

GUM ACACIA— & EMULSION

GUM ACACIA 383 I



Acacia gum is a natural ingredient used in the beverage industry to improve emulsions. Gum acacia is a 100% natural and vegetal hydrocolloid, coming from acacia trees. It presents many functional and active properties as an emulsifier that will be key to obtain a successful emulsion.

Alland & Robert reference **INSTANT SOLUBLE GUM ACACIA 383I** is dedicated to a usage in soft drinks, which are obtained after a dilution of oil-in-water emulsion with carbonated water, sucrose or sweeteners.

PRODUCTS BENEFITS

- 100% all natural, all vegetal and GMO free product, with constant traceability.
- 100% acacia gum, no additives added.
- A synergistic blend which combines emulsifying properties of both seyal and senegal acacia gums.
- A product that ensures emulsification of essential oils droplets in beverages.
- A product that contributes to the stabilization of dispersed droplets in emulsions.
- Cost-saving quality, cheaper than regular senegal grades that are used for emulsions.

ALLAND & ROBERT SERVICES

- A strong expertise on acacia gum thanks to a dedicated R&D team, research programs and exclusive partnerships with globally recognized universities.
- Production and laboratory that reach the highest quality standards through international certifications.
- A commitment to develop the quality of products through sustainable development, social investment and environmental awareness.
- Solid partnerships with an extensive network of African suppliers to ensure security of supply.

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COMPOSITION

Gum ACACIA 383 i	20 % D.M. w/w
Water	64.3 % w/w
Citric acid	0.5 % w/w
Sodium benzoate	0.2 % w/w
Oil phase (colourings and/or flavours)	7.5 % w/w
Estergum 8BG(weighting agent)	7.5 % w/w
Blend n°1	Blend n°2
- Gum acacia	- Oil phase
- Citric acid	- Estergum 8BG
- Sodium benzoate	
- Water	

MANUFACTURING PARAMETERS

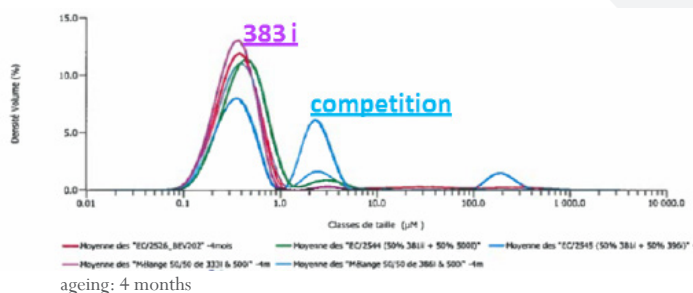
Blend n°1	high speed mixer (i.e. Ultra Turrax for 4 min.)
High-pressure homogenisation	NIRO SOAVI NS1001L 2 stages (400 Bars + 50 Bars)

MANUFACTURING PROCESSES

Disperse the gum acacia in the aqueous phase under stirring and wait for 3 hours at least the complete hydration of the gum. Add the blend made with essential oil(s) and weighting agent under stirring (with a Turrax or a Silverson for example). This premix phase is very important.

Homogenise the preparation with the high pressure homogeneizor, (NIRO SOAVI NS1001L – first stage: 270 Bars, second stage: 30 Bars). This o/w emulsion can be dosed in sucrose syrup (containing citric acid and preservatives) to make an aroma for soft drinks or spray dried to make encapsulation.

EMULSIONS STABILIZATION BY GUM ACACIA 383 I



Alland & Robert's research has shown that Instant Soluble Gum Acacia 383 I has a similar stabilization functionality compared regular senegal acacia gum. However, it is less expensive as it is a blend of seyal and senegal qualities.

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