FUNCTIONAL INGREDIENTS
FOR MEAT PROCESSING
Benefits of Blends in Meat Processing

Fresh meat with high nutritional value has a limited shelf life, which can be extended by cold storage. However, purge loss, shelf life extension and protein binding are limited with the cold storage process. The use of phosphate blends improves the overall quality of meat to the desired level and provides the following benefits:

- **Retains Moisture**
  After slaughter, pH value of meat products keeps decreasing due to biochemical processes resulting in mineral loss and texture deterioration. Moisture must be retained in the muscle protein to ensure its freshness and tenderness. Phosphate blends restructure the proteins (Actomyosin), thereby, improving its binding properties and water holding capacity. Hence, phosphate blends prevent the purge loss during transportation and storage.

- **Emulsion Stabilization**
  Meat is susceptible to dehydration and reduction in ionic strength. Phosphate blends help in internal protein extraction to delay the denaturisation of unsaturated protein to retain the freshness, taste, appearance and nutrition values of meat and sausage products.

- **Preservation of Colour : Perfect Appearance of Meat**
  Natural oil and fat available in meat is susceptible to oxidation and microbiological spoilage. Thus, delaying these oxidation reactions is necessary to ensure palatability of meat. The excellent preservation properties of phosphate blends are used to ensure longer shelf life and protecting natural taste and colour even after subsequent preparations.

The **gusto™** Advantage

We, at Aditya Birla Chemicals (Thailand) Ltd., have designed the gusto range of phosphates and specifically targeted to fulfill your meat processing requirements for various applications.

**REDUCES COOKING LOSS & IMPROVES COOKING YIELD**

Cooking Loss and Yield Comparison with STTP & gusto

**REDUCES PURGE LOSS**

Purge Loss Comparison with STTP & gusto

**IMPROVES ORGANOLEPTIC PROPERTIES**

Sensory Performance with STTP & gusto
Marinated Beef, Pork and Chicken Meat

Marinade with gusto before cooking ensures retention of natural ingredients and succulence of beef, pork and chicken meat. It also maintains natural juices and flavours present in the meat, thereby preserving the original taste of the meat. Gusto also helps in minimising the drip and cooking losses during meat processing.

Injected Hams and Steaks

For injected ham, gusto has been formulated to dissolve at low temperature of brine solution. The use of gusto in injected hams and steaks achieves an internal protein extraction to improve binding and water holding capacity. Meat retains good appearance, texture and flavour due to lesser purge.

Sausage

We offer blends for minced meat for Sausage & Hotdog application. It requires high meat binding property of Phosphates. We ideally select the different types of Pyro and Tripolyphosphate to offer this Property.

Meat Balls and Nuggets

Gusto provides better binding properties to nuggets and meatballs. The customised formulations provide the perfect shape and elasticity to the nuggets and meat balls. The purge loss during storage is reduced upon use of gusto, which extends the shelf life and retains the freshness of the meat.

<table>
<thead>
<tr>
<th>Application</th>
<th>Product</th>
<th>Advantages and properties of the product</th>
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<tbody>
<tr>
<td>Chicken marinated</td>
<td>Gusto M46</td>
<td>Increase color stability</td>
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<tr>
<td></td>
<td>Gusto M33</td>
<td>Increase water entrapment</td>
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<td></td>
<td>Gusto M53</td>
<td>Improve textural characteristics.</td>
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<tr>
<td>Injection ham</td>
<td>Gusto M38</td>
<td>Prevents paleness and retains natural color of chicken breast</td>
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<td>Gusto M41</td>
<td>Enhances the tenderness of meat</td>
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<td></td>
<td>Gusto M53</td>
<td>Improves the firmness and springiness</td>
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<td></td>
<td>Gusto M38</td>
<td>Prevents drip and moisture loss during storage</td>
</tr>
<tr>
<td>Sausage</td>
<td>Gusto S507</td>
<td>Increase water binding</td>
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<tr>
<td></td>
<td>Gusto S509</td>
<td>Increase color stability</td>
</tr>
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<td></td>
<td>Gusto S22</td>
<td>Reduced sodium residue; prevents drip and moisture loss during storage</td>
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<tr>
<td>Meat ball</td>
<td>Gusto B61</td>
<td>Improve firm texture and meat emulsion</td>
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In addition to the above range, we also have an extensive application laboratory which is available to provide custom made solutions to your meat 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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