

Product Specification Sheet

Product line:
Chitoceuticals

Product: Chitosan Oligomer
 CAS: 9012-76-4
 Product No.: 44009
 Storage conditions: < 25 °C, dry and well closed
 Shelf life: 36 months
 Valid from: 01.07.2011

Parameter
Method
Specification

| | | |
|--|----------------|--|
| Appearance of solid product | HMC QK-PA-0001 | white to yellow |
| Appearance of solution | HMC QK-PA-0002 | clear, colorless to slightly yellowish |
| Degree of deacetylation | HMC QK-PA-0014 | ≥ 75 % |
| Viscosity (1 % in 1 % acetic acid, 20 °C) | HMC QK-PA-0004 | ≥ 5 mPas |
| pH (1% in water, 20 °C) | HMC QK-PA-0013 | 3.0 - 7.0 |
| Ashes (sulphated) | HMC QK-PA-0005 | ≤ 1 % |
| Dry matter content | HMC QK-PA-0006 | ≥ 90 % |
| Insolubles | HMC QK-PA-0010 | ≤ 2 % |
| Heavy metals | | |
| Pb | HMC QK-PA-0019 | ≤ 40 ppm |
| Hg | HMC QK-PA-0020 | ≤ 0.2 ppm |
| Cd | HMC QK-PA-0020 | ≤ 0.5 ppm |
| As | HMC QK-PA-0020 | ≤ 0.5 ppm |
| Protein content | HMC QK-PA-0008 | ≤ 0.5 % |
| Microbiological tests | | |
| Total bacterial count | HMC QK-PA-0022 | ≤ 1000 CFU/g substance |
| Yeast & mould | HMC QK-PA-0022 | ≤ 100 CFU/g substance |
| For reference | | |
| Molecular weight by GPC will be in the range of ≤ 5 kDa. | | |

Halle (Saale), 01.07.2011


 Torsten Richter
 Head of QA/QC

 Page: 1/1
 Rev: 02