TicaPAN® Coating Systems
Better Performance is Here.
And much better here...

Introducing TicaPAN Coating Systems, an Innovative Alternative for Gum Arabic in Panned Confections

There are three separate TicaPAN Coating Systems, one of which will meet your needs:

• TicaPAN® 311 Coating System is a drop-in replacement for gum arabic and acts as a binder for sugar and sugar-alcohol syrups used in hard as well as soft confection coating and panning. Initially designed to replace gum arabic 1:1, TicaPAN 311 has comparable crystallization, binding, and viscosity properties; at the same time, it imparts a whiter shell color during the panning process and lends a crunchy texture to the finished product.

• TicaPAN® Quick Crunch is best used for product improvement over traditionally used gum arabic based confection coatings. It dries faster and produces a shell with superior strength. This, in turn, provides a crunchier texture to the finished product. Experience a piece of candy-coated chewing gum’s crunch and crackle, and you will know the delights of TicaPAN Quick Crunch.

• TicaPAN® Seal is best used as a film-former and functions as an oil and oxygen barrier for panned nuts, chocolate candies, and other oil-containing centers.

Hard panned chewing gum with crunch, jelly beans in rainbow colors, malted milk balls with shine – our favorite sweets benefit from TIC Gums’ patent-pending coating system.

Because of its superior performance, gum arabic (also known as gum acacia) was historically the primary hydrocolloid used in panned candies and chewing gum. It is one of the world's most universally used gums with a history that stretches back thousands of years. Unfortunately, gum arabic is also one of the most difficult gums to source and is subject to unstable pricing, with supplies sometimes impacted due to weather and/or political instability.

These challenges prompted the development of the TicaPAN® Coating System, which offers food manufacturers low-cost, non-gum arabic based systems that exhibit the same or even superior functionality. This innovative solution is used for binding and strengthening the sugar and sugar-alcohol shell in panned confections, and enrobing nuts, malt balls, chocolate candies, and other oil-containing centers.

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The Gum Market at TIC Gums understands that a candy shell or a hard candy coating is important in candy making, and the bottom line: the global confectionery market is on an estimated $120 billion and expected to grow to $147 billion by 2023. Taking hard panned chewing gum, for instance, confectionery manufacturers are well aware of the added benefits of a crunch shell. According to The Flavor Bible, by Karen Page and Andrew Dornenburg, crunchiness is an important component in mouth feel, contributing a pleasing texture with the accompanying sound of vigorous, prolonged chewing. Crunch is an important component in mouth feel, contributing a pleasing texture with the accompanying sound of vigorous, prolonged chewing.

Cake and candy embellishments are another example of the importance of texture in confections. Confectioners and bakers want to position and distinguish their products and confectioners and bakers want to position and distinguish their products and confectioners and bakers want to position and distinguish their products and confectioners and bakers want to position and distinguish their products and confectioners and bakers want to position and distinguish their products and confectioners and bakers want to position and distinguish their products. This innovative hydrocolloid system gives confectioners the crunch and shine they want, and provides confectioners a reliable, low-cost gum arabic substitute. Better costs with the added bonus of comparable or even superior functionality over gum arabic...now that’s a sweet deal indeed.

Consider the features of the TicaPAN® line:

- At least 20% less than the cost of gum arabic
- Up to 20% shorter drying times
- Less reliance on Africa for gum arabic
- Whiter color
- Harder and crunchier shells
- Sugar-free and non-cariogenic
- Available non-GMO

Introduction to TicaPAN Coating Systems, an Innovative Solution for Superior Coating Performance

Hard panned chewing gum with crunch, jelly beans in rainbow colors, malted milk balls with shine – our favorite sweets benefit from TIC Gums’ patent-pending coating system. Because of its superior performance, gum arabic (also known as gum acacia) was historically the primary hydrocolloid used in panned candies and chewing gum. It is one of the world’s most universally used gums with a history that stretches back thousands of years. Unfortunately, gum arabic is also one of the most difficult gums to source and is subject to unstable pricing, with supplies sometimes impacted due to weather and/or political instability.

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There is nothing as desirable or delicious as a bite of creamy chocolate covered candy. Even in times of deep recession, these candy sales experience reliable growth, as consumers and confectioners seek out new and innovative ways to enjoy their favorite treats. TicaPAN 311 and TicaPAN Quick Crunch are used in many confectionary production, from overcoating soaked with milk salts and other oil-based centers to providing a strong, protective oxidative barrier to the candy chocolate layers. This quick-drying feature appeals to chocolate manufacturers.

Concentration vs. Viscosity at Room Temperature

- Gum Arabic
- TicaPAN 311
- TicaPAN Quick Crunch

Whiter color
- Gum Arabic
- TicaPAN 311
- TicaPAN Quick Crunch

Drying time
- Gum Arabic
- TicaPAN 311
- TicaPAN Quick Crunch

Dispersion
- Gum Arabic
- TicaPAN 311
- TicaPAN Quick Crunch

Security of supply
- Gum Arabic
- TicaPAN 311
- TicaPAN Quick Crunch

TicaPAN Value Comparison Table (as compared to Gum Arabic FT)

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<th>TicaPAN Quick Crunch</th>
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<tbody>
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<tr>
<td>Dispersion</td>
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<td>Hardness</td>
<td>Low</td>
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<td>Hardness Equivalent</td>
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<tr>
<td>Color</td>
<td>Poor</td>
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Table 1: TicaPAN Value Comparison Table

Table 2: TicaPAN Value Comparison Table

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For chewing gum applications, TicaPAN 311 is a functional match to gum arabic in texture, drying, and film-forming. TicaPAN Quick Crunch is suited for hard candy shell and its fast-drying attributes that save time during production. For chewing gum with a candy shell, TicaPAN gum bases adhere the shell to the candy center, form and strengthen coatings, and ensure a smooth finished appearance.

The savings of up to 20% compared to traditional gum arabic make TicaPAN ideal for any application where lower cost is critical. However, TicaPAN can improve the look and crunch of gumballs, candy-coated chocolate, or a handful of colorful jelly beans, nuts and other oil-based centers to providing a strong, protective oxidative barrier to the outer chocolate layer. This quick-drying feature appeals to chocolate manufacturers.

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TicaPAN 311 and TicaPAN Quick Crunch are used in many confection production processes, from processing made with bulk nuts and other oil-based centers to providing a strong, protective oxidative barrier to the outer chocolate layer. The quick-drying feature appeals to chocolate manufacturers. Confectioners and bakers want to position and distinguish their products by their appearance and texture, contributing a pleasing texture with the accompanying sound of vigorous, prolonged chewing.

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To order a sample, visit www.ticgums.com/ticapan or call the Gum Gurus® at (800) 899-3953. We will be happy to hear from you.