

## The Hansen Solubility Parameters of Some Lignosulfonates

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**Abstract :** Lignosulfonates (LS) find widespread use as dispersants, binders, anti-oxidants, and fillers. In most of these applications LS is used in formulation together with a number of other components. To better understand the interactions between LS and water and possibly other components in a formulation, the Hansen solubility parameters have been determined for some LS. The Hansen solubility parameter splits the total solubility parameter into three components, the dispersive, polar and hydrogen bonding part. The Hansen solubility parameter was determined by comparing the solubility in a number of solvents and solvent mixtures. We have found clear differences in the solubility parameters, with softwood LS being closer to water than hardwood LS.

**Keywords :** Hansen solubility parameter, lignosulfonate (LS), solubility, solvent

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