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| State: ALABAMA | Materials: Re: Section 804, Asphalt Materials; 804.02 Performance Grade Binders, (PGAB) |
| Date Last Reviewed: 7-7-2008 | Web Address: www.dot.state.al.us |
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ASPHALT BINDER:

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| 804.01 | Description: | Products furnished for use shall be from an approved producer who is participating in and meeting requirements of ALDOT -243, ACCEPTANCE PROGRAM FOR ASPHALT MATERIALS and listed on LIST 1-4, PRODUCERS OF ASPHALT PRODUCTS, of the Department's 'Materials Sources,' and Devices With Special Acceptance Requirements Manual. |
| | PMA: | PG 64-22 and 76-22 require polymer modification. A sample and infrared scan (Fourier Transform Infrared, FTIR) using the ALDOT 408 test method to determine the styrene and Butadiene peaks along with the percentage of polymer added at the appropriate polymer loading shall be submitted to the Materials and Tests Engineer for laboratory evaluation prior to use. All polymers shall conform to Section 811 for polymer additives. All Polymer Modified Asphalt Binder shall submit the information required in Article 811.01 annually or upon request by the Department |
| | Exclusions: | No air blown or oxidized asphalt shall be allowed. |

| PROPERTY | Test Method AASHTO or Other | Requirements by Performance Grade, PG (Common Grades) | | | |
|---|-----------------------------------|--|---|---------|---------|
| | | Table 1 | Table 2 ¹ | Table 3 | Table 4 |
| | | 58-22 | 64-22 ¹ | 67-22 | 76-22 |
| ORIGINAL: | | | | | |
| Flash Point, °C | T 48 | 230 min. | | | |
| Rotational Viscosity, Pa Xs | 135°C | T 316 | 3.0 max. | | |
| Dynamic Shear, kPa (G* /sin *, 10 rad./sec.) | At grade temperature | T 315 | 1.0 min. | | |
| RTFO RESIDUE: | | | | | |
| Mass Loss, % | T 240 | 1.0 max. | | | |
| Dynamic Shear, kPa (G* /sin *, 10 rad./sec.) | At grade temperature | T 315 | 2.2 min. | | |
| PAV RESIDUE: | | | | | |
| | R 28 | 100°C; 20 hrs; 300 psi | | | |
| Dynamic Shear, kPa (G* Xsin *, 10 rad./sec.) | At test temperature | T 315 | 5,000 max. | | |
| | | | 22°C | 25°C | 26.5°C |
| Creep Stiffness | At test temperature | T 313 | Stiffness 300 max. MPa & m Value 0.300 min. | | |
| | | | -12°C | | |
| Direct Tension, (1mm/min.), % Strain | T 314 | No Requirement | | | |

PG PLUS REQUIREMENTS: YES

ORIGINAL:

| | | | | | | |
|-----------------|------------------|----------------------------|----|----------------------------------|----|----------------------------------|
| Polymer Content | Qty ⁴ | AL DOT 408 ² | No | 1.5% min. solids ⁴ | No | 2.5% min. solids ⁴ |
|-----------------|------------------|----------------------------|----|----------------------------------|----|----------------------------------|

RTFO:

| | | | | | | |
|--|-------|-------------------|----|----|----|---------|
| | @10°C | T301 ⁵ | -- | -- | -- | Min 50% |
|--|-------|-------------------|----|----|----|---------|

NOTES:

- Made by modifying a PG 58-22 or by blended from a PG 76-22.
- Infrared Trace, determine Styrene and Butadiene peaks and polymer percentage at appropriate loading submitted to DOT prior to use.
- Article 811.01: must be listed (SBR, SB, SBS allowed); variations accepted w/ approval; written certification required before use; specifications apply for SBR's; see 811.02 Styrene Butadiene Rubber (SBR) for Hot Mix Asphalt or 811.03 SBR Latex for Asphalt Surface Treatments.
- Submitted annually or as requested, determined by AL DOT 408, Infrared Trace.
- The following exceptions shall be made to the requirements given in AASHTO t 301: The statement given in section 4.5 that reads "Attach the clips to the pins or hooks of the force adapter and the testing machine..." shall be disregarded. The molds shall be in accordance with the requirements given in ASTM D 6084 with dimensions noted in this method. All Elastic Recovery failures will be subject to FTIR scans for acceptability.



Disclaimer: "To ensure the most accurate and current information, the specific agency should be contacted."

