CREATE FOAM, FROTH AND FUN

FOMATION foaming agents



Develop beverages with rich foam or froth for memorable drinking experiences

Satisfy consumers' thirst for fun with the creamy, smooth mouthfeel and visual excitement of foam or froth. With FOAMATION foaming agents and Ingredion expertise, you can deliver more consumer enjoyment and build a future brimming with new product success.



Fun is rising with naturally sourced **FOAMATION** foaming agents

Your consumers want indulgent, lasting foam in their cappuccinos, beers and frozen carbonated beverages—without chemical-sounding ingredients on the labels. You can replace often-costly propylene glycol alginates (PGAs) or hydrocolloids with naturally sourced FOAMATION foaming agents and achieve superior stability—the key to thick, rich foam.

KEEPING BUBBLES STABLE

FOAMATION foaming agents contain natural surfactants called saponins, which stabilize the water/air interface of bubbles. Without these active foam stabilizers, these bubbles would burst before foam or froth is formed. As indicated on the diagram below, FOAMATION foaming agents prevent bubbles from coalescing, which ensures stabilization for thick, long-lasting foam.

DRY FOAM STABILITY o foaming agent Stabilization foaming agent helps the foam to last longer O air bubble & bursted bubble)0 3. Liquid drainage 1. Coalescence 2 smaller bubbles rise small bubbles gravity drains liquid from in-between slowly to the surface coalesce to form 0 a larger bubble bubble walls Coalescence prevention foaming agent prevents smaller bubbles from 2. Buoyancy 4. Breakage (bursted bubbles) coalescing to larger ones rises to the suface according to thinning of bubble walls causes the 0^{1} Stoke's law bubbles to collapse WITHOUT FOAMING AGENT WITH FOAMATION FOAMING AGENT

EASY FORMULATION

FOAMATION ingredients are liquids that disperse instantly, needing no time for hydration, unlike PGAs. They require low usage levels (ppm), are easy to formulate with in a broad range of pH levels and temperatures, and won't impact taste or aroma. In frozen carbonated beverages, the foaming agent helps entrap more air, improving overrun, or the volume of entrapped air, leading to improved mouthfeel and cost efficiencies.

SOURCE OF CONFIDENCE

Naturally sourced FOAMATION foaming ingredients are cultivated by the industry's leading supplier of quillaja and yucca products, using responsible and sustainable agriculture practices certified by the Forest Stewardship Council. Ingredion brings you this 35-year heritage of quality, ensuring you have a consistent, reliable supply of these ingredients, as well as unparalleled insights, formulation and applications expertise.

FIND OUT MORE: ingredion.com.au | ingredion.co.nz

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LEVERAGE OUR CAPABILITIES:









KNOW YOUR YS AND QS

Two FOAMATION foaming agents are currently available to meet your formulation needs:

FOAMATION Y foaming agent is made from yucca extract from the Mohave yucca plant.

- In the U.S., it is approved for use in beverages and ideal in frozen carbonated beverages*
- It is non-GMO and kosher

FOAMATION Q foaming agent is made from quillaja extract from the Chilean soapbark tree.

- In the U.S., it is approved for use in non-alcoholic and alcoholic beverages and in a variety of food applications*
- In Canada, FOAMATION Q foaming agent is approved for use in nonalcoholic and alcoholic beverages (excluding beer)*
- · It is non-GMO and kosher



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^{*}For specific applications and regulations, please contact your Ingredion representative