CEKOL® 150 Cellulose Gum

Description
Cekol® 150 is a highly purified Sodium Carboxymethylcellulose. It is a tasteless and odourless thickener, stabilizer or dispersant.

Standard packaging
All packaging material complies with FDA and EU food contact legislation.

Regulatory compliance
Cekol® 150 Complies with the requirements contained in the following regulations and standards:
- Food Chemicals Codex
- 21 CFR 182.1745 (US FDA)
- JECFA
- Purity criteria in the current EU Regulations
- Japan's Specifications and Standards for Food Additives
- National Standard of the People's Republic of China.

Cekol® 150 also conforms to the monographs of “Carmellose Sodium” or “Carboxymethylcellulose Sodium” in the current
- Ph. Eur.
- USP/NF
- JP

Manufactured under U.S. FDA cGMP.
INCI name: Cellulose Gum.

Labeling information
Cekol® 150
Cellulose Gum, Sodium Carboxymethyl Cellulose.
CAS number 9004-32-4.
E-466 for use in food.

Cekol® 150 is Kosher and Halal certified.

Storage conditions/
Shelf life
Store in a roofed and well-ventilated area in the unopened original package.
Shelf life for Cekol® 150 products is 36 months from the date of manufacture.

However, as a result of a natural process the viscosity of Cellulose Gum may decrease in time. We guarantee that the product will meet the viscosity specification for 12 months after the indicated "Manufacturing Date". After these 12 months the product can still be used safely up to the indicated shelf life end date, but may need a slight dosage correction in order to give optimum performance in the application.

Documentation
Further details appear from Product Specifications:
- Purity Specifications 001 for CEKOL, Cellulose Gum (Sodium Carboxymethylcellulose) grades in food applications
- Purity Specifications 002 for CEKOL, Cellulose Gum (Carboxymethylcellulose Sodium, Carmellose Sodium) grades in pharma applications

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Test methods are available upon request. CP Kelco reserves the right to use company test methodology.

Production Facilities
Possible production facilities of CP Kelco:
CP Kelco Äänekoski, Finland
CP Kelco Taixing, China

Specifications

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Specification</th>
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</thead>
<tbody>
<tr>
<td>NaCMC content (dry basis)</td>
<td>min. 99.5%</td>
</tr>
<tr>
<td>Moisture as packed</td>
<td>max. 10%</td>
</tr>
<tr>
<td>Sodium chloride content (dry basis)</td>
<td>max. 0.5%</td>
</tr>
<tr>
<td>Sodium glycolate content (dry basis)</td>
<td>max. 0.4%</td>
</tr>
<tr>
<td>Degree of substitution</td>
<td>0.75 – 0.85</td>
</tr>
<tr>
<td>Sodium content, %</td>
<td>7.5 – 9.0</td>
</tr>
<tr>
<td>Sulphated ash content, %</td>
<td>24.0 – 27.0</td>
</tr>
<tr>
<td>pH (1% solution)</td>
<td>6.5 – 8.0</td>
</tr>
<tr>
<td>Viscosity, 2%, 25°C</td>
<td>150 – 300 mPa.s</td>
</tr>
<tr>
<td>Brookfield LV</td>
<td></td>
</tr>
</tbody>
</table>

Other characteristics
White to cream powder
Odourless
Neutral taste
Typical particle size:
> 0.075 mm : 40-75%
> 0.5 mm : max 2%