

# EVERYTHING ASPHALT

## Tack & Prime



*"A good application of tack is critical to the long term success of a hot mix asphalt overlay."*

AASHTO Subcommittee on Construction, 2006

### Increasing Strength and Fatigue Life

Tack and prime coats are spray applications of asphalt emulsion to prepare pavements for new asphalt. They eliminate slippage planes and provide a bond between the existing pavement and new overlays or patches. Recent research has demonstrated that effective tack coats significantly increase the strength and fatigue life of pavements at a very low cost.

### Tack and Prime Benefits

- Low cost treatment significantly increases bond strength between pavement layers
- Stronger bond between layers increases pavement structural strength and fatigue life.
- Asphalt emulsion tack prevents slippage and reduces pushing and shoving.



### Surface Preparation and Construction

On existing asphalt or concrete pavements, the surface should be prepared with any necessary repairs and cleaned free of dust, loose or foreign matter or any other material which would hinder the adhesion of the emulsified asphalt. Gravel bases should be graded and compacted.

The application rate should give a uniform coverage of just enough asphalt for a thin, tacky, adhesive film without running off the road's surface. The emulsions typically are diluted prior to the application to reduce the viscosity for spraying, to allow filling of small cracks or voids and to more accurately apply very small quantities of residual asphalt per square yard.

The emulsion should be sprayed by a properly calibrated pressure distributor at a uniform rate, without splattering or drilling from the spray bar. The nozzle angle and spray bar height should be adjusted to insure that the spray pattern is even and will give the best tack. The emulsion should be allowed to break before the new surface is applied, and traffic should be strictly controlled to prevent damage to the newly applied tack.

### Martin Asphalt Products for Tack and Prime

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| <b>CSS-1</b>     | Cationic slow setting emulsion used for many applications, including tack and prime. It works best on a new base, and should be diluted 3:1 with water.                             |
| <b>SS-1</b>      | Anionic slow setting emulsion, used for many applications, including tack and prime. It should normally be diluted with water for prime applications.                               |
| <b>SS-1h</b>     | Anionic slow setting emulsion, formulated with a lower penetration (harder) base asphalt. It should normally be diluted with water for prime applications.                          |
| <b>EAP&amp;T</b> | Emulsified Asphalt Prime and Tack formulated specifically for priming. This anionic emulsion should be diluted 3:1 with water. It penetrates very well in most road base materials. |
| <b>PCE</b>       | An anionic, non-asphalt emulsion which is low odor and non-tracking. PCE should be diluted 3:1 with water.  |
| <b>AE-P</b>      | An anionic water in oil emulsion, AE-P is not soluble in water and should not be diluted. It contains solvent and penetrates very well in most base materials.                      |
| <b>RC-250</b>    | A rapid curing cutback asphalt.   |
| <b>MC-30</b>     | A medium curing cutback asphalt.  |

### Martin Asphalt Makes It Easy

PG asphalt, tack emulsions, asphalt emulsions for cold mix, asphalt materials for dust control and priming pavements. Through Martin Asphalt, you get **Everything Asphalt**—a full range of products for your pavements. In addition, you receive technical assistance in selecting the right materials and application. The company's AASHTO Certified Laboratory makes sure the products meet your specifications. And your products are delivered both on spec and on time via Martin's Gulf Coast network of production plants, storage facilities and transportation fleet including ocean-going and inland barges, rail cars and tanker trucks.

Contact us for more information on the best products for your application.