

C-51: Rubberised bitumen emulsion for road surfacing

K Subramaniam

(Dept of Chemical Engineering, University of Moratuwa)

Natural rubber modified bitumen is a valuable material for road surfacing. It enhances the strength and durability of the road surface better than the bituminous material alone. It can be produced by incorporating natural rubber in the form of powder into hot bitumen or by mixing latex into bitumen emulsion. The latter process is most beneficial to road engineers as the blend is a water-based liquid which can be applied on road surfaces directly, by spraying. This process of blending natural rubber latex with bitumen emulsion has been investigated in this work. From the studies, suitable formulations for preparing bitumen emulsion and blend of latex bitumen emulsion for road surfacing have been identified.