

Ethyl Cellulose pharmaceutical Application Guide

The goods because it did not dissolve in water, but soluble in many organic solvents were used as tablets, granules of the adhesive, can increase the hardness of tablets to reduce friability tablets, it can be used as film-forming agent to improve the appearance of tablets, isolated taste, to avoid the failure of water-sensitive drugs to prevent the influx of metamorphic change agents, promoting the safe storage of tablets, but also can be used as reinforcing material for Sustained Release Tablets.

Technical specification

Comply with USP, EP and CP.

| Item | K grade | N grade |
|-------------------------|-----------|-----------|
| Ethoxy (WT%) | 45.5-46.8 | 47.5-49.5 |
| Loss on drying (%) | ≤3.0 | |
| Residue on ignition (%) | ≤0.4 | |
| Chloride (%) | <0.1 | |
| Heavy metals (ppm) | ≤20 | |
| Arsenic (ppm) | ≤3 | |
| Acetaldehyde(%) | ≤0.01 | |

Viscosity specifications

| Spec. | viscosity range mPa•s | Spec. | viscosity range mPa•s |
|-------|-----------------------|-------|-----------------------|
| 7 | 6-9 | 70 | 62-77 |
| 10 | 8 -12 | 100 | 90-110 |
| 15 | 12-18 | 110 | 100-120 |
| 20 | 18-24 | 150 | 135-165 |
| 35 | 30-39 | 200 | 180-220 |
| 45 | 40-50 | 250 | 220-270 |
| 55 | 51-61 | 300 | 270-330 |

Organic solvent method of solubility and dissolution

EC can be dissolved in various organic solvents, such as ethanol, isopropyl alcohol, other alcohols, ketones, aromatic and so on. Common solvent (volume ratio):

*Toluene: Ethanol = 4:1

*Ethanol

*Acetone: Isopropanol = 65:35

*Toluene: Isopropanol = 4:1

*Methyl Acetate: Methanol = 85:15

Alcohols and aromatics in the viscosity of the mixture, going down with alcohol content higher, when alcohol accounts for 30-35%, the lowest viscosity of the composition. Dissolution method: the EC under the stirring slowly add the container filled with a solvent until complete wetting dissolved.

Package

12.5kg / fiber drum (20 feet container can load 4.5MT with palletized and 5MT without palletized; Packing size: H500mm x D380mm)