PGXpand®: A Specially-Engineered Innovative Polymer

Sripath Technologies LLC develops, manufactures and markets a wide range of innovative additives, such as, rejuvenators, oils, anti-strip agents, and polymers to enhance the performance of bitumen for both paving and roofing applications. Sripath Technologies, located in New Jersey USA since 2006, has affiliates around the world: Sripath Innovations Ltd in London UK, Bitpath Pvt. Ltd. in Mumbai India and Sripath Asia-Pac Pty. Ltd. in Melbourne Australia.

March 7, 2022





A key product offered by Sripath is PGXpand – a specially-engineered innovative polymer used to enhance the high temperature properties of bitumen without impacting the low temperature properties. PGXpand is a highly bitumen-compatible plastomeric polymer. It has been specifically designed to interact with bitumen in a very unique and innovative manner, allowing the product to deliver outstanding roadway performance, even though it does not confer any significant elastic recovery properties to the bitumen.

PGXpand polymer easily melts into bitumen, mixes into bitumen using low shear mixers, lowers mixing temperatures and shortens mixing times. It is easy to incorporate into a mix plant and exhibits excellent storage stability. PGXpand is highly dosage efficient, it lowers the viscosity of bitumen and aids in lowering the paving temperature. It helps lower energy consumption and reduces overall costs.

This polymer interacts with bitumen in a unique fashion and tends to provide exceptional properties to the PGXpand Modified Bitumen hot mixes. PGXpand improves the key performance qualities of Bitumen, such as, softening point, penetration, and true high grade. It lowers viscosity of the PMB mix, improves its workability and makes the mix easier to compact. PGXpand delivers roadways with outstanding rutting resistance, fatigue properties and long-term durability.

For Hybrid PMB systems, PGXpand is highly compatible with elastomeric polymers. It allows engineers to design mixes with lower levels of elastomeric polymers while delivery better or equivalent roadway properties. Hybrid PMB mixes made using PGXpand have lower viscosity, better workability, and are significantly easier to manufacture and pave. At the same time, they deliver excellent rutting properties, fatigue performance, and roadway durability.

Bitumen modified with PGXpand can also be used in hot spray seal applications on roadways, allowing for improved workability and better performance. PGXpand Modified Emulsions are used for repair and maintenance applications in the paving industry to deliver long-term durability and reduce frequency of road repairs.

Sripath's PGXpand has been tested, evaluated, and vetted by leading experts in academia, industry and transportation agencies from around the world. It has been trusted and effectively used on roadways across the globe since 2015.

For further information on PGXpand or other Sripath products, please visit www.Sripath.com.

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