ACACIA SENEGAL GRADE

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 references INSTANT SOLUBLE GUM ACACIA 396I or SPRAY DRIED GUM ACACIA 396A are dedicated to the stabilization of oil in water emulsions.

PRODUCTS BENEFITS

- 100% all natural, all vegetal and GMO free product, with constant traceability.
- 100% acacia gum, no additives added.
- A product that reduces the surface tension between the dispersed and continuous phases of an emulsion.
- Contribution to the stabilization of dispersed droplets with electrostatic or steric effects.

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.
Disperse the gum acacia in the aqueous phase under stirring and wait for 3 hours at least to 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 homogenizer, (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.

**ACACIA GUM ACTION ON EMULSIONS**

**Continous phases : water**  
Thickening agent = Gum Acacia

**Gum Acacia**

**Dispersed phase : oil**  
Tensioactive = Gum Acacia

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**MANUFACTURING PROCESSES**

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**MANUFACTURING PARAMETERS**

<table>
<thead>
<tr>
<th>Blend n°1</th>
<th>Blend n°2</th>
</tr>
</thead>
</table>
| - Gum acacia  
- Citric acid  
- Sodium benzoate  
- Water | - Oil phase  
- Estergum 8BG |

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**COMPOSITION**

<table>
<thead>
<tr>
<th>Gum ACACIA 396i or 396A</th>
<th>20 % D.M. w/w</th>
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<tbody>
<tr>
<td>Water</td>
<td>64.3 % w/w</td>
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<tr>
<td>Citric acid</td>
<td>0.5 % w/w</td>
</tr>
<tr>
<td>Sodium benzoate</td>
<td>0.2 % w/w</td>
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**Oil phase (colourings and/or flavours)**  
| 7.5 % w/w |

**Estergum 8BG(weighting agent)**  
| 7.5 % w/w |

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