

Original Binder Grading (AASHTO T315) - Final Report

Project name: AASHTO T315-19 Original Grading | DESKTOP-3G66709 | 06/10/2025
Date, Time: 06/10/2025 09:24:41
Test name: 06/10/2025 09:26 Original Binder Grading PG70 MD
Operator: Balai Bahan Jalan
Sample: PG70
Batch no.:
Description: P MD
Measuring Device: SmartPave 102e SN85331914
Temperature control unit: P-PTD220+H-PTD220 SN85345133-85298347
Measuring System: PP25/SP SN125867
MS Diameter: 25,012
Gap: 1,000 mm



Asphalt original binder

Application version: Anton Paar RheoCompass™,
V1.35.1394-Release
Licensed for: PT. Equiva Ligand Indonesia
License no. Rh25H6050
Version no. 1.35.0.0
Project: AASHTO T315-19 Original Grading | DESKTOP-3G66709 | 06/10/2025 |
MD PG70
Input data: 06/10/2025 09:26 Original
Binder Grading PG70 MD, <Last
measuring result>, From
interval 1, Point 1
Result data: Asphalt original binder (final)

PREVIOUS RESULTS

Passed at 64,0 °C with $|G^*|/\sin(\delta)=3,4117$ kPa, $|G^*|=3,3906$ kPa, $\delta=83,62^\circ$
Passed at 70,0 °C with $|G^*|/\sin(\delta)=1,5389$ kPa, $|G^*|=1,5343$ kPa, $\delta=85,59^\circ$
Failed at 76,0 °C with $|G^*|/\sin(\delta)=0,7330$ kPa, $|G^*|=0,7321$ kPa, $\delta=87,09^\circ$

TEST RESULTS:

Mean frequency: 10,0 rad/s = 1,59 Hz
Mean strain: 12,06 %
Mean shear stress: 0,088 kPa
Mean phase shift angle: 87,1°
Mean complex shear modulus $|G^*|$: 0,732 kPa
Mean temperature lower plate: 76,0 °C
Mean temperature sample: 76,0 °C

ANALYSIS RESULT:

Number of data points: 10
 $|G^*|/\sin(\delta)$: 0,7330 kPa
Standard deviation: 0,0005 kPa
Median: 0,7329 kPa
Confidence interval (95 %): 0,7326 ... 0,7333 kPa
AASHTO T315 ORIGINAL BINDER PERF. CRITERION: $|G^*|/\sin(\delta) \geq 1,0000$ kPa

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This sample is found to F A I L at 76,0 °C
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Pass/fail temperature is 73,5 °C
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Responsible Employee:

Signature: