

Development of Surface Acting Agents using Naturally Occurring Phenols from CNSL, A Penetrating Aid in Kraft Pulping.

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ABSTRACT

Cashew Nut Shell Oil is a naturally occurring phenolic material. Commercially CNSL is vacuum distilled to separate cardanol. The structural features of CNSL are similar to that of many surface-active compounds, which are basically manufactured by using petrochemicals. The petrochemical based compounds are non-biodegradable and hence are not ecofriendly. Sulphonated CNSL can be conveniently used for important applications such as detergents, emulsifying, penetrating, wetting and solubilising agents. CNSL is readily available in the West Coast Belt of India. As CNSL is obtained from natural resources it is more advantageous and eco-friendly. The compound is proved to be a good penetrating aid for pulping of hardwoods. It improves the pulp quality and yield by accelerating delignification process.