



# Hebei Yibang Building Materials Co., Ltd

Tel: +8613785166166  
www.yibanghpmc.com

## Hydroxyethyl cellulose (HEC)

### 1、 Technical requirements:

#### 1. Quality standard: Q / shd004-2007

project	standard
Appearance	White or yellowish powder
Molar substitution (MS)	1.8-2.0
Water insoluble (%)	≤0.5
Loss on drying (wt%)	≤7.5
Ignition residue (wt%)	≤1.0
PH value	6.0-8.5
2% viscosity (MPa. S), 20 °C aqueous solution	30000-50000

### 2、 Main quality performance

Versatility: it can be used in different emulsion systems and pH conditions.

Excellent color paste and pigment compatibility

Good water retention

Good color mixing viscosity stability

Good storage stability

Better low foaming and transparency.

### 3、 Features and uses

Hydroxyethyl cellulose (HEC) is a kind of nonionic cellulose ether, which is made from natural polymer cellulose by a series of chemical processes. It is a kind of odorless, white powder or particle, which can be dissolved in cold water to form a transparent viscous solution, and the dissolution is not affected by pH value. It has the characteristics of thickening, adhesion, dispersion, emulsification, film-forming, suspension, adsorption, surface activity, water retention and salt resistance.

hydroxyethyl cellulose can be widely used in water-based coating, construction mortar, oil drilling, synthetic resin, ceramic industry, medicine, food, textile, agriculture, cosmetics, tobacco, ink, paper daily chemistry and other fields.

### 4、 Physical and chemical properties:

1. This product is a white or yellowish odorless powder, which is easy to flow. It can dissolve in cold water and hot water. In general, the viscosity of insoluble pH value in most solvents changes slightly within the range of 2-12, but the viscosity decreases beyond this range. After surface treatment, HEC cold water

is dispersed and does not agglomerate, and the dissolution speed is fast. Generally, it takes about 15 minutes to slowly increase the viscosity.

2. 100 mesh screening rate  $\geq 99\%$ ; softening temperature: 135-140 °C; surface density: 0.35-0.61g/ml; decomposition temperature: 205-210 °C; slow combustion rate; equilibrium moisture content: 23 °C, 6% at 50% RH, 9% at 84% RH. (RH is relative humidity).

3、 Dissolution method:

Dissolved in water:

Slowly add HEC into the water with violent agitation until it is completely dissolved. If all materials are added, it will be difficult to dissolve;

5、 Packaging, transportation and storage:

Packing form

The inner polyethylene plastic film bag and the outer three in one composite paper bag or barrel are used for packaging; the net weight of each bag is  $25 \pm 0.25\text{kg}$

During transportation, pay attention to rain proof, sun proof and sharp object puncture proof packaging.

Storage precautions: sealed, no exposure to the sun, rain, moisture, acid and alkali.

During storage, rotate it in a dry and well ventilated place, pay attention to moisture-proof and do not mix it with other chemicals.