POTENTIALS OF USING THE POLYFUNCTIONAL ADDITIVE "REDISET WMX" FOR ASPHALT MIXTURES

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ABSTRACT

Rediset WMX from Akzo Nobel is a polyfunctional additive based on fatty amine surfactants and oly ethylenes. The primary function of the product is to enable the mixing and paving temperature of asphalt to be lowered by 30 to 40^{o}C – so called warm asphalt-resulting in reductions in energy consumption and CO_2 emissions and improved health and saftey conditions for workers with no compromise on performance. The product is in fact designed to improve the initial coating of the aggregate and long term stripping resistance of the mix. In addition, it leads to an increase in resistance to rutting. The paper reveals the application of the additive in laboratory conditions and field trial. There were presented three field trials with different types of asphalt mixtures, i.e. asphalt-concrete, base course mixture and mastic asphalt.

KEY WORDS: Polyfunctional additive, bitumen, asphalt mixtures, field trial