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Effect of Blended Waste LDPE/LLDPE on Properties of Bitumen for Rural Roads

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Abstract

Bitumen of VG-30 grade is a common satisfactory binder for flexible pavement in tropics. Bitumen when mixed with other additives exhibits poor performances under moist and temperate conditions. Under varying temperature, traffic loads and volume and wet conditions, the pavement becomes less durable. The addition of polymers to bitumen has shown increased performances in interfacial properties of flexible pavements and also become cost effective. The local milk pouches used by Odisha State Cooperative Milk Producers' Federation's (OMFED) are of low-density polyethylene display excellent additive properties of bitumen as a good