Benefits of Blends in Cheese Processing

Processed cheese is produced from natural cheese along with other dairy ingredients, emulsifiers, salt, food color and water. While producing processed cheese, salts play a vital role during emulsifying and cooking process. CORINO® melting salt blends provide a range of benefits when used in cheese processing:

- **Regulation of pH**
  The pH value of the processed cheese determines the consistency of the processed cheese. The pH value of processed cheese varies between 5.5 - 6.0 and can be controlled with the use of CORINO blends to achieve the desired value depending on the application.

- **Emulsification**
  Creaming is a complex, melting salt controlled emulsifying step in processed cheese making. CORINO® blends when used in cheese processing act as emulsifying agent to stabilize the milk proteins. Depending on the application, different phosphate blends with varying creaming strengths can be used to control the texture and firmness of the cheese.

- **Ion Exchange Property**
  Specific condensed phosphates have an excellent ion exchange capability that improves the emulsifying properties and solubility of the milk proteins in the processed cheese matrix. The controlled ion exchange creates a stable processed cheese over the entire shelf life.

---

The [Corino®](#) Advantage

We, at Aditya Birla Chemicals (Thailand) Ltd., have designed the CORINO® range of customized Solutions specifically targeted to fulfill your cheese processing requirements for various applications.

- **Offers Ideal Taste**
- **Prevents Water and Fat Separation**
- **Provides Good Texture**
- **Improves Shelf Life**
**Applications in Cheese Processing**

**Block Cheese**

CORINO® is used to provide improved ion exchange properties to block cheese. It provides firm shape, good taste and elasticity to the cheese with easy to shred and slice properties. It protects processed cheese from crystallization and maintains natural appearance over time.

**Sandwich & Burger**

Our CORINO® range of phosphate blends can be used in sliceable processed cheese for sandwich and burgers. It would also help the cheese improve re-melting capability, toasting properties, nonstick on packaging, maintain color and improve product stability.

**UHT Milk, evaporated milk**

Ultra - High Temperature (UHT) milk is pasteurized at a higher temperature than common pasteurization. Bacteria, air, and light are the basic ingredients that cause milk to go bad and lose nutrients. Unlike other food sterilization methods, UHT treatment takes place before packaging. This process minimizes heat penetration problems and allows very short heating and cooling times, while minimizing unwanted changes in the taste and nutritional properties of the milk product. CORINO® UHT milk blends prevent protein sedimentation therefore the stabilization of milk proteins, delay enzyme induced sweet curdling or enzymatic coagulation, and reduce milk tartar development so fewer cleaning cycles.

**Spreadable Processed Cheese**

After selection of natural cheese and other raw materials, our CORINO® range of phosphate blends will be a key raw material for spreadable processed cheese with smooth texture and high creaming suitable for medium to high fat content. CORINO® would also help improve the product stability and consistency of the cheese.

**Pizza & Cheese Analogue**

Using customized CORINO® melting salt blends produces a pizza cheese or cheese analogue with perfect melt, good stretching profile, controlled fat release and easy to shred properties.

---

**OUR CUSTOMISED SOLUTIONS FOR CHEESE PROCESSING**

<table>
<thead>
<tr>
<th>Application</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pizza cheese</td>
<td>CORINO® 11 SC</td>
</tr>
<tr>
<td>Medium cheese stretch</td>
<td>CORINO® 70 PC</td>
</tr>
<tr>
<td>Long cheese stretch</td>
<td>CORINO® 81 SL</td>
</tr>
<tr>
<td>Thermal stable</td>
<td>CORINO® 73 BL</td>
</tr>
<tr>
<td>Quick melt</td>
<td>CORINO® 76 BT</td>
</tr>
<tr>
<td>Spreadable</td>
<td>CORINO® 76 SL</td>
</tr>
<tr>
<td>Cheese spreads</td>
<td>CORINO® 90 SL</td>
</tr>
<tr>
<td>Wedges</td>
<td>CORINO® 90 SS</td>
</tr>
<tr>
<td>Cream cheese / quark</td>
<td>CORINO® 75 SP</td>
</tr>
<tr>
<td>Cheese slices</td>
<td>CORINO® 85 ST</td>
</tr>
<tr>
<td>IWS burger slice</td>
<td>CORINO® 38 BL</td>
</tr>
<tr>
<td>Alkaline</td>
<td>CORINO® 67 BC</td>
</tr>
<tr>
<td>pH correction</td>
<td>CORINO® 45 PR</td>
</tr>
</tbody>
</table>

---

In addition to the above range, we also have an extensive application laboratory which is available to provide custom made solutions to the processed cheese industry. Please contact us for more information.
WHERE WE ARE AROUND THE WORLD

Aditya Birla Chemicals (Thailand) Ltd. is part of one of India’s most respected industrial houses, the Aditya Birla Group.

- US $60+ billions of Revenues
- Fortune 500 company
- Present across 36 Countries
- More than 140,000 Employees worldwide

Aditya Birla Chemicals (Thailand) Ltd. serves customers across the world operating in diverse industries such as food processing, personal consumer products, pulp and paper, detergents, water treatment and more.

OUR CUSTOMISED SOLUTIONS FOR FOOD PROCESSING

**corino**<sup>®</sup>
Phosphates for Cheese

**gusto**<sup>™</sup>
Phosphates for Meat

**pearl**<sup>®</sup>
Phosphates & Non Phosphates for Seafood

**délice**<sup>™</sup>
Phosphates for Bakery

Aditya Birla Chemicals (Thailand) Ltd.
Phosphates Division / Marketing Department
77 Moo 6, Soi Sukhaphiban 1
Poochao Samingprai Road, Samrong
Phra Pradang, Samut Prakan 10130, Thailand
T. +66 2 7042100
F. +66 2 7484970
E. support.phosphates@adityabirla.com
www.adityabirlachemicals.com

This above information and recommendations given by us (ABCTL) is to the best of our knowledge & ability and is intended to provide general notes on our products and their usages. It should not be therefore construed as guaranteeing the specification of the product described or their suitability for a particular application. We expressly request the customer or end users of our products to perform such tests prior to any commercial use or application of our products for specific intended use. No representation, warranty or guarantee is made as to its accuracy, reliability or completeness. No consequential losses shall be entertained by usage of the product.