Benefits of Phosphate Blends in Bakery

Phosphates are widely used as raising agents in the baking industry. By the use of phosphates, the rate of reaction can be regulated, giving rise to a wide range of effects in the finished baked product that give a characteristic texture and colour to the bakery product.

Leavening

Leavening is an important phenomenon required to provide the characteristic texture of bakery products. Chemical leavening depends upon the reaction between an acid and an alkaline source of carbon dioxide, usually sodium bicarbonate. This gives rise to carbon dioxide evolution, and it is the rate at which this gas is produced that determines the amount of rise in the final product. A wide range of phosphate acidulants can be used with differing rates of reaction to give the desired characteristics for various product applications.

The \textit{délice} Advantage

We, at Aditya Birla Chemicals (Thailand) Ltd., have designed the \textit{délice} range of customised phosphates specifically targeted to fulfil your bakery requirements for various applications.

- Enhances Palatability
- Controls Crumb pH
- Controls Crumb Color
- Increases Formulation Tolerance over Yeast Products
**Sponge Cakes**

Our délice range for bakery provides good raising properties across the wide range of sponge conditions. Products have been formulated that are suitable for a wide range of bakery conditions and sizes.

**Speciality Breads**

Speciality breads can require a baking powder that reacts in two stages, to structure the dough and give an extra rise during the baking. délice D21 has been formulated especially to meet these criteria.

**Batter Mixes**

Batter mixes are extremely variable, depending upon the size of the batch to be made up, the handling conditions and the hold time before its use. For larger batches, or more vigorous mixing conditions, a slower acting raising agent and higher strength baking powder is required. délice has been formulated to meet the specific requirements that will give the right raising properties to the batter mix.

**Doughnuts**

Doughnuts require a rapid evolution of carbon dioxide as soon as they hit the hot oil. The short cooking time makes it essential that the acidulant reacts quickly with the bicarbonate. We have developed the délice range to meet the requirements of doughnut applications. If the doughnut batter is to be used over a long period of time, délice can ensure that there is still enough rise left in the mix at the end of its storage to provide correct texture to the product.

### OUR CUSTOMISED SOLUTIONS FOR BAKERY PROCESSING

<table>
<thead>
<tr>
<th>Application</th>
<th>Product</th>
<th>Advantages and properties of the product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Scale Commercial Bakeries</td>
<td>délice S12 Baking Powder</td>
<td>High Carbon dioxide content that gives higher bench tolerance</td>
</tr>
<tr>
<td>Small Scale Commercial Bakeries</td>
<td>délice S22 Baking Powder</td>
<td>Lower Carbon dioxide content for small scale bakery products such as sponge cakes</td>
</tr>
<tr>
<td>Speciality Breads And Batters</td>
<td>délice D21 Baking Powder</td>
<td>Contains two acidulants for two stage aeration suitable for applications such as pizza base, pancakes etc.</td>
</tr>
<tr>
<td>Industrial Bakeries</td>
<td>délice CP Aerator Acidulant</td>
<td>Suitable for applications that require customisation of parameters such as pH and baking strength</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 your bakery processing requirements. 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® Phosphates for Cheese
- gusto™ Phosphates for Meat
- pearl® Phosphates & Non Phosphates for Seafood
- délice™ Phosphates for Bakery

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