Delivers good gratability</li> <li>Offers stable texture over shelf-life</li> <li>Provides good balance of firmness and meltability in combination with GEL'N'MELT™ starch</li> </ul>
<b>PRECISA® GEL 04 starch</b>	<ul style="list-style-type: none"> <li>Modified instant starch gelling agent for block processed cheese (E1412)</li> <li>Protein replacer</li> <li>Sago based</li> </ul>	<ul style="list-style-type: none"> <li>Replaces protein and hydrocolloid for cost reduction</li> <li>Develops fast setting and strong gels</li> <li>Offers high process flexibility</li> <li>Suitable for low temperature processes (80-85°C) and low moisture systems</li> </ul>
<b>PURITY™ 87, N-CREAMER™ 221, NATIONAL FRIGEX®</b>	<ul style="list-style-type: none"> <li>Modified starches for analogue block cheese (E1442)</li> <li>Protein replacer</li> <li>Tapioca based</li> </ul>	<ul style="list-style-type: none"> <li>Provides viscosity, mouthfeel and creaminess</li> <li>Delivers stable texture over whole shelf-life</li> <li>Provides low hot viscosity and bland flavour</li> <li>Offers excellent process resistance and superior freeze/thaw stability</li> </ul>
<b>PRECISA® 655S starch</b>	<ul style="list-style-type: none"> <li>Modified starch texturiser for block processed and analogue cheese slices and shreds (E1440)</li> <li>Tapioca based</li> </ul>	<ul style="list-style-type: none"> <li>Provides elasticity and bendability to processed and analogue cheese slices and shreds</li> <li>Allows development of high quality vegan cheese</li> </ul>
<b>PRECISA® 680 starch</b>	<ul style="list-style-type: none"> <li>Modified starch for analogue block pizza cheese</li> <li>Waxy maize based</li> </ul>	<ul style="list-style-type: none"> <li>Yield improvement without changing the texture of the cheese</li> <li>Improves texture while retaining functional attributes such as shred, stretch and melt in cheese products</li> </ul>
<b>CheeseApp 50, 70 and 80 starches</b>	<ul style="list-style-type: none"> <li>Modified starches for analogue block and block processed cheese</li> <li>Neutral taste</li> <li>Strong gelling capacity</li> </ul>	<ul style="list-style-type: none"> <li>Cost savings through protein reduction</li> <li>Yield improvement through better processability</li> <li>Firm texture</li> <li>Improved appearance, taste and mouthfeel</li> </ul>



# Spreadable processed cheese and cream cheese

## SPREADABLE PROCESSED CHEESE AND CREAM CHEESE PRODUCT GUIDE

Applications include: cheese based spreads (triangle and jar)  
cream based spreads (triangle and jar)

Our products in this range provide creaminess, mouth-coating, stability, non-stickiness to the foil, taste and colour stability.

PRODUCT	FEATURES	BENEFITS
<b>ELASTIGEL™ 1000J starch</b>	<ul style="list-style-type: none"><li>Modified starch gelling agent for spreadable processed cheese preparations</li><li>Protein replacer</li><li>Sago based</li><li>Builds fast setting, strong gels</li></ul>	<ul style="list-style-type: none"><li>Replaces casein for protein reduction</li><li>Develops fast setting, strong gels</li><li>Offers stable texture over shelf-life</li></ul>
<b>FLOJEL® 6o starch</b>	<ul style="list-style-type: none"><li>Modified starch gelling agent for spreadable processed cheese preparations</li><li>Protein replacer</li><li>Maize based</li><li>Builds fast setting, strong gels</li></ul>	<ul style="list-style-type: none"><li>Replaces protein for cost reduction</li><li>Develops fast setting, strong gels</li><li>Suitable for higher temperature processes</li><li>Offers stable texture over shelf-life</li></ul>
<b>NATIONAL™ M2 maltodextrin</b>	<ul style="list-style-type: none"><li>Maltodextrin for spreadable processed cheese</li><li>Tapioca based</li></ul>	<ul style="list-style-type: none"><li>Maintains desired dry matter in cost-effective recipes</li></ul>
<b>N-DULGE® SA1 and N-DULGE® C1 co-texturisers</b>	<ul style="list-style-type: none"><li>Co-texturisers for spreadable processed cheese preparations and cream cheese preparations</li><li>Fat replacers</li><li>Waxy maize and tapioca based</li></ul>	<ul style="list-style-type: none"><li>Improves mouthfeel in light and reduced fat products to create or maintain indulgent textures</li></ul>
<b>PRECISA® GEL o4 starch</b>	<ul style="list-style-type: none"><li>Modified instant starch gelling agent for spreadable processed cheese preparations and cream cheese preparations (E1412)</li><li>Protein replacer</li><li>Sago based</li></ul>	<ul style="list-style-type: none"><li>Replaces protein and hydrocolloid for cost reduction</li><li>Develops fast setting and strong gels</li><li>Delivers good spreadability and smoothness with a soft set</li><li>Offers high process flexibility</li><li>Suitable for low temperature processes (80-85°C) and low moisture systems</li></ul>
<b>PURITY™ 87, N-CREAMER™ 221, NATIONAL FRIGEX®</b>	<ul style="list-style-type: none"><li>Modified starches for processed cheese preparations, cream cheese preparations and analogue block cheese (E1442)</li><li>Protein replacer</li><li>Tapioca based</li></ul>	<ul style="list-style-type: none"><li>Provides viscosity, mouthfeel and creaminess</li><li>Delivers good spreadability</li><li>Delivers stable texture over whole shelf-life</li><li>Provides low hot viscosity and bland flavour</li><li>Offers excellent process resistance and superior freeze/thaw stability</li></ul>

## CONTACT US

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