



## Technical Data Sheet

### Hydroxy Ethyl Cellulose HEC

#### Introduction:

Shangdun HEC is a nonionic surfactant and odorless, free flowing white powder. HEC is characterized by hygroscopicity and can be dissolved in both cold and hot water. It has high thickening effect, excellent rheological properties, suspension, adhesion, emulsification, filming, watering and protective colloid properties.

CAS No.: 9004-62-0

Appearance: White solid powder

Softening temperature: 130- 140 °C

Bulk Density: 0.35 - 0.61 g/ml

Decomposition Temperature: 205 - 210 °C

#### Specification:

Items	Value
Molar Substitution Degree	1.8 - 3.0
PH value (1%, .sol.)	5.5-8.5
Water Insoluble (%)	1.5 Max
Ash (%)	5.5 Max
Particle size (% ,through 60 mesh)	98 Min
Moisture (%)	5.0 Max
Viscosity (mpa·s)	300-100000

**Viscosity table (mpa•s):**

Nominal viscosity	Viscosity (2%) Brookfield	Viscosity (2%) NDJ-I
100	80-130	
300	250-400	250~400
2000	1500-2500	1500~2500
6000	4500-6500	4500~6500
10000	5500-8000	6500~12000
15000	7000~10000	12000~20000
20000	9000-13000	15000-25000
30000	15000~25000	26000~40000
50000	25000-32000	45000~60000
70000	33000~42000	60000~80000
100000	42000~65000	80000~110000
>100000	/	>110000

**Application:****• Latex Paints**

Polymerized with vinyl acetate emulsion to improve stability of polymerizing system within wide range of PH value. In the finished product manufacturing, HEC used as a role of dispersion, stabilization and thickening in paint, especially high-PVA coating, providing excellent coating properties.

**• Construction & Building Materials**

Used as thickening agent and adhesive for cement and dry mixed mortars. As its good water retention, it improves the liquidity and performance of mortars and extends open time. Also HEC can improve water retaining ability and adhesive strength when used in wall plasters, render mortars, adhesive plasters and gypsum putty.

**• Petroleum Drilling**

Used as thickening agent to make mud achieve good mobility and stability, easy for mud pump which is required by drilling, well set, cementing and fracturing operations.



- **Personal Care**

Guarantee the stability of paste and improve the taste as its strong salt and acid resistance.

Besides, water retaining ability and emulsifying capacity make toothpaste difficult to dry.

- **Water Based Ink**

Help ink dry and fast penetrate. Moreover, it's also widely used textile printing and dyeing, paper making, daily chemicals and so on.

- **High Molecular Polymer**

Used as dispersant for suspension polymer such as styrene, acrylate, acrylonitrile etc.

### **Product Package:**

20Kg or 25Kg net paper bags with PE inner liner. On clients' requirement

### **Storage:**

Stored in dry and well-ventilated place, avoid direct sunlight, rain and humidity and keep sealed condition.

### **Safety Notice:**

The above data is in accordance with our knowledge, but don't absolve the clients carefully checking it all immediately on receipt. To avoid the different formulation and different raw materials, please do more testing before using it. We reserve the right to alter our product and without informing in advance.