

### 3 MATERIAL SPECIFICATIONS

3.1. The ENDURASEAL Coal Tar Pitch Emulsion is produced using a colloid mill to insure homogeneity and appropriate size of the particles in suspension. Enduraseal Coal Tar Emulsion Sealer (undiluted) meets or exceeds the following specifications:

#### 3.1.1 ENDURASEAL MATERIAL SPECIFICATION

% Water	53 max.
% Solids	47 min.
Solids of Ash	30-40
% Solids Solubility in CS <sub>2</sub>	20 min.
Specific Gravity 77 degrees/77 degrees F.	1.2 min.
Drying time (sets by Water Evaporation)	8 hours max.
Kerosene Resistance	0 penetration 0 loss of adhesion
Water Resistant	No loss of adhesion or formation of blisters.
Heat Resistance 80 degrees C. (176 degrees F.)-2 hours	No blisters or slippage.
Flexibility	Will not flake, crack or lose adhesion properties.
Weathering (Accelerated)	Will not crack or sag.
Impact Resistance	Will not chip, flake, crack, or lose adhesion outside periphery of 1/4" from point of impact.
Volatilization Resistance	No more than 10 percent wt. loss heated solids computed from base base weight after exposure for 30 minutes to sustained oven temperature of 270 degrees C (518 degrees F.)

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3.1.2 Additional References: ENDURASEAL conforms to the following specifications:

- 3.1.2.1 Federal Specification RP355e
- 3.1.2.2 ASTM Specification D-3320
- 3.1.2.3 ASTM Specification D-490

The tar pitch prior to emulsification shall conform to ASTM D-490, grade RT12. The pitch shall be derived from high temperature coal tar pitch. Oil and water gas tars shall not be used even though they might comply with ASTM D-490, grade RT-12.

- 3.1.2.4 ASTM Specification D-3423

3.2 Water used as diluent shall be potable and free of excessive minerals and contaminants.

3.3 Sand shall be clean, washed, graded silica. (Graded slag is also acceptable). Sand filler should be clean, hard and free of deleterious clay, dirt, mineral salts or organic matter.

**3.3.1 Aggregate shall conform to the following gradation:**

<b>Sieve Size</b>	<b>% Passing</b>
<b>30</b>	<b>100</b>
<b>40</b>	<b>100</b>
<b>50</b>	<b>80</b>
<b>70</b>	<b>23</b>
<b>100</b>	<b>5</b>

(Gradations not within these ranges may be used, provided experience has proven the aggregate of choice has been successfully used on other projects and has performed to satisfactory standards.)

**3.4 Latex Additive compounds shall conform to the following specification.**

**3.4.1 ALT 604, Polytoough, as manufactured by Allstates Coatings Company (Div. of ARK-LA-TEX Custom Coatings, Inc.**

Polytoough, Coal Tar Sealer Latex Additive forms a barrier between destructive elements that damage your asphalt and the Coal Tar Sealer itself. Polytoough provides greater toughness, viscosity, flexibility, speeds up the cure process and helps retain the aggregate in suspension.

**GUIDELINES FOR SELECTING PROPER AMOUNTS OF WATER  
MINERAL AGGREGATE AND ADDITIVE IN COAL TAR SEALER APPLICATION**

	Sealer in Gallons RP355e	Water in Gallons	Sand in Pounds	Additive in Gallons	Total Gallons Mix
<b>A</b>	100	25	300-400	0	145
<b>B</b>	100	30-50	400-800	2-3 Polytoough	193
<b>C</b>	100	40-50	800	5 Polytoough	205

