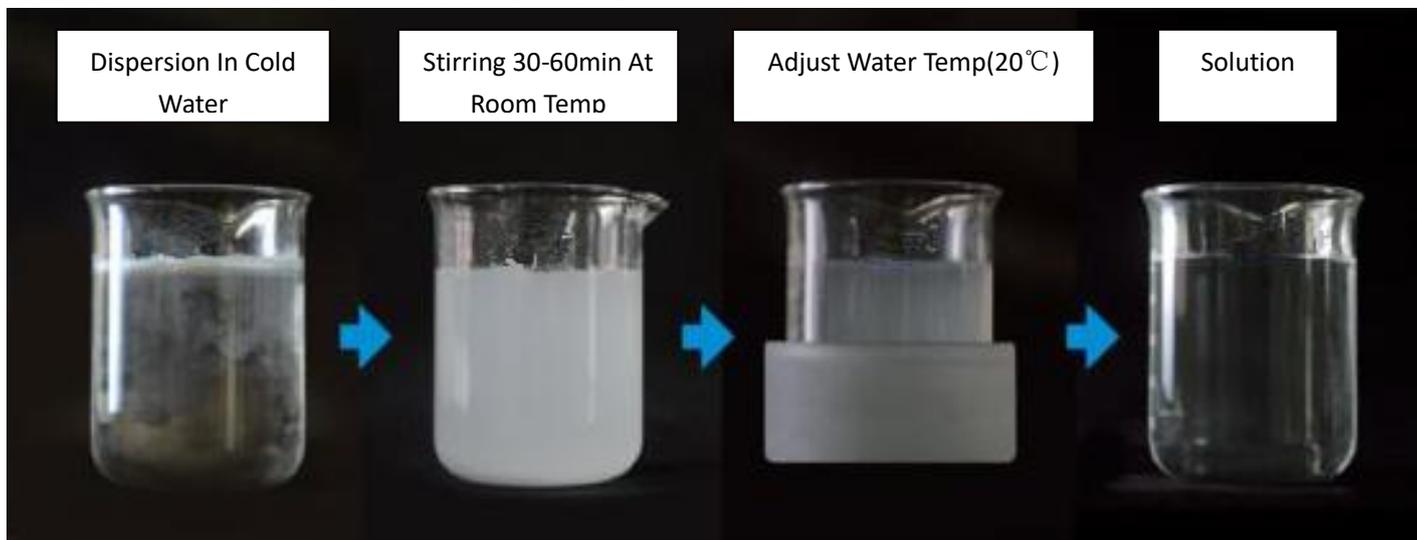


HPMC Dissolution Methods

I ,SURFACE TREATED PRODUCT DISSOLUTION METHODS(S)

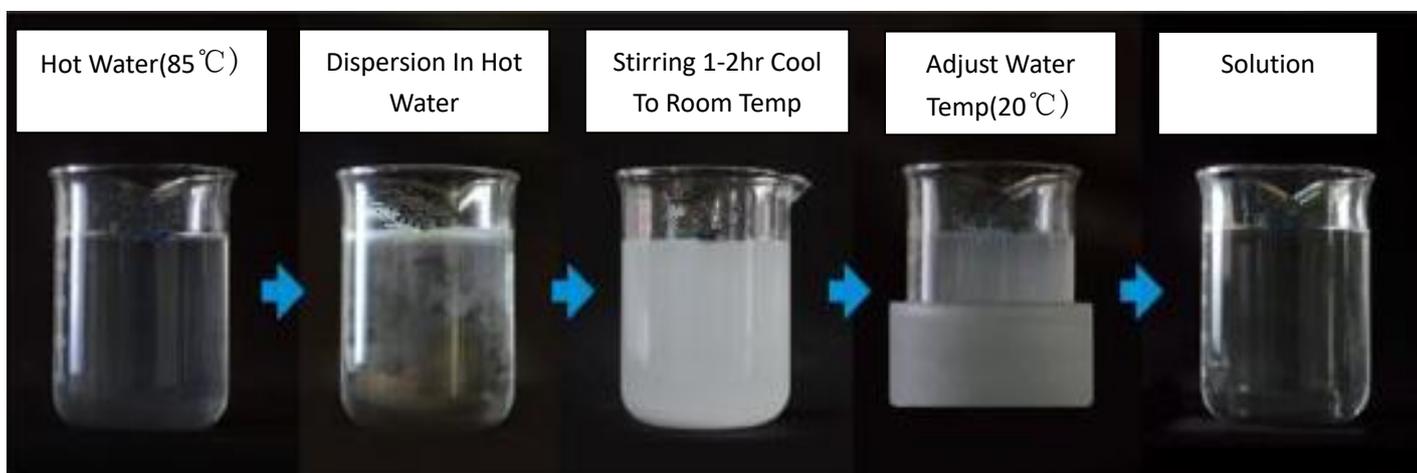
Surface treated powder is specially developed to prevent lumping in wet blending applications such as paints and emulsion based applications. To make the solution with surface treated powder, powder is directly placed into cold water. With time, a fully developed-solution with the right viscosity is prepared through continuous stirring of the solution.

Note: The surface-treated HPMC, after humidified with cold water, will become viscous if add Ammonia water or Alkaline water for PH value within 8-10.



II , NON-SURFACE TREATED PRODUCT DISSOLUTION METHODS

Coacervation will happen before dissolving if HPMC product is directly charged into water. However, it is very slow and difficult to dissolve in this way. Three good dissolving methods are recommended here below for users to choose based on the specific applications:



1,Hot water dissolving method: Since HPMC is indissolvable in hot water, HPMC will be dispersed in hot water homogeneously. Here are two typical methods in the next cooling step:

1), Add hot water(85 °C) into a vessel to the required level. Then gradually add HPMC into the hot water. At first, HPMC is floating on the surface of the hot water, then it is gradually formed into a kind of slurry. Keep stirring to cool the slurry.

2), Add hot water(85 °C) into a vessel to 1/3 or 2/3 of the required level, gradually add HPMC into the hot water and keep stirring. Then add cold water or ice water to the hot water slurry to the expected level. Keep stirring to cool the mixture down.

2, Powder mixing dissolving method: Mix HPMC powder up with other powdery materials of the same or higher amount in dry state for full dispersal. Then add water into the mixture for dissolving. HPMC will be dissolvable instead of coacervation.

3, Organic-solvent Humidifying dissolving method: Disperse or humidify HPMC with organic solvent such as Alcohol, Ethanediol or Oil before add in water. Then HPMC will go dissolvable successfully.

www.celluloseether.com