

Government of the Peoples Republic of Bangladesh Quality Control & Training Division, BRRL

DATA & REPORT SHEET

Memo No: LAB-25-04-15-03761-001-01 Date: 2025-04-15

Client : Dhaka, Banani Lab Register No. : 92 (B) 2024-2025.

Tender No. : 733415 Contract No. : DZ(e-GP)-16-Contract/Dev/2022-2023

Tracking Number : LAB-25-04-15-03761 Sample Sent By : Client

Project/Work Name : Construction of 94.274m (3x30.488) Long P.C.Gride (Turag Bridge) at 1st K.M (Ch.00+067m) & 19.64m

Long (1x18.30m) R.C.C Girder (Turag Uttarpara-Mugrakanda Bridge-1) (Ch.00+476m) of Turag-Ruhitpur-

Bourity Road (Z-5069) under Dhaka Road Division during the

Sample Collection From : From Stackyard Sample Source : Nill

Sample Sealing Status : Sealed Sample Collected By : EE (RHD)

Name of Test : BITUMEN ROUTINE TEST

Item Name : Others Test Code : BRRL

Test Method : ASTM

Associated Agency : National Development Engineers Ltd.- Hasan Techno Builders Ltd-JV

Date of sample receive : 10/04/2025 Date of Test : 13/04/2025

at Lab

Sample Description : Sample was supplied to the laboratory by Contractor's representative. Sample was carried in a pot. Amount

of sample received is 7 kg approximately. Sample was sealed by Executive Engineer, RHD, Dhaka Road

Division, Dhaka.

Test Performed By : Akram Hossen Test Supervised By : Mst. Rupali Khatun

Assistant Research Officer

BITUMEN ROUTINE TEST

| Name of the test | Unit | Result | Comments | Test Code | Spec 60/70 | Spec 80/100 |
|--|-------------------|-------------|-------------|------------|------------|-------------|
| Penetration @25°C (100g, 5s) | 0.1mm | 69 | | ASTM D-5 | 60 - 70 | 80/100 |
| Softening Point | °C | 48 | | ASTM D-36 | 48 - 56 | 45 - 52 |
| Ductility (@25°C) | CM | 100 | | ASTM D-113 | ≥ 100cm | ≥ 100cm |
| Loss on heating | %(of wt) | 0.09 | | ASTM D-6 | ≤ 0.2 | ≤ 0.5 |
| Penetrating drop after heating | % | 85.51 | | ASTM D-5&6 | ≥ 80 | ≥ 80 |
| Flash point | °C | 316 | | ASTM D-92 | ≥ 250 | ≥ 250 |
| Specific Gravity @25/25°C | | | | | | |
| Descriptions | Unit | Specimen #1 | Specimen #2 | | | |
| Weight of Pycnometer (+Stopper), A | gm | 30.373 | | | | |
| Weight of Pycnometer +Water, B | gm | 56.136 | | | | |
| Weight Pycnometer partially filled with Bitumen, C | gm | 44.825 | | | | |
| Pycnometer+Bitmen+Water, D | gm | 56.316 | | | | |
| Density of Water at 25 °C, G25 | Kg/m ³ | 1000 | | | | |
| Temperature of Water (T); °C, | °C | 25 | | | | |
| Density of Water at Temperature T °C(GT) | Kg/m ³ | 1000 | | | | |
| SP. Gravity=((C-A)/{(B-A)-(D-C)})*(GT/G25) | | 1.0126 | | | | |
| Specific Gravity | | 1.0126 | | | | |

Comment: Test was performed on the basis of supplied sample.

Test Performed By

15-Apr-2025

Akram Hossen Assistant Research Officer (AC) Quality Control & Training Division, BRRL Test Approved By

15-Apr-2025 Mst. Rupali Khatun Assistant Engineer (AC) Quality Control & Training Division, BRRL Counter Signed By

15-Apr-2025 Jahangir Alam Sub Divisional Engineer Quality Control & Training Division, BRRL Counter Signed By

15-Apr-2025
Mohammad Wahiduzzaman
Executive Engineer
Quality Control & Training
Division, BRRL