

Polymer Modified Bitumen for High Performance Roads

To provide a colourful and durable solution for roads and pavements in India, STP Limited has developed a synthetic pigmentable binder that possess all significant properties of Polymer Modified Bitumen (PMB) which is conventionally used in high performance road making.

Bitumen is widely used for the construction of roads and pavement surfaces, wherein a bituminous binder is mixed with aggregate to form asphalt. Bitumen is generally black in appearance due to the presence of asphaltene in bitumen. The appearance of bituminous roads and pavements is considered acceptable for most applications. However, in special locations, it is desirable to have a surface of specific colour. For example, to demarcate the cycle paths, bus lanes, walkways, car parks, stadium tracks, decorative pavements etc. Further, in certain application like tunnel roads it is preferable to have light coloured surface in order to improve visibility.

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"STP Coloured Asphalt" is a polymer modified synthetic binder making it an ideally strong and flexible product for high performance asphalt application. It is pigmentable and can be made available in a range of long lasting colours designed to meet specific purpose and to provide an aesthetic and environment friendly pavement solution. The product could be applied as a hot mix similar to bitumen using conventional equipment. The macadam is prepared at a mixing temperature of 150°C and compaction is done by rolling below 120°C. Semi dense bituminous concrete grade pavement of 25 mm thickness could be prepared using "STP Coloured Asphalt" which

provides coverage of 7 kg per square metre area. The product is designed for both high and low trafficked roads.

"STP Coloured Asphalt" finds application in a wide range of fields like:

- Roadways and Tunnels
- Boardwalks and Promenades
- Architectural applications
- Driveways in Office buildings, Car parks
- Sport venues and Stadium tracks
- Walkways in Parks, Gardens and Historical monuments

Apart from its aesthetic coloured application in roads and pavements, the product enables differentiation of specific road sections like pedestrian areas, bus lanes, cycle paths, emergency routes, etc. It also provides a distant identification of road safety signs due to higher contrast. Use of lighter shades of coloured asphalt inside tunnels greatly improves the illumination and adds to significant cost savings by reduced tunnel lighting. "STP Coloured Asphalt" can be successfully used in preparation of attractive games court and sport tracks and lanes. The product adds greater creativity for landscapes and architectural applications. It provides harmonization of pavements with the surroundings inside parks and gardens. "STP Coloured Asphalt" is an environment friendly product.



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