Product Evaluation

RE: Review of ZycoTherm Antistripping Additive

PRODUCT
The ZycoTherm Antistripping Additive is produced and distributed by Zydex Incorporated located in Morrisville, North Carolina.

VENDOR CLAIMS AND INFORMATION
CLAIMS
ZycoTherm Antistripping Additive changes surface of aggregates from hydrophilic to hydrophobic at a nano level at processing (HMA at about 165 – 175°C). ZycoThem has a positive effect on mixing, workability and compaction of warm mix asphalt. Its superior aggregate wetting and coating properties, ensures uniform bind film thickness and better lubrication of the warm mix. Product Web Link: http://www.zydexindustries.com/

DESCRIPTION
ZycoTherm Antistripping Additive is a organosilicon compound new generation antistripping agent. Zycothem attributes are: reactive antistripping agent; reduces stripping debonding; improves rut resistance, improves compaction by 1 to 1.5%; improves workability; does not impart any odor to the bitumen binder or asphalt mix and does not cause any corrosion and skin irritation.

POTENTIAL USAGE
ZycoTherm Antistripping Additive is mixed with bitumen binder at 0.05 to 0.2% by bitumen weight. Addition of ZycoTherm to the mix results in lower VMA and air voids, indicating a need to lower the optimim binder content.

STANDARDS
None provided

ALBERTA TRANSPORTATION COMMENTS
EXPERIENCE
Alberta Transportation has no experience with this product.

APPLICABLE STANDARDS
The Alberta Transportation Specifications: 3.10, Asphalt Surface Treatment; 3.50, Asphalt Concrete Pavement.

RECOMMENDATIONS:
ZycoTherm Antistripping Additive product be listed as a Potential Product under Alberta Transportation Products List, Asphalt Materials – Liquid Anti-strip Additives – Proprietary, based on the information provided. Final acceptance as a proven product will be based on field performance.

TRIAL PROJECTS
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