

UNIVERSITAS ISLAM INDONESIA

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LABORATORIUM TERPADU
Quantachrome TouchWin v1.22



Report date: Mon Jan 8 2024 Operator: Yusuf
Filename: 16731223_2.qcuPhysIso

Analysis Information

Sample

ID 1673_2 Weight 0.0855g
Description CFA-CTAB-5

Analysis

Data ID {31f7ffaa-a53f-4a2c-9c5c-4615c1d14882}
Operator Yusuf Date 2024.01.08 Duration 145.9 min
Instrument St 3 on NOVA touch 4LX [s/n:170170510001] Firmware 1.07
Comments description of sample
Ambient Temp. 20.38°C Void Volume Mode NOVA mode Cell ID 43
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

Degas 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 Adsorption results

Surface Area 43.0491 m²/g
Pore Volume 0.130649 cc/g
Pore radius Dv(r) 2.03917 nm

Table - BJH Pore Size Distribution Adsorption

| 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 |
|--------------|---------------------|---|------------------|-------------------------------|-------------------|--------------------------------|
| 2.03917 | 6.919981e-03 | 6.787069e+00 | 1.378370e-02 | 1.351895e+01 | 6.439108e-02 | 6.315433e+01 |
| 2.65572 | 1.681057e-02 | 1.423558e+01 | 1.352896e-02 | 1.018854e+01 | 8.220481e-02 | 6.190773e+01 |
| 3.64434 | 3.301790e-02 | 2.313010e+01 | 1.300564e-02 | 7.137438e+00 | 1.080638e-01 | 5.930495e+01 |
| 5.59962 | 5.675152e-02 | 3.160697e+01 | 8.907786e-03 | 3.181570e+00 | 1.126528e-01 | 4.023589e+01 |
| 12.9167 | 1.306489e-01 | 4.304915e+01 | 6.173683e-03 | 9.559250e-01 | 1.696251e-01 | 2.626453e+01 |