

FOAMATION™ Q 200

Description:

FOAMATION™ Q 200 foaming agent is a naturally sourced extract of the quillaia tree that is native to Chile. It offers the ability to produce dense, frothy foams in beverages that hold longer and are more stable compared to foams produced by hydrolyzed protein, gums or stabilizer systems. FOAMATION™ Q 200 contains invert sugar and it is standardized with JECFA specifications hence it is also standardized in performance.

Appearance:

Color Dark Brown
 Form Liquid
 Taste/Odor Bittersweet at some levels

FEATURES	BENEFITS
<p>FOAMATION™ Q 200 comes in a liquid form and instantly disperses requiring no time for hydration. This natural foaming agent is high in surface active saponins and therefore used in low dosage levels. It is active across a broad range of pH and temperatures.</p> <p>FOAMATION™ Q 200 is non-GM.</p> <p>Manufactured in a world class production facility certified to Kosher, Halal, ISO9001, HACCP, ISO 22000, IMO, OMRI, FSC (Forestry Stewardship Council). All relevant certificates available on request.</p>	<ul style="list-style-type: none"> • Superior long lasting foam • Label friendly alternative to chemical-based foaming agents • Consistent performance • Cost effective • Process convenient, easy to disperse • Easy to formulate with • Sustainable supply chain

APPLICATION AND USAGE INFORMATION

Label declaration recommendation:

Quillaia Extract

Note: Invert Sugar is used as a processing aid to standardize FOAMATION™ Q 200. It may not be necessary to label on finished beverage

Product handling:

FOAMATION™ Q 200 is in liquid form and therefore easy to use. FOAMATION™ Q 200 can be added directly to the beverage or concentrate.

Effective Date: 06.01.2015 [1]

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Recommended use levels in Europe (*):

FOAMATION™ Q 200 can be used in a maximum dosage of 0.4 g per l liter in flavoured beverages. To meet Regulatory limits in Europe, the maximum use level is calculated using the high end of specification for “Loss of Drying”. For anhydrous extract content in a specific batch, please refer to the Certificate of Analysis.

Typical usage levels:

Carbonated beverages	: 0.04g – 0.06 g/l
Juice drinks	: 0.04 – 0.08 g/l
Frozen carbonated beverages	: up to 0.4 g/l (***)
Fruit concentrate/syrup	: up to 0.4 g/l (depends on concentration in ready to drink beverage)
Barley drink	: 0.14 – 0.22 g/l

Recommended use levels / Middle East & Africa ():**

FOAMATION™ Q 200 can be used in a maximum dosage of 0.385 g per kg in flavoured beverages and in 0.26 g per kg in semi-frozen beverages. To meet Regulatory requirements under Codex Alimentarius the maximum use level is calculated using the higher end of specification for “Saponin (Dry Basis)” and “Loss of Drying”. For a batch specific maximum usage level please refer to “Saponin (Dry Basis)” and “Loss of Drying” information provided on the Certificate of Analysis.

Typical usage levels:

Carbonated beverages	: 0.04g – 0.06 g/kg
Juice drinks	: 0.04 – 0.08 g/kg
Frozen carbonated beverages	: up to 0.26 g/kg (***)
Fruit concentrate/syrup	: up to 0.385 g/kg (depends on dilution factor in ready to drink beverage)
Root beer / Barley drink	: 0.14 – 0.22 g/kg

Usage levels of FOAMATION™ Q 200 can vary greatly depending on the beverage composition and the desired amount and quality of the foam.

ADDITIONAL TECHNICAL INFORMATION

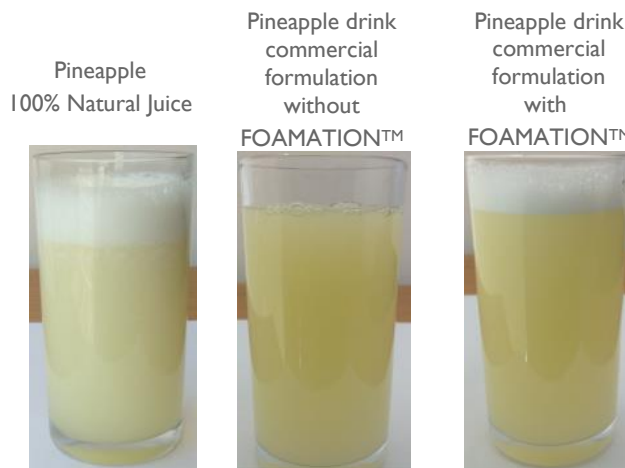
Photos of beverages with and without FOAMATION™ Q 200



Foodservice:
Cola-type beverage
after 10 min
without FOAMATION™



Foodservice:
Cola-type beverage
after 10 min
with FOAMATION™



Pineapple
100% Natural Juice

Pineapple drink
commercial
formulation
without
FOAMATION™

Pineapple drink
commercial
formulation
with
FOAMATION™

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REGULATORY GUIDELINES

Application summary Europe (*)

Under regulatory status Europe (*) E999⁽¹⁾ is permitted⁽²⁾ for use in flavoured drinks and cider & perry (excluding cidre bouché) to a maximum level of 200 mg/l as an anhydrous extract⁽³⁾.

Application details Europe (*)

Beverages: Permitted In	Beverages: <u>Not</u> Permitted In
Flavoured drinks: Carbonated & non-carbonated drinks, concentrates such as fruit syrups, squashes and cordials, and powders for their preparation. Water-, dairy-, cereal-, vegetable - and fruit-based flavoured drinks, including so-called "sport," "energy" or "electrolyte" drinks. May contain "probiotic ferments and ingredients".	Water, including natural mineral water as defined in Directive 2009/54/EC and spring water and all other bottled or packed waters
	Fruit juices as defined by Directive 2001/112/EC and vegetable juices
	Fruit nectars as defined by Directive 2001/112/EC and vegetable nectars and similar products
	Coffee, tea, herbal and fruit infusions, chicory; tea, herbal and fruit infusions and chicory extracts; tea, plant, fruit and cereal preparations for infusions, as well as mixes and instant mixes of these products
	Alcoholic beverages. This includes alcohol-free and low-alcoholic counterparts for beer and malt beverages, wine, cider and perry, fruit wine, mead and aromatised wine-based products.
Cider & Perry: Fruit wine made from apples (cider) and pears (perry)	Unflavoured soy drinks

Ref:

(*) Includes EU-28, Bosnia, Russia, Kazakhstan, Belarus, Ukraine, Iceland, Macedonia, Montenegro, Norway, Serbia, Switzerland, Egypt, Morocco, Israel, Tunisia; (**) Includes Algeria, Ethiopia, Kenya, Nigeria. Quillaia Extract is not permitted in South Africa; (***) In case the maximum legal dosage of FOAMATION™ Q 200 doesn't provide sufficient results you may consider testing Q-NATURALE® 200V up to the dosage of 0.95 g/l.

(1) Regulation (EU) 231/2012 on specifications for food additives; (2) Regulation (EU) 1333/2008 on food additives; (3) Regulation (EU) No 1129/2011 - Annex II; Listed for use under flavoured drinks (14.1.4) and cider and Perry (14.2.3); (4) JECFA

Specifications, Quillaia Extract (Type I), prepared at the 61st JECFA 2003;

(5) Codex GSFA 2016, <http://www.fao.org/fao-who-codexalimentarius/standards/gafa/en/>

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Application summary Codex / Middle East & Africa ()**

Under regulatory status Codex / Middle East & Africa (**) INS999(i)⁽⁴⁾ is permitted for use in water based flavoured drinks to a maximum level of 50 mg/kg on saponin basis & 130 mg/kg (dry basis) in semi-frozen beverages ⁽⁵⁾.

Application details Codex / Middle East & Africa ()**

Beverages: Permitted In	Beverages: <u>Not</u> Permitted In
Water based flavoured drinks, including "sport," "energy" or "electrolyte" and particulated drinks. Includes all carbonated and non-carbonated varieties and concentrates. Includes products based on fruit and vegetable juices. Also, includes flavoured coffee-, tea- and herbal-based drinks.	Water, including natural mineral waters, source waters, table waters and soda waters
	Fruit juices and vegetable juices
	Fruit and vegetable nectars
	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal & grain beverages including cocoa. Includes the ready-to-drink products (e.g., canned), and their mixes and concentrates.
	All alcoholic beverages, including alcohol-free and low-alcohol counterparts

Ref:

(*) Includes EU-28, Bosnia, Russia, Kazakhstan, Belarus, Ukraine, Iceland, Macedonia, Montenegro, Norway, Serbia, Switzerland, Egypt, Morocco, Israel, Tunisia; (**) Includes Algeria, Ethiopia, Kenya, Nigeria. Quillaia Extract is not permitted in South Africa;

(***) In case the maximum legal dosage of FOAMATION™ Q 200 doesn't provide sufficient results you may consider testing Q-NATURALE® 200V up to the dosage of 0.95 g/l.

(1) Regulation (EU) 231/2012 on specifications for food additives; (2) Regulation (EU) 1333/2008 on food additives; (3) Regulation (EU) No 1129/2011 - Annex II; Listed for use under flavoured drinks (14.1.4) and cider and Perry (14.2.3); (4) JECFA Specifications, Quillaia Extract (Type 1), prepared at the 61st JECFA 2003;

(5) Codex GSF 2016, <http://www.fao.org/fao-who-codexalimentarius/standards/gsf/en/>

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Ingredion UK Limited
 Ingredion House
 Manchester Green
 339 Styal Road
 Manchester M22 5LW
 England

P: +44 (0) 161 435 3200
 F: +44 (0) 161 435 3300

Registered in England No. 07315745

Ingredion Germany GmbH
 Grüner Deich 110
 20097 Hamburg
 Germany

P: +49 (0) 40 23 91 50
 F: +49 (0) 40 23 91 51 70

Amtsgericht Hamburg HRB 105432

Ingredion South Africa (Pty) Ltd
 Infinity Office Park, Suite 6, Block C,
 2 Robin Close, Meyersdal, 1448,
 Gauteng
 RSA

P: +27 (0) 11 867 9260
 F: +27 (0) 11 867 9271

Registration number 2010/013219/07

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