QS-NCS-009-MC

QS-NCS-009-MC is a modified version of the Nano-Cellulose that has been blended with specific additives to change & enhance the performance of QS-NCS-009-RC and be more user friendly for the end users.

These modifications are made during the mechanical & chemical pretreatment part of the proprietary manufacturing process.

Characteristics

- Biodegradable
- Intensifying
- Self-assembly
- High surface activity

Specifications

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Light yellow liquid solution/hydrogel</td>
</tr>
<tr>
<td>Fiber diameter (nm)</td>
<td>≤ 20</td>
</tr>
<tr>
<td>Length to diameter ratio</td>
<td>≥ 500</td>
</tr>
<tr>
<td>PH</td>
<td>6 - 8</td>
</tr>
<tr>
<td>Concentration (%)</td>
<td>3.5% ± 0.5%</td>
</tr>
<tr>
<td>Zeta Potential</td>
<td>-63 mV</td>
</tr>
</tbody>
</table>

Application Benefits

QS-NCS-009-MC can be widely used in fiber, resin, plastic and organic / inorganic nano-hybrid materials.

For the papermaking industry, nano-cellulose is a natural and environmentally friendly nano-additive. Its adding into the pulp or coating on paper surface will improve the surface & tensile strength, the smoothness and permeation resistance.

As well as the performance enhancements, the Nano-Cellulose will able you to replace other more harmful additives and at the same time, increase the number of cycles a paper for example, can be processed and improve the picking data.
Suggestion for Paper

**QS-NCS-009-MC** can be added into paper pulp and be suitable for pulps that both weak in acidity and weak alkalinity, as it’s available in both a positive and negative ion-charge.

Add 5-8kg solution per ton of paper into the pulping machine and disperse evenly.

As the Nan-Cellulose has already been blended with other additives already, there’s no real need to add further additives, however, if required, there will be no problem with blending/mixing them together.

Packing, Transportation and Storage

1-ton tank or as per customer requirement.

Store the product in a cool and well-ventilated place and prevent exposure to direct sunlight, as due to the natural biomass composition of the Nano-Cellulose, which makes it perform so well, the shelf life will be 3 months. However, when stored correctly, for example, in a refrigerated area, the shelf life will be extended.