

S1.2.4 NONWOVEN WATER-BASED BINDERS USED IN FILTRATION APPLICATIONS

John Norton, BASF

Water-based emulsion polymers (i.e., latex) have been widely used as binders in nonwoven fabrics for a diverse range of filtration applications. These polymers are produced with a specific charge: anionic, cationic, or nonionic. This overview will discuss the general properties of typical emulsion polymers, available polymer stabilization methods, and how the polymer properties can be modified with assorted monomers and crosslinking techniques.

The nonwoven fabrics that use emulsion polymers include cellulosic, glass, and polyester substrates. Additionally, the presentation will examine how the polymer treatment of the nonwoven fabrics affect sheet properties for use in a variety of filtration applications. The applications include, but are not limited to, automotive, residential, and commercial filtration media.