



VSS ASPHALT TECHNOLOGIES DATA SHEET VER: 1.0 --PRODUCT INFORMATION

**DESCRIPTION:**

RoadChem™ 503® is a ethyl methyl acrylate copolymer designed to improve the rheological properties of asphalt. It is specially designed for hot mix and chip seal binders where high shear resistance must be combined with flexibility. It has a wide range of compatibility with different asphalts made from different crudes and using different processing methods. It usually requires high shear blending. **Emultech®** Polymer asphalt plants are recommended.

**BENEFITS:**

- Increases softening point 10-20C
- Gives excellent low temperature properties
- Easy to handle and transport
- Stable (>40days) asphalt blends.
- Easy to compact hot mixes made with asphalt /503 blends.
- High deformation resistance with excellent fatigue properties.
- Easy to emulsify

**TYPICAL PHYSICAL PROPERTIES:**

**Form:** Free flowing beads.

30/70

**Density:** 0.951 (ASTM D-792)

**Melt flow Index:** 1.1 g/10min (ASTM D1238)

**Hardness Shore A:** 71 (ASTM D-2240) 1% Secant Modulus Mpa 18 (ASTM D-638)

Elongation at Break % 975 (ASTM D-638)

**Storage Life:** Indefinite in sealed 50 lb bags.

**APPLICATION:**

**Blending:**

RoadChem™ 503® may be blended using any high shear equipment.

**TYPICAL FORMULATION:**

All formulations should be tested in the laboratory before use.

Asphalt should be checked for compatibility by making mixtures in the laboratory. VSS can assist with this process.

A typical formulation for a binder for high deformation resistance, shear resistance and high fatigue life will contain 5% by weight **RoadChem™ 503®** blended with 80/100 pen or other asphalt. (eg 30/40, 50/70, 180/220 or ANY other Grade)

**The mix should be designed in accordance with good practice.**

**SAFETY:**

RoadChem™ 503® is non hazardous. Refer to the MSDS for further information.

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