

The present invention relates to a new, particularly economical process for producing particulate water-soluble cellulose derivatives. The process involves forming a feed composition of swollen and/or dissolved cellulose derivative, and water. The feed composition is contacted with a carrier and heat exchange gas, in a sieve-free high rotational speed gas jet impact mill, and the cellulose derivative of the feed composition is converted into a solid state form of finely particulate particles. The particulate cellulose derivative is then separated from the heat exchange gas and carrier gas, and optionally dried. The mill drying and the particulate cellulose derivative product are influenced by establishing a specific water content in the swollen and/or dissolved cellulose derivative.