

UNIVERSITAS ISLAM INDONESIA

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LABORATORIUM TERPADU
Quantachrome TouchWin v1.22



Report date: Mon Jan 8 2024 Operator: Yusuf
Filename: 16731223_1.qcuPhysIso

Analysis Information

Sample

ID 1673_1 Weight 0.0863g
Description CFA-5

Analysis

Data ID {660185be-4bef-4b3b-948f-c64486943aa9}
Operator Yusuf Date 2024.01.08 Duration 142.1 min
Instrument St 2 on NOVA touch 4LX [s/n:170170510001] Firmware 1.07
Comments description of sample
Ambient Temp. 20.31°C Void Volume Mode NOVA mode Cell ID 42
Cell Type 9mm with rod Thermal Delay 300 sec Po Mode Continuous

Adsorbate

Name Nitrogen Molecular Weight 28.013 g/mol Cross Section Area 16.2 Å²/mol
Non-ideality 6.580000e-05 1/torr Bath Temperature 77.35 K

Degassing information

Time 1.0 hours Temp 90.000000°C

Data Reduction Parameters

Thermal Transpiration yes Eff. Molec. Diameter 0 Å
Eff. Cell Diameter 0 mm
Thickness Method deBoer
P-tags below 0.35 included Moving Pt. Average off

Adsorbate Model

Name Nitrogen Molecular Weight 28.0134 g Cross Section Area 16.2 Å²/molec
Bath Temperature 77.35 K

BJH Pore Size Distribution Desorption results

Surface Area 36.4253 m²/g
Pore Volume 0.124414 cc/g
Pore radius Dv(r) 3.67783 nm

Table - BJH Pore Size Distribution Desorption

| radius nm | Pore Volume cc/g | Pore Surf. Area m ² /g | dV(r) cc/nm/g | dS(r) m ² /nm/g | dV(log r) cc/g | dS(log r) m ² /g |
|--------------|---------------------|---|------------------|-------------------------------|-------------------|--------------------------------|
| 2.06489 | 9.200061e-05 | 8.910962e-02 | 1.880522e-04 | 1.821429e-01 | 8.899103e-04 | 8.619461e-01 |
| 2.66568 | 2.690296e-03 | 2.038556e+00 | 3.647495e-03 | 2.736638e+00 | 2.225426e-02 | 1.669689e+01 |
| 3.67783 | 2.267488e-02 | 1.290616e+01 | 1.523272e-02 | 8.283540e+00 | 1.276187e-01 | 6.939896e+01 |
| 5.73222 | 6.279091e-02 | 2.690283e+01 | 1.434334e-02 | 5.004458e+00 | 1.854994e-01 | 6.472163e+01 |
| 12.9426 | 1.244140e-01 | 3.642532e+01 | 5.301368e-03 | 8.192098e-01 | 1.467286e-01 | 2.267367e+01 |