

### 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 that 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 —	
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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	
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## MANUFACTURING PARAMETERS

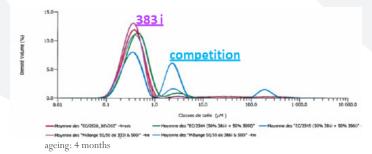
Blend n°1	high speed mixer (i.e. Ultra Turrax for 4 min.)
High-pressure homogenisation	NIRO SOAVI NS1001L 2 stages (400 Bars + 50 Bars)

# 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.

