

The present invention relates to a process for the production of suspensions of nano-fibrillar cellulose by providing cellulose fibres and at least one filler and/or pigment; combining the cellulose fibres and the at least one filler and/or pigment; and fibrillating the cellulose fibres in the presence of at least one filler and/or pigment, as well as the suspensions of nano-fibrillar cellulose obtained by this process and their uses.