The tender leaf of *Centella asiatica*, a spontaneous herbaceous plant also known as Gotu kola or Indian Pennyworth, is collected from Madagascar and contains several active molecules endowed with biological activity both for topical and oral applications. The most characteristic chemical compounds are the triterpenes as *asiaticoside*, *asiatic acid*, *madecassoside* and *madecassic acid*, but several biologically active polyphenols are also present in the leaf.
Since ancient times, *Centella asiatica* has been traditionally used in Indian and Chinese medicine for various disorders, in particular for healing wounds. It is from Madagascar that Indena has selected the best *Centella asiatica* quality. Co-financing opportunities are also available for centella derivatives users willing to share Indena’s sustainable approach.

### CENTEVITA™

**CHARACTERISTICS**

**HPLC CONTENT**  
≥45.0% of the sum of asiaticoside, madecassoside, asiatic acid and madecassic acid. Polyphenols for information only.

**FORM**  
greenish powder

**LEVEL OF USE**  
0.1 – 1%

**SOLUBILITY**  
soluble in alcohol 50° (v/v), slightly soluble in water, propylene glycol, glycerin

**INCI/CTFA**  
centella asiatica leaf extract

### PLUS

- ECOCERT VALIDATED
- COMBINATION OF ALL FOUR TERPENOIDS INCLUDING MADECASSOSIDE
- BIOACTIVE POLYPHENOLS
- PROMOTION OF COLLAGEN TYPE I AND III SYNTHESIS
- VALIDATED AS ANTI-GLYcation AND ANTI-INFLAMMAGING
- SPECIFICALLY TAYLORED FOR PRODUCTS WITH A GREEN CLAIM

### MADECASSOSIDE

**CHARACTERISTICS**

**HPLC CONTENT**  
≥95.0 of madecassoside and terminoloside

**FORM**  
white / off white powder

**LEVEL OF USE**  
0.1 – 0.5%

**SOLUBILITY**  
soluble in water and ethanol

**INCI/CTFA**  
madecassoside

### CENTEROX™

**CHARACTERISTICS**

**HPLC CONTENT**  
≥50.0% ≤70.0% of madecassoside and terminoloside,  
≥10.0% ≤20.0% of asiaticoside,  
≥70.0% ≤90.0% of sum of madecassoside, terminoloside and asiaticoside

**FORM**  
off white powder

**LEVEL OF USE**  
0.1 – 0.5%

**SOLUBILITY**  
freely soluble in water, ethanol 50° (v/v), soluble in propylene glycol and glycerin

**INCI/CTFA**  
madecassoside<sup>(A)</sup>, asiaticoside<sup>(B)</sup>
## Asiaticoside

<table>
<thead>
<tr>
<th>Characteristics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HPLC Content</strong></td>
<td>≥36.0 ≤44.0% of asiaticoside</td>
</tr>
<tr>
<td><strong>Form</strong></td>
<td>White powder</td>
</tr>
<tr>
<td><strong>Level of Use</strong></td>
<td>0.1 – 1%</td>
</tr>
<tr>
<td><strong>Solubility</strong></td>
<td>Very soluble in propylene glycol, ethoxydiglycol, ethoxydiglycol / water [w/w 1:1]; soluble in ethanol 50% [v/v], glycerin, butylene glycol, polyethylene glycol 400, polyethylene glycol 600</td>
</tr>
<tr>
<td><strong>INCI/CTFA</strong></td>
<td>Asiaticoside</td>
</tr>
</tbody>
</table>

## Centella Asiatica Selected Triterpenes

### PhytoSomes®

<table>
<thead>
<tr>
<th>Characteristics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HPLC Content</strong></td>
<td>≥36.0 ≤44.0% of asiaticoside, ≥56 ≤64.0% of genins as a sum of asiatic acid and madecassic acid</td>
</tr>
<tr>
<td><strong>Form</strong></td>
<td>White powder</td>
</tr>
<tr>
<td><strong>Level of Use</strong></td>
<td>0.1 – 1%</td>
</tr>
<tr>
<td><strong>Solubility</strong></td>
<td>Soluble in propylene glycol, ethoxydiglycol, polyethylene glycol 600, polyoxyethylene sorbitan monooleate</td>
</tr>
<tr>
<td><strong>INCI/CTFA</strong></td>
<td>Asiaticoside(H), asiatic acid(B), madecassic acid(C)</td>
</tr>
</tbody>
</table>

## Centella Asiatica Selected Triterpenes

<table>
<thead>
<tr>
<th>Characteristics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HPLC Content</strong></td>
<td>≥85.0% of asiaticoside</td>
</tr>
<tr>
<td><strong>Form</strong></td>
<td>Yellow powder</td>
</tr>
<tr>
<td><strong>Level of Use</strong></td>
<td>0.1 – 0.5%</td>
</tr>
<tr>
<td><strong>Solubility</strong></td>
<td>Very soluble in propylene glycol, ethoxydiglycol, ethoxydiglycol / water [w/w 1:1]; soluble in ethanol 50° (v/v), glycerin, butylene glycol, polyethylene glycol 400, polyethylene glycol 600</td>
</tr>
<tr>
<td><strong>INCI/CTFA</strong></td>
<td>Asiaticoside</td>
</tr>
</tbody>
</table>

*Solubility is defined according to EP.*