

Mg₂(dobdc) Low-Pressure CO₂ Raw Isotherm Data

Pressure 20°C	Quantity Adsorbed 20°C	Pressure 30°C	Quantity Adsorbed 30°C	Pressure 40°C	Quantity Adsorbed 40°C
0.03243	0.01022	0.04809	0.00932	0.08166	0.00741
1.03477	0.46186	0.9619	0.24658	1.02336	0.15196
19.46793	3.857	10.2744	1.95058	10.5959	1.32325
40.84325	4.96779	19.06602	2.87966	19.90132	2.10868
61.3311	5.48004	40.92624	4.12808	38.74038	3.14893
86.27046	5.85892	64.83291	4.82547	58.47823	3.83429
99.49784	6.00586	86.24421	5.21491	77.91209	4.29777
120.60275	6.20068	98.732	5.3881	96.57278	4.63324
141.16787	6.35419	121.22793	5.63904	120.89107	4.96397
151.46628	6.42281	140.87867	5.81376	141.02031	5.18263
161.0168	6.48395	151.0886	5.8942	151.14993	5.27744
180.5005	6.59797	160.80167	5.96458	160.772	5.36062
201.51562	6.70645	180.93703	6.09619	180.46591	5.51262
249.92697	6.92612	202.08281	6.21572	201.82285	5.65357
302.67413	7.13234	250.29541	6.44487	250.45971	5.91583
353.60141	7.30823	302.98921	6.65089	303.73327	6.14372
403.35722	7.47162	353.43354	6.82109	354.32861	6.32389
452.40911	7.62263	403.01887	6.98591	403.85962	6.47691
500.49843	7.76348	452.58426	7.11947	453.01689	6.61335
550.58493	7.90222	500.10384	7.24123	500.85468	6.73978
600.54145	8.03761	550.71135	7.36736	550.9761	6.86135
650.55725	8.16845	600.51464	7.48516	600.477	6.96892
701.06018	8.29579	651.05183	7.59732	650.4753	7.0684
750.51568	8.41683	700.38771	7.70177	700.43939	7.16328
800.60191	8.5316	750.38068	7.80686	750.35757	7.25719
850.4257	8.64521	800.66033	7.90855	800.45763	7.34734
900.46099	8.75841	850.55932	8.00953	850.5948	7.43547
950.50921	8.87183	900.30198	8.10647	900.68118	7.51743
1000.65541	8.97993	970.06962	8.23444	950.45672	7.59725
		1019.9118	8.32133	1000.54824	7.68051
		1070.13172	8.41187	1050.38627	7.76299

Units: Pressure (mbar), Quantity Adsorbed (mmol/g)
Amount adsorbed is excess

Mg₂(dobdc) Low-Pressure CO₂ Raw Isotherm Data

Pressure <i>50°C</i>	Quantity Adsorbed <i>50°C</i>	Pressure <i>60°C</i>	Quantity Adsorbed <i>60°C</i>	Pressure <i>70°C</i>	Quantity Adsorbed <i>70°C</i>
0.09652	0.00657	0.12901	0.00485	0.15149	0.00365
1.09426	0.09935	1.11166	0.06318	1.05608	0.0374
11.14371	0.90893	9.62008	0.52755	10.19008	0.36567
20.7646	1.50758	20.9204	1.04979	20.73054	0.70038
40.04592	2.39223	40.65333	1.77117	40.36955	1.23307
59.69532	3.03043	60.48468	2.33257	60.54901	1.69109
79.42838	3.50912	80.05536	2.77629	80.67185	2.07646
96.14413	3.83018	96.28354	3.0823	96.65787	2.34355
120.86885	4.21029	121.22051	3.4748	120.85852	2.69614
141.36137	4.46214	140.57175	3.73087	141.02001	2.9521
150.70504	4.56385	150.67474	3.85174	150.98898	3.06854
161.13813	4.66931	161.06176	3.9677	160.85058	3.17816
180.34715	4.84347	180.3736	4.15824	180.82369	3.37895
201.57671	5.00858	201.83658	4.3483	201.76672	3.56951
250.25328	5.31795	249.57967	4.69471	249.96597	3.93755
304.26828	5.58576	303.47121	5.00317	303.23242	4.26777
354.87324	5.79068	354.41999	5.23828	354.23702	4.52941
404.64024	5.96048	404.84156	5.43553	404.23976	4.74643
453.26678	6.10869	453.89027	5.60201	454.25323	4.93538
500.59249	6.23586	500.66251	5.74248	500.29747	5.09493
550.24557	6.35652	550.99233	5.88019	550.73686	5.25109
600.375	6.46823	600.59833	6.00024	600.62107	5.38928
650.60082	6.56999	650.48694	6.11891	650.58902	5.51057
700.49016	6.66823	700.8041	6.22606	700.45875	5.62331
750.64621	6.75862	750.63408	6.31882	750.69633	5.72432
800.50434	6.84725	800.22531	6.41071	799.69655	5.84722
850.59032	6.9297	850.58633	6.49757	852.01875	5.90603
900.25715	7.01796	900.52104	6.5788	918.60257	6.01903
950.7067	7.09852	950.56186	6.65477	951.05254	6.07391
1000.55914	7.16694	1000.50788	6.72977	1000.47826	6.1487
1050.34404	7.23333	1050.5338	6.80094	1050.33395	6.21974

Mg2(dobdc) Low-Pressure CO2 Raw Isotherm Data

Pressure <i>80°C</i>	Quantity Adsorbed <i>80°C</i>	Pressure <i>90°C</i>	Quantity Adsorbed <i>90°C</i>	Pressure <i>100°C</i>	Quantity Adsorbed <i>100°C</i>
0.17026	0.00268	0.15528	0.00173	0.18513	8.40E-04
1.12342	0.02563	1.12729	0.01851	1.18255	0.01288
9.97314	0.2277	10.03347	0.17013	11.85884	0.14066
20.79868	0.45414	21.1555	0.34758	21.09132	0.24554
40.29341	0.82223	40.78733	0.63667	40.87054	0.45909
60.50925	1.15872	60.92426	0.90883	61.21499	0.66402
80.60983	1.45691	80.62031	1.15171	80.60461	0.84757
97.12976	1.67911	95.99043	1.32918	97.20039	0.99736
120.7163	1.96139	121.05467	1.5963	121.38647	1.20065
140.86153	2.18027	141.06792	1.79162	141.47906	1.35869
150.50507	2.27856	150.76008	1.88285	151.02987	1.4318
160.91016	2.37968	161.31634	1.97935	160.94175	1.50869
180.48603	2.55829	180.57152	2.14093	180.78372	1.65198
201.36951	2.73392	201.28309	2.30641	201.81668	1.79593
249.16825	3.08456	248.63169	2.64041	249.14969	2.08606
302.41087	3.41136	303.35114	2.97562	303.42548	2.38308
352.82727	3.67907	353.90656	3.2485	353.89428	2.63343
403.22621	3.91354	404.61603	3.49144	403.51533	2.85142
453.98499	4.11611	455.74347	3.70666	454.80491	3.05926
500.53142	4.28319	500.6582	3.87569	501.47523	3.23304
550.49856	4.44392	550.37186	4.04646	551.18624	3.40252
600.55349	4.59053	601.36938	4.20841	601.08861	3.56126
650.65782	4.72491	651.15648	4.36111	650.87721	3.71132
700.23823	4.85177	700.75227	4.49989	701.32864	3.85044
750.62904	4.96788	750.51585	4.62825	750.53082	3.97576
800.58026	5.06996	801.47928	4.75088	800.23996	4.10143
850.83859	5.17196	851.18809	4.85955	851.133	4.23125
900.38718	5.27464	900.51315	4.95935	901.1831	4.33776
950.55087	5.37501	950.38324	5.05374	950.22058	4.43718
1000.68796	5.45396	1000.83744	5.14704	1000.60211	4.53366
1050.36259	5.52324	1050.63845	5.23687	1050.59052	4.62376

Mg2(dobdc) Low-Pressure CO2 Raw Isotherm Data

Pressure <i>110°C</i>	Quantity Adsorbed <i>110°C</i>	Pressure <i>120°C</i>	Quantity Adsorbed <i>120°C</i>	Pressure <i>130°C</i>	Quantity Adsorbed <i>130°C</i>
0.19367	6.10E-04	0.2027	3.70E-04	0.21364	7.00E-05
1.01194	0.00754	1.05837	0.00583	1.09762	0.00434
9.69404	0.08395	9.59903	0.06174	10.0928	0.04961
21.72325	0.18476	21.30325	0.1363	21.32622	0.10315
41.21562	0.34038	41.33979	0.2563	41.24012	0.19346
61.33679	0.49466	61.48201	0.37254	61.27282	0.28322
80.87381	0.63619	81.00074	0.48154	81.63396	0.37093
97.83681	0.75433	98.56529	0.5759	99.21096	0.44421
121.67286	0.91239	121.07977	0.6926	121.14288	0.53514
141.35647	1.03776	141.1456	0.79399	141.11785	0.61625
151.7757	1.10163	151.50944	0.84703	151.56209	0.65824
161.46297	1.16057	161.51164	0.89608	161.38786	0.69691
180.97865	1.27431	181.0362	0.98627	181.0921	0.77156
201.09742	1.387	201.04795	1.07887	201.94246	0.84835
248.50973	1.63658	248.83636	1.29188	249.14577	1.01449
302.05079	1.89405	301.98463	1.50729	301.68935	1.18875
352.56899	2.11559	352.39867	1.69842	352.71802	1.34677
403.38656	2.32292	402.77455	1.88045	401.93457	1.49256
454.30576	2.51315	452.85426	2.04281	452.80084	1.63843
500.36868	2.67314	501.07736	2.19201	500.97833	1.77727
551.59938	2.83692	551.44025	2.34363	551.47443	1.91334
601.38257	2.98555	601.05182	2.48423	601.62669	2.03746
650.90105	3.12851	650.99276	2.61729	650.75401	2.15597
700.7849	3.26672	701.20112	2.74293	700.52165	2.27008
750.87153	3.40472	751.01515	2.86688	750.59893	2.38037
801.50825	3.52741	800.60264	2.98554	801.53054	2.48439
850.26051	3.64053	850.53645	3.10336	851.12942	2.58359
900.80121	3.74654	900.79494	3.21925	900.62333	2.67501
950.67383	3.85018	950.60092	3.32415	950.32889	2.76991
1001.17978	3.94192	1000.30534	3.42194	1000.51154	2.87341
1050.25038	4.03004	1050.56831	3.5128	1050.73903	2.97757

Mg₂(dobdc) Low-Pressure CO₂ Raw Isotherm Data

Pressure <i>140°C</i>	Quantity Adsorbed <i>140°C</i>	Pressure <i>150C</i>	Quantity Adsorbed <i>150°C</i>	Pressure <i>160°C</i>	Quantity Adsorbed <i>160°C</i>
0.25142	-1.02E-03	0.22931	-3.30E-04	0.23181	-3.60E-04
1.12894	0.00229	1.1535	0.00225	1.16028	0.002
10.42009	0.03772	10.65167	0.03134	10.8498	0.02594
21.51697	0.0774	22.23829	0.06357	21.32066	0.05054
40.83413	0.14358	41.40806	0.11445	41.48316	0.09492
61.21513	0.21157	61.45187	0.16692	61.25192	0.13726
81.45496	0.2779	81.92743	0.21934	81.65821	0.18096
99.89368	0.33678	99.9935	0.26689	99.86438	0.22003
121.72537	0.40516	121.3712	0.3216	121.02197	0.26291
141.39335	0.4682	141.06911	0.37026	140.96226	0.30317
151.28616	0.50043	151.35366	0.39657	150.99834	0.3251
161.7047	0.53248	161.94621	0.42332	161.73299	0.34675
180.72851	0.58937	181.70837	0.46975	181.23028	0.38533
200.97603	0.64849	201.72172	0.51493	201.46216	0.42463
249.44754	0.78289	250.06515	0.62111	250.75633	0.51682
301.77099	0.92285	301.56257	0.73159	301.56475	0.61514
352.27385	1.04988	351.95836	0.83657	351.67681	0.70743
402.06029	1.17145	402.26979	0.9371	401.52766	0.79346
452.47933	1.2888	452.19066	1.03819	451.79457	0.88062
500.97922	1.39994	501.33678	1.14118	501.67395	0.96151
550.97012	1.51493	551.99717	1.23842	551.30139	1.04015
601.04129	1.63	601.47269	1.32777	600.84876	1.11684
651.0131	1.7363	650.56046	1.41289	651.0227	1.19248
700.78677	1.83495	701.48097	1.50187	700.90216	1.26724
751.00872	1.9331	751.81375	1.58678	750.7524	1.33977
800.71697	2.02185	800.3809	1.66924	801.31694	1.41997
850.54996	2.10958	851.05976	1.74348	850.51212	1.50447
900.95712	2.1973	900.54366	1.81518	900.80943	1.58615
951.0951	2.28479	950.50124	1.88803	952.0741	1.65556
1000.99921	2.36497	1000.66843	1.96247	999.80693	1.71809
1050.13605	2.44701	1050.61925	2.04968	1050.38196	1.78756

Mg2(dobdc) Low-Pressure CO2 Raw Isotherm Data

Pressure <i>170°C</i>	Quantity Adsorbed <i>170°C</i>	Pressure <i>180°C</i>	Quantity Adsorbed <i>180°C</i>	Pressure <i>190°C</i>	Quantity Adsorbed <i>190°C</i>
0.24841	-8.10E-04	0.24097	-5.70E-04	0.24882	-7.60E-04
1.18378	8.70E-04	1.18535	0.00106	1.19808	5.00E-04
11.0276	0.02105	11.18635	0.01809	11.28638	0.01536
21.54865	0.04033	21.82169	0.03373	21.96145	0.02863
41.74571	0.07488	40.85823	0.0604	41.15347	0.05116
61.3545	0.11026	61.60289	0.08887	61.84742	0.07494
81.38521	0.14548	81.01171	0.11479	81.32642	0.09688
100.48267	0.17778	100.75955	0.14131	101.10006	0.11909
121.4587	0.21257	121.07154	0.16851	121.13395	0.14055
141.7221	0.24588	141.93115	0.19516	141.9402	0.16247
151.81421	0.26227	151.85322	0.20916	151.91815	0.17328
162.11475	0.27876	161.96106	0.22296	161.46529	0.1834
181.21764	0.30916	181.34273	0.24728	181.05485	0.20418
201.16689	0.3395	201.51531	0.27408	201.21802	0.22897
250.06803	0.41258	250.92392	0.33416	251.12605	0.28252
301.92615	0.4894	301.57628	0.39398	301.87299	0.3315
351.55019	0.56805	352.35347	0.45361	351.54091	0.37982
400.66709	0.643	401.34949	0.51603	401.64264	0.4271
451.62011	0.71766	451.62776	0.58137	451.82436	0.4762
500.70084	0.78343	501.66727	0.639	501.15885	0.52351
551.37503	0.85092	550.74988	0.69276	551.13697	0.57129
601.54942	0.91393	601.07904	0.74775	600.75953	0.61938
650.90829	0.9778	650.79734	0.7997	651.37879	0.66823
700.66007	1.03895	700.57764	0.84977	700.7805	0.71134
750.83174	1.0979	751.14999	0.89977	750.7716	0.75319
800.5543	1.15629	800.36267	0.95071	800.61297	0.79392
850.8106	1.21854	851.63857	1.00485	851.44816	0.83722
900.11132	1.29397	900.57467	1.05647	900.64929	0.87846
951.22619	1.36746	951.62883	1.10882	950.3022	0.93259
1000.74581	1.42797	1000.45799	1.15884	1001.3579	0.99213
1050.33704	1.48099	1050.41077	1.20617	1051.60012	1.03177

Mg₂(dobdc) Low-Pressure CO₂ Raw Isotherm Data

Pressure	Quantity
<i>200°C</i>	<i>200°C</i>
0.20621	5.00E-04
1.17401	0.00246
11.37009	0.01625
21.19905	0.02703
41.39186	0.04704
61.72161	0.06681
81.27585	0.08744
100.57445	0.10696
121.10352	0.12634
141.62836	0.14488
151.37336	0.15368
161.8438	0.16276
181.30148	0.17845
201.64673	0.1975
251.29425	0.24044
300.75817	0.28345
351.38382	0.32621
401.51208	0.36792
451.35556	0.41253
501.17444	0.45751
551.05462	0.49578
600.93534	0.5353
651.31841	0.57534
701.31537	0.60877
750.3072	0.64454
800.47033	0.68786
851.26833	0.73042
900.61812	0.76875
950.64217	0.80517
1000.66192	0.84811
1050.88387	0.8895

MOF-177 Low-Pressure CO₂ Raw Isotherm Data

Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed
<i>20°C</i>	<i>20°C</i>	<i>25°C</i>	<i>25°C</i>	<i>30°C</i>	<i>30°C</i>
0.20631	-1.00E-04	0.21184	-1.80E-04	0.21549	-2.20E-04
23.53927	0.02088	23.79603	0.01915	23.98601	0.0176
42.1597	0.03804	42.34031	0.03456	42.60101	0.03156
61.07002	0.05532	61.94141	0.05074	61.46764	0.04607
81.49009	0.07389	81.22163	0.06694	81.85712	0.06151
101.09013	0.09216	100.18215	0.08273	101.09085	0.07621
121.79031	0.11142	120.77809	0.10018	121.81472	0.09217
140.86274	0.12905	141.28942	0.11717	141.51102	0.10727
151.4402	0.13944	151.22311	0.12602	151.82615	0.11572
161.18548	0.14895	161.26463	0.13487	161.50826	0.12372
181.56395	0.16775	181.10689	0.15163	181.5979	0.13945
201.98122	0.1867	201.78242	0.16895	201.25941	0.15468
250.61842	0.23104	250.59483	0.20873	251.36804	0.1922
301.21867	0.27737	301.48189	0.25057	301.77225	0.23033
351.97643	0.32369	351.63962	0.29204	351.74541	0.26814
401.7328	0.36959	401.38111	0.33328	401.88391	0.30636
452.06766	0.41611	452.12227	0.37572	452.12983	0.34453
501.06763	0.46166	500.60543	0.41619	501.36257	0.38229
551.0864	0.50825	550.68909	0.45829	551.05344	0.42087
601.08267	0.55465	601.07941	0.50017	600.83614	0.45955
650.94715	0.60141	651.18964	0.54257	651.20221	0.49799
700.71256	0.64875	701.56405	0.58531	700.65747	0.53619
751.04982	0.69728	751.10328	0.62717	751.75362	0.57592
801.11733	0.74434	801.22116	0.67042	801.10284	0.61498
850.42562	0.79095	851.06636	0.71362	850.53084	0.65301
900.56946	0.83873	901.163	0.75686	901.13688	0.69324
951.30399	0.88742	950.56284	0.79949	951.0038	0.73324
1000.89383	0.93556	1000.85144	0.84308	1000.39387	0.77287

Units: Pressure (mbar), Quantity Adsorbed (mmol/g)
Amount adsorbed is excess

MOF-177 Low-Pressure CO₂ Raw Isotherm Data

Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed
<i>40°C</i>	<i>40°C</i>	<i>50°C</i>	<i>50°C</i>	<i>60°C</i>	<i>60°C</i>
0.21038	-1.00E-04	0.22411	-2.90E-04	0.22691	-3.00E-04
23.16298	0.01439	24.51906	0.01288	23.87162	0.01078
42.54146	0.0264	42.56632	0.02274	42.37987	0.01954
60.98391	0.03806	61.89871	0.0334	61.65387	0.02881
81.30015	0.05083	81.5381	0.04424	81.66114	0.03833
101.47442	0.0636	101.20673	0.0553	100.6149	0.04736
121.13179	0.07647	120.80096	0.06625	121.71622	0.05753
141.4262	0.08947	141.48919	0.07796	141.05313	0.06689
151.95041	0.09654	151.67333	0.08403	151.00391	0.0721
161.6827	0.10298	161.37542	0.0897	161.60587	0.07773
182.00068	0.11597	181.79586	0.10108	181.37781	0.08732
201.56524	0.12874	201.47733	0.1121	201.37846	0.09706
250.59586	0.15901	251.28925	0.13874	251.16979	0.12017
301.29052	0.19053	301.11935	0.16557	302.27782	0.14383
351.71815	0.22218	351.475	0.19267	351.41841	0.16698
402.05419	0.25408	401.77076	0.22024	401.64512	0.19046
451.6527	0.28557	452.32171	0.24831	451.31036	0.21405
501.6355	0.31698	501.54871	0.27582	501.21138	0.23759
551.05552	0.34807	551.45649	0.30316	551.07342	0.26128
601.3988	0.38063	600.53482	0.32955	601.10228	0.2854
651.1046	0.41246	650.69111	0.35751	651.38189	0.30938
701.33246	0.44466	700.95798	0.38511	700.69042	0.33274
750.61439	0.47655	750.65084	0.41295	750.57427	0.35648
800.99307	0.50965	801.55487	0.44085	800.7946	0.38118
850.81035	0.54182	851.31023	0.46867	850.80856	0.40561
900.54122	0.57385	900.57947	0.49592	901.4998	0.43006
951.31172	0.6075	951.21521	0.52557	950.6604	0.45372
1000.77226	0.63875	1000.66216	0.55337	1000.35432	0.47809

MOF-177 Low-Pressure CO₂ Raw Isotherm Data

Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed
<i>70°C</i>	<i>70°C</i>	<i>75°C</i>	<i>75°C</i>	<i>90°C</i>	<i>90°C</i>
0.21992	-1.70E-04	0.23044	-3.20E-04	0.23059	-2.80E-04
24.14062	0.00859	24.17127	0.00763	24.35418	0.00655
42.73892	0.01609	42.2229	0.01364	42.30662	0.01162
61.91465	0.02336	62.10912	0.02051	61.022	0.01701
81.71533	0.03134	81.38829	0.02719	81.50643	0.02292
101.5343	0.03892	101.08487	0.03385	101.28924	0.02894
121.17604	0.04694	121.91508	0.04128	121.99962	0.03524
141.38779	0.05515	141.99375	0.04825	141.22208	0.04088
151.25382	0.05951	151.68708	0.05164	151.21048	0.04443
162.03776	0.06404	160.79245	0.05583	161.50746	0.04751
180.9725	0.07138	180.78036	0.06481	181.71815	0.05384
201.55926	0.07964	201.52341	0.07233	202.06713	0.05975
250.66947	0.09807	251.60001	0.0878	251.85337	0.07411
302.20172	0.1179	302.38686	0.10376	301.78857	0.08795
351.16611	0.13721	352.38459	0.12041	351.23556	0.10226
400.90198	0.15588	402.05996	0.13652	401.60419	0.11713
451.39877	0.17515	451.6693	0.15339	451.3104	0.13039
501.31745	0.19567	500.86733	0.17002	500.98406	0.14606
551.01267	0.21477	550.86608	0.18602	551.18645	0.15959
600.77454	0.23345	601.16009	0.20286	600.92037	0.17263
650.75633	0.25276	651.82895	0.22105	650.42933	0.18746
700.71988	0.27328	701.70401	0.24182	701.13057	0.2033
750.6746	0.29625	752.0892	0.25726	751.69885	0.21857
801.04669	0.31407	800.77564	0.27276	800.62054	0.23237
850.55118	0.33407	850.87733	0.30029	850.78578	0.24723
900.89381	0.35223	902.06291	0.32227	900.59916	0.26389
950.38512	0.37125	950.90639	0.33407	950.86677	0.27831
1001.28776	0.38933	999.77478	0.35028	1000.75273	0.29464

MOF-177 Low-Pressure CO₂ Raw Isotherm Data

Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed
<i>100°C</i>	<i>100°C</i>	<i>110°C</i>	<i>110°C</i>	<i>120°C</i>	<i>120°C</i>
0.23028	-2.50E-04	0.25416	-6.00E-04	0.2719	-8.60E-04
24.41386	0.00576	24.43788	0.00507	24.01462	0.00342
42.21174	0.01032	41.32874	0.00907	41.61306	0.00659
61.7208	0.01533	61.70072	0.01419	61.69198	0.01018
82.18525	0.02066	81.32924	0.01922	81.91831	0.01392
101.26521	0.02589	100.68043	0.02429	100.92147	0.01732
121.39247	0.0312	121.60522	0.02992	122.28723	0.02102
141.80473	0.03666	142.04371	0.03541	141.29507	0.02527
151.21548	0.03979	151.63505	0.03821	151.39907	0.02832
161.72671	0.04276	161.54854	0.04119	161.06394	0.03064
182.2612	0.04805	181.52269	0.04618	181.82131	0.03415
200.96165	0.05305	201.11758	0.05178	202.24485	0.03751
250.75586	0.06503	251.34165	0.0637	251.75198	0.04406
301.79605	0.07746	301.95467	0.07632	300.9354	0.05082
351.3282	0.09472	352.06028	0.08746	351.64182	0.05767
401.45117	0.11018	401.24208	0.09786	401.73325	0.06628
451.45114	0.11977	451.72541	0.11069	451.749	0.07455
501.61316	0.12961	501.35171	0.12169	501.78209	0.0811
550.96336	0.14489	551.00714	0.13177	551.32417	0.08926
602.25204	0.15737	601.60093	0.14534	601.16546	0.09921
650.9489	0.16904	652.13577	0.15713	650.91212	0.10927
701.27827	0.18326	701.5127	0.17164	700.90663	0.11676
751.12899	0.19532	751.47622	0.18438	750.5047	0.12289
801.34167	0.20663	800.45779	0.19661	800.65936	0.13019
850.96334	0.21843	850.67975	0.20643	851.53409	0.13719
900.67492	0.22975	900.28123	0.21861	900.50826	0.14393
950.53281	0.2438	951.48862	0.23197	950.90696	0.15228
1001.08661	0.25945	1001.51992	0.24061	1001.49746	0.16466

MOF-177 Low-Pressure CO₂ Raw Isotherm Data

Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed
<i>130°C</i>	<i>130°C</i>	<i>140°C</i>	<i>140°C</i>	<i>150°C</i>	<i>150°C</i>
0.28888	-0.00109	0.29215	-0.0011	0.29769	-0.00116
24.33105	0.00258	24.0521	0.00258	24.11804	0.00217
41.1529	0.0051	42.40475	0.00539	41.98637	0.00477
60.91437	0.00872	61.72814	0.00885	61.30976	0.00764
81.70075	0.01287	81.85857	0.01248	81.42444	0.01041
101.02453	0.01545	100.89299	0.01586	100.99166	0.01325
121.68391	0.01877	121.78268	0.01936	122.53607	0.01594
142.14518	0.02203	141.686	0.02246	141.19174	0.01921
150.74092	0.02365	151.46184	0.02432	151.37295	0.02194
161.51797	0.02552	161.14113	0.02564	161.67603	0.02402
181.5173	0.02865	181.63143	0.02945	181.76488	0.02691
201.39069	0.032	201.23199	0.0327	202.34453	0.02993
251.49272	0.0393	252.00344	0.04092	251.21599	0.0368
301.74582	0.046	302.33139	0.05001	301.92401	0.04307
351.95897	0.05306	350.90876	0.05788	351.62371	0.04957
401.70151	0.06035	401.8346	0.06409	401.84514	0.05649
451.18802	0.068	451.66218	0.07288	451.61942	0.06544
500.73669	0.07481	501.4293	0.08053	501.24088	0.07355
550.89957	0.08282	551.17363	0.08862	551.02643	0.08165
601.02981	0.0909	601.54182	0.09688	601.42325	0.08961
650.76044	0.09768	650.89429	0.10753	651.09529	0.09519
701.25304	0.10457	700.95277	0.11796	701.55192	0.09994
750.40957	0.11254	752.07032	0.12326	751.27921	0.10745
801.08722	0.12522	820.51987	0.13414	801.33687	0.11523
851.34042	0.14345	850.74941	0.13876	850.47518	0.12624
902.52739	0.15057	900.64782	0.14703	901.59542	0.13446
969.87465	0.16006	950.8998	0.15558	950.42149	0.14132
1000.64092	0.16444	1000.5611	0.16569	1000.99921	0.15161

MOF-177 Low-Pressure CO₂ Raw Isotherm Data

Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed
<i>160°C</i>	<i>160°C</i>	<i>170°C</i>	<i>170°C</i>	<i>180°C</i>	<i>180°C</i>
0.26731	-6.70E-04	0.27984	-8.20E-04	0.27323	-7.00E-04
24.53473	0.00237	24.73297	0.0015	24.79865	0.00196
42.02656	0.00488	41.26942	0.0033	41.30439	0.00382
62.00284	0.0076	61.0881	0.00601	61.15299	0.00597
82.18149	0.01051	81.29351	0.00901	81.79306	0.00876
101.2355	0.0129	100.91208	0.01151	100.76853	0.01163
121.0505	0.01623	122.50155	0.01428	122.11684	0.0151
141.81848	0.01892	141.56909	0.01647	141.58285	0.01815
152.02299	0.02021	151.7531	0.01771	151.69641	0.01945
161.58072	0.0218	161.78798	0.01873	161.2344	0.02027
181.54139	0.0255	181.71262	0.02129	181.36031	0.02257
201.50244	0.02908	201.62629	0.02432	201.37065	0.02565
251.42294	0.03536	250.97887	0.03033	251.7806	0.02974
301.82286	0.04083	301.65945	0.03815	302.07488	0.03482
351.76734	0.04625	350.98648	0.04498	351.40274	0.04065
401.84343	0.05216	401.33391	0.05201	401.29416	0.04641
451.0854	0.05673	452.19461	0.05728	450.9594	0.05378
500.89821	0.06231	501.65442	0.06448	501.4249	0.0623
550.82568	0.07187	551.78776	0.06976	551.81099	0.06663
601.28411	0.08213	601.00788	0.07626	620.99823	0.07183
651.08874	0.09034	651.44483	0.08188	651.0891	0.07546
700.61458	0.09704	701.04716	0.09019	701.01681	0.08031
750.59234	0.1044	750.95331	0.0966	750.89407	0.08604
801.16249	0.11175	800.60101	0.10148	800.51524	0.0925
850.72426	0.11865	850.34376	0.1074	851.03071	0.10156
901.94711	0.12222	900.39223	0.11793	900.72089	0.10946
970.71157	0.12833	951.30496	0.12588	950.14588	0.12136
1000.80815	0.13773	1000.5803	0.13182	1002.01019	0.12378

MOF-177 Low-Pressure CO2 Raw Isotherm Data

Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed
<i>190°C</i>	<i>190°C</i>	<i>200°C</i>	<i>200°C</i>
0.3466	-0.00177	0.26792	-5.70E-04
25.17637	8.20E-04	24.36292	0.00185
42.69893	0.00248	41.60604	0.00359
61.6462	0.00451	62.1106	0.00574
82.20229	0.0069	81.46923	0.00811
101.74207	0.00921	101.04462	0.01053
121.87662	0.01174	122.10395	0.01293
141.76905	0.01434	141.70044	0.01562
151.71035	0.01597	151.59692	0.01768
161.38037	0.01751	161.77736	0.01963
182.17986	0.01966	181.77534	0.02402
202.20644	0.02329	202.12724	0.02764
250.97246	0.03076	252.42337	0.03243
301.19649	0.03828	301.44423	0.03687
352.17481	0.0433	351.26998	0.04086
402.28952	0.04825	401.79489	0.0455
451.67056	0.05202	451.49174	0.05071
501.34748	0.05881	501.39463	0.05794
552.25561	0.06433	551.70435	0.06498
601.83354	0.07004	601.18572	0.07273
650.62938	0.07665	651.41216	0.07984
701.76008	0.08485	701.55591	0.08487
750.86543	0.09106	750.66451	0.09092
801.02562	0.09815	801.08974	0.09963
851.24326	0.10604	851.27361	0.10868
900.28937	0.11984	900.1582	0.12239
951.77107	0.13091	951.22074	0.13345
1000.3732	0.13945	1001.35392	0.13329

Mg₂(dobdc) Low-Pressure N₂ Raw Isotherm Data

Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed
20°C	20°C	30°C	30°C	40°C	40°C
0.21083	-1.80E-04	1.22116	8.00E-04	1.23493	7.00E-05
23.90223	0.03109	23.9349	0.02431	23.63921	0.01762
41.45124	0.05455	40.0737	0.03991	39.84847	0.02934
60.59948	0.0795	61.15701	0.06123	61.09912	0.04528
81.44688	0.10692	81.33288	0.07956	80.91529	0.05913
100.26024	0.13174	100.85225	0.09878	100.81354	0.07487
126.03577	0.16551	125.64453	0.12241	125.6759	0.09262
150.79926	0.19587	151.06693	0.14594	150.7234	0.11047
174.52569	0.22551	174.80862	0.1685	175.87535	0.12829
200.88205	0.25631	200.7346	0.19294	200.88528	0.146
250.62469	0.31782	250.76915	0.23835	250.94758	0.17967
299.46848	0.37675	300.6782	0.28264	301.09829	0.21477
350.99978	0.43869	350.66322	0.32672	351.16554	0.24735
401.171	0.49542	400.87004	0.3698	400.75974	0.28083
451.25503	0.55171	451.1182	0.41322	450.71442	0.31315
500.70479	0.60618	501.29357	0.45627	501.04888	0.34881
551.25505	0.66076	551.07208	0.50081	551.04575	0.38389
600.78797	0.71405	601.17995	0.54284	600.76087	0.41382
650.66645	0.76739	650.58703	0.58249	650.61453	0.44184
700.71256	0.8175	700.98735	0.62163	700.52483	0.47147
750.52056	0.8665	725.65867	0.6426	725.57282	0.48741
800.54478	0.91602	750.93166	0.66382	750.54083	0.50518
825.97922	0.94374	775.4085	0.68429	775.71878	0.52026
850.52115	0.96911	801.07941	0.70581	800.74024	0.53437
875.58331	0.99221	850.85202	0.74402	850.43726	0.56542
900.52836	1.0179	900.58988	0.7813	900.68777	0.59535
950.51369	1.06459	950.2943	0.82323	950.59189	0.6249
1000.51357	1.10997	1000.5676	0.86398	1000.63848	0.65248

Units: Pressure (mbar), Quantity Adsorbed (mmol/g)
Amount adsorbed is excess

Mg₂(dobdc) Low-Pressure N₂ Raw Isotherm Data

Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed
<i>50°C</i>	<i>50°C</i>	<i>60°C</i>	<i>60°C</i>	<i>70°C</i>	<i>70°C</i>
1.23738	-2.00E-05	1.24312	-3.00E-04	1.24084	-1.30E-04
24.09966	0.01384	23.93783	0.00978	24.08634	0.00888
41.39969	0.02354	41.10704	0.01904	41.49533	0.01561
61.291	0.03435	60.85249	0.02832	61.20295	0.02315
81.11598	0.04515	80.76286	0.0368	81.26918	0.03027
101.19485	0.05738	100.95418	0.04573	100.97826	0.03736
126.00299	0.07034	126.30619	0.05583	126.03084	0.04678
150.8708	0.08485	151.2245	0.06744	150.96272	0.0549
175.90806	0.09894	176.52139	0.07761	175.98252	0.06376
200.95304	0.11168	199.51025	0.08665	200.93864	0.0729
250.88541	0.13853	250.50444	0.10846	251.59999	0.08805
300.91321	0.16481	300.63465	0.13024	301.36766	0.10554
351.19471	0.19018	350.54315	0.15063	351.1417	0.12144
401.33224	0.21519	400.56863	0.17049	401.05211	0.13595
451.15539	0.23964	450.91387	0.18994	451.50212	0.15286
500.95554	0.26746	500.91807	0.20961	500.61654	0.16848
550.86425	0.29623	551.05039	0.22964	551.06406	0.18274
600.74265	0.31881	600.58539	0.24917	600.53701	0.1975
650.57372	0.33918	650.51416	0.26861	650.67125	0.21256
700.56478	0.36151	700.91274	0.28818	701.14717	0.23093
725.57746	0.37425	726.04365	0.30058	726.32756	0.23982
750.46954	0.38816	750.4584	0.31523	750.93744	0.24905
775.80251	0.40215	775.67101	0.32233	775.72634	0.25552
800.6085	0.41241	820.67725	0.33879	800.80672	0.26436
850.50577	0.43795	850.57201	0.34796	850.41447	0.28006
901.14908	0.46324	900.60852	0.3634	900.67223	0.29545
950.65495	0.48516	950.32962	0.38608	950.52833	0.30934
1000.62188	0.50762	1000.7651	0.40415	1000.42699	0.32405

Mg₂(dobdc) Low-Pressure N₂ Raw Isotherm Data

Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed
<i>80°C</i>	<i>80°C</i>	<i>90°C</i>	<i>90°C</i>	<i>100°C</i>	<i>100°C</i>
1.25198	-7.10E-04	1.25426	-5.50E-04	1.2547	-5.50E-04
23.97225	0.00491	24.40498	0.00667	24.51588	0.00511
41.68285	0.00985	41.83722	0.01184	41.73132	0.00842
61.47373	0.01523	61.87839	0.01774	61.28925	0.01257
81.5839	0.02057	81.73629	0.02307	81.60669	0.01701
100.51116	0.02547	101.5367	0.02922	101.0037	0.02095
126.67848	0.03214	126.84927	0.03676	125.98756	0.02613
151.09389	0.03884	151.40085	0.04406	151.80827	0.03147
176.55825	0.0457	176.17389	0.0508	177.0966	0.03575
201.06465	0.05392	201.31243	0.05848	201.6257	0.04143
251.14235	0.06663	249.68749	0.07369	251.99866	0.05397
300.74605	0.07673	301.38945	0.08919	301.57882	0.06573
350.73825	0.08665	351.55576	0.10197	351.40201	0.07502
400.87692	0.09761	401.8514	0.11515	401.60675	0.08453
450.60196	0.10862	451.94479	0.12908	451.64338	0.09481
500.63912	0.11981	501.6759	0.1449	501.36481	0.10332
551.30074	0.13069	551.45144	0.15856	551.36071	0.11178
600.53742	0.14022	601.36202	0.16985	600.9914	0.12196
650.47213	0.1508	651.42749	0.1819	651.4561	0.13288
700.67578	0.16279	701.35305	0.19473	700.83006	0.14034
725.61676	0.17119	726.32707	0.20516	725.27687	0.14942
750.85745	0.18669	750.88951	0.2171	751.72856	0.16065
775.9109	0.20094	776.1529	0.22167	776.57116	0.16933
800.68776	0.20854	821.16915	0.23004	801.75725	0.1718
850.97538	0.21194	851.34799	0.23807	871.32934	0.18081
920.84489	0.22078	901.61779	0.2508	901.55904	0.18644
950.52719	0.22692	950.59311	0.26066	951.43304	0.19772
1000.78422	0.23507	1001.89424	0.26524	1000.88146	0.20645

Mg₂(dobdc) Low-Pressure N₂ Raw Isotherm Data

Absolute Pressure <i>110°C</i>	Quantity Adsorbed <i>110°C</i>	Absolute Pressure <i>120°C</i>	Quantity Adsorbed <i>120°C</i>	Absolute Pressure <i>130°C</i>	Quantity Adsorbed <i>130°C</i>
1.26002	-6.90E-04	1.26877	-9.40E-04	1.28644	-0.00146
22.29167	0.00439	22.54317	0.00304	22.64377	0.00211
42.09739	0.00807	42.2473	0.00638	42.3634	0.00521
61.09829	0.01195	62.11301	0.01018	61.35278	0.00816
81.79821	0.01565	79.47903	0.01313	81.59342	0.01034
101.06251	0.01891	101.29825	0.01689	101.9172	0.01341
124.35746	0.02354	126.26756	0.02097	127.00305	0.01666
151.07976	0.02962	151.62752	0.02534	152.06186	0.02
176.17914	0.03465	176.85773	0.02898	176.90961	0.02309
201.83601	0.03997	201.02237	0.03271	201.05118	0.02589
251.57528	0.04783	251.12251	0.04115	250.87611	0.03288
301.48565	0.05844	301.37922	0.05037	301.48097	0.04262
351.74309	0.07122	351.43106	0.05977	349.31457	0.05239
401.06485	0.08177	401.39038	0.06683	401.16046	0.06092
451.3078	0.08821	452.02934	0.07293	451.98987	0.06678
500.94028	0.0964	501.85854	0.08185	501.15763	0.07346
551.15085	0.10504	551.35216	0.09405	551.29585	0.0771
601.59772	0.11635	601.77996	0.11105	601.17629	0.08225
651.84897	0.12728	651.87273	0.12211	651.63699	0.08641
701.39748	0.13842	701.39561	0.12983	701.11609	0.09338
726.45198	0.14351	726.28525	0.13404	726.2815	0.09598
751.19629	0.15104	751.2386	0.13351	750.61968	0.10427
776.73725	0.16095	795.78288	0.13806	776.88274	0.11672
801.66725	0.16734	800.75172	0.14099	801.68458	0.12676
851.38713	0.17049	851.49056	0.14498	852.15977	0.12934
920.73211	0.18169	920.47302	0.15096	920.68874	0.14013
950.91307	0.18508	950.71256	0.15996	951.38048	0.14518
1001.11679	0.19833	1001.02688	0.17316	1001.01313	0.15273

Mg₂(dobdc) Low-Pressure N₂ Raw Isotherm Data

Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed
<i>140°C</i>	<i>140°C</i>	<i>150°C</i>	<i>150°C</i>	<i>160°C</i>	<i>160°C</i>
1.27912	-0.0012	1.28936	-0.0015	1.29146	-0.00153
22.76358	0.00199	22.5443	0.00147	22.58415	0.00204
41.61895	0.00488	41.60811	0.00319	41.70491	0.00434
61.21806	0.00735	61.29503	0.00522	62.31025	0.0071
79.38319	0.00947	79.37897	0.00745	79.91771	0.00904
102.3914	0.0127	102.25145	0.01005	101.07621	0.01094
126.58835	0.01582	126.81483	0.01237	126.33264	0.01385
151.40801	0.01869	151.54893	0.01557	150.99917	0.01636
176.31769	0.02118	174.93499	0.01949	176.28991	0.01879
202.00797	0.02571	201.77319	0.02408	201.35413	0.02152
251.48121	0.03581	251.42941	0.02851	249.66408	0.0266
301.35781	0.04435	301.7219	0.03258	301.62826	0.03262
351.45319	0.05063	352.28182	0.03618	349.41759	0.0384
401.39128	0.05588	402.22654	0.04057	401.87529	0.04358
451.82965	0.06111	451.40996	0.04575	451.19306	0.04848
501.45359	0.06722	501.24633	0.05218	501.33165	0.05225
551.39513	0.07084	551.5403	0.05869	551.62281	0.05765
601.83907	0.07621	601.55496	0.06689	601.77642	0.0619
650.90699	0.08091	651.93201	0.07693	651.16706	0.06703
701.75227	0.08688	701.53459	0.08269	700.91274	0.07111
727.04397	0.08995	746.12005	0.08422	726.40918	0.07385
751.18075	0.09213	771.29051	0.08314	750.88959	0.07966
776.36537	0.09589	796.17966	0.08467	775.46652	0.09976
801.14215	0.10598	801.18055	0.08529	802.09178	0.11329
850.93917	0.12352	851.24937	0.08899	851.76723	0.11731
901.50021	0.13472	901.14127	0.09435	920.95825	0.12369
951.22749	0.13715	951.24719	0.09728	951.47479	0.12003
1020.29344	0.14323	1001.02745	0.11435	1020.46075	0.12377

Mg2(dobdc) Low-Pressure N2 Raw Isotherm Data

Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed
<i>170°C</i>	<i>170°C</i>	<i>180°C</i>	<i>180°C</i>	<i>190°C</i>	<i>190°C</i>
1.28246	-0.00125	1.29544	-0.00162	1.3066	-0.00192
22.92757	0.00145	22.85671	3.70E-04	23.11951	9.70E-04
41.87578	0.00341	41.96371	0.0018	42.16372	0.00288
61.48946	0.0055	61.61924	0.00365	61.81661	0.00417
79.61539	0.00772	81.45118	0.00497	81.77012	0.00522
102.50507	0.00981	102.34258	0.00616	102.50603	0.00689
126.5754	0.01298	127.51264	0.00774	127.61255	0.00848
151.60682	0.01693	151.66524	0.00899	151.15287	0.01063
176.33724	0.02098	176.81716	0.01032	176.05476	0.01334
199.65904	0.02386	201.73374	0.0115	199.72766	0.01678
251.12048	0.02813	251.73406	0.01453	251.11745	0.0229
301.36343	0.03313	299.66573	0.01786	301.77876	0.02719
352.124	0.03734	351.02354	0.0202	351.52464	0.0338
402.13263	0.04036	401.16258	0.02348	401.42566	0.03957
451.97319	0.04567	451.99247	0.02726	452.37147	0.04068
502.50636	0.04841	501.25471	0.02928	521.2905	0.04093
571.68936	0.05173	551.05552	0.04125	571.48105	0.04734
601.10329	0.06068	601.57933	0.05378	601.56037	0.05036
651.96163	0.07393	651.85617	0.05879	651.08365	0.05348
701.87132	0.08366	720.8473	0.05907	701.37534	0.06013
726.35938	0.08233	745.98236	0.05515	726.94177	0.05398
771.13126	0.08522	770.72993	0.05335	770.75043	0.06489
776.36488	0.08479	796.69834	0.05256	776.51656	0.07087
821.20992	0.08606	821.67668	0.05233	802.16762	0.07863
851.06929	0.08813	870.52724	0.05666	871.96235	0.07774
901.88388	0.09315	900.93141	0.06194	921.69753	0.07655
951.61386	0.09698	951.6045	0.06439	971.1457	0.07913
1000.302	0.10972	1021.40118	0.06507	1001.02826	0.08196

Mg2(dobdc) Low-Pressure N2 Raw Isotherm Data

Absolute Pressure <i>200°C</i>	Quantity Adsorbed <i>200°C</i>
1.3063	-0.00189
23.11124	-6.00E-04
41.46574	-2.40E-04
70.61385	0.00121
81.70966	0.00116
117.09962	0.00221
125.05081	0.00262
151.82267	0.00491
176.65861	0.00866
199.84677	0.01115
271.01527	0.01329
301.9769	0.01344
351.45629	0.01286
401.92594	0.01201
471.95767	0.01292
502.21524	0.01083
571.54029	0.01147
601.90889	0.01382
651.26703	0.01549
721.54003	0.01764
746.19027	0.02005
750.68608	0.03125
775.97933	0.04575
820.89769	0.04263
870.8638	0.03952
921.41207	0.03854
971.17288	0.03926
1001.07098	0.03862

MOF-177 Low-Pressure N2 Raw Isotherm Data

Absolute Pressure 20°C	Quantity Adsorbed 20°C	Absolute Pressure 25°C	Quantity Adsorbed 25°C	Absolute Pressure 30°C	Quantity Adsorbed 30°C
0.03821	-1.40E-04	1.23208	2.00E-05	1.24578	-2.20E-04
24.04907	0.00494	24.56993	0.00452	25.21866	0.00408
41.94907	0.00871	41.4535	0.00765	41.73207	0.00668
61.8941	0.01282	61.88654	0.01175	61.10445	0.01005
81.48368	0.01673	81.67623	0.01569	80.17966	0.0133
101.28423	0.02083	101.56511	0.01965	101.92579	0.01704
126.68775	0.02634	124.80058	0.02418	125.45526	0.0211
151.94338	0.0318	151.36147	0.0293	151.65169	0.0257
176.49407	0.03679	176.1875	0.03409	176.94942	0.0298
201.97046	0.04188	201.25451	0.03874	202.1244	0.03417
251.05851	0.05157	251.60284	0.04848	251.96247	0.04257
300.15324	0.06144	301.3841	0.05776	301.06027	0.05074
351.51581	0.07175	349.72584	0.06667	351.579	0.05896
401.87394	0.08136	401.56936	0.07653	401.15717	0.06699
451.75238	0.09149	451.52486	0.08558	451.89247	0.07515
501.37604	0.1013	501.28677	0.09495	501.41123	0.08325
551.4114	0.11121	551.13156	0.10404	551.38394	0.09144
601.62502	0.12075	600.87024	0.11336	601.13291	0.09957
651.35454	0.13049	651.12023	0.12271	651.13182	0.10757
700.98109	0.14019	700.88165	0.13182	701.53093	0.11556
751.20337	0.1498	751.26717	0.14095	750.86868	0.12374
801.09324	0.15976	800.83521	0.14992	800.63039	0.13161
825.81542	0.16526	825.68481	0.15495	826.71297	0.13613
850.99214	0.17071	851.01761	0.16004	851.66543	0.1409
876.16903	0.17578	875.66704	0.16496	876.26164	0.14549
901.63928	0.18155	901.23485	0.16972	901.47238	0.14984
951.39244	0.19102	951.78279	0.17949	951.13733	0.15805
1000.88879	0.20092	1001.44628	0.18931	1000.4536	0.16634

Units: Pressure (mbar), Quantity Adsorbed (mmol/g)
Amount adsorbed is excess

MOF-177 Low-Pressure N2 Raw Isotherm Data

Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed
<i>40°C</i>	<i>40°C</i>	<i>50°C</i>	<i>50°C</i>	<i>60°C</i>	<i>60°C</i>
1.2336	0	1.24479	-1.70E-04	1.24742	-2.00E-04
24.9163	0.00358	22.28532	0.00303	22.4547	0.00296
41.79708	0.00616	41.92284	0.00585	41.50143	0.00547
61.53671	0.0094	62.30836	0.00883	62.50528	0.0082
80.63099	0.01229	81.8566	0.0117	81.29694	0.011
101.6233	0.01552	101.48379	0.01453	101.4646	0.0134
124.93017	0.01872	124.70681	0.01779	124.88744	0.01665
151.57486	0.02285	151.2865	0.02157	149.54473	0.02011
176.59266	0.02673	176.88751	0.02513	176.56572	0.02348
201.10029	0.03052	202.30749	0.02874	201.20392	0.02671
251.23489	0.03783	249.45729	0.03541	251.49716	0.03312
302.03932	0.04503	301.22664	0.04261	299.51151	0.03929
349.7771	0.05205	351.52366	0.04996	351.17091	0.04581
401.84843	0.05965	401.68699	0.05703	401.21376	0.05215
449.72732	0.06678	451.36464	0.06397	449.74787	0.0584
501.44325	0.07369	501.72997	0.07074	500.81521	0.06493
551.80611	0.08081	551.80729	0.07758	552.2135	0.07142
601.83138	0.08812	601.34611	0.084	601.85604	0.07765
652.00492	0.09521	651.27659	0.09087	651.7728	0.08398
701.81061	0.10229	701.23774	0.09729	701.90419	0.09043
751.86599	0.10956	751.30606	0.104	751.4872	0.09651
801.43737	0.11698	800.93367	0.11075	801.07745	0.10248
826.17492	0.12124	825.7578	0.11447	826.61149	0.10673
851.37802	0.125	850.80775	0.11812	851.59911	0.11015
876.13616	0.12908	876.1526	0.1229	875.54905	0.11394
901.13525	0.13296	901.69013	0.12739	901.34739	0.11725
950.57699	0.14027	951.82347	0.13404	951.41514	0.12343
1000.92451	0.14755	1000.78723	0.14122	1001.62302	0.12993

MOF-177 Low-Pressure N2 Raw Isotherm Data

Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed
<i>70°C</i>	<i>70°C</i>	<i>75°C</i>	<i>75°C</i>	<i>90°C</i>	<i>90°C</i>
1.25143	-2.60E-04	1.24363	-1.20E-04	1.27916	-6.70E-04
22.54318	0.00236	22.54293	0.00249	22.80731	0.00124
42.29181	0.00469	41.59245	0.00425	41.79325	0.00276
59.35006	0.00669	61.59892	0.0064	59.36851	0.00395
82.46131	0.00936	81.14771	0.00851	81.29845	0.00578
101.53414	0.01153	102.104	0.01191	102.375	0.00768
125.34306	0.01427	125.29777	0.01444	124.71206	0.00925
151.95293	0.0173	152.04949	0.01681	151.39569	0.01092
177.02646	0.02005	176.34205	0.01909	176.99155	0.0122
201.57026	0.0231	201.8673	0.02152	201.96033	0.01379
251.32861	0.02945	251.44306	0.02717	251.59826	0.01726
302.35092	0.03523	302.17493	0.03084	301.52683	0.02031
351.29598	0.04071	352.3173	0.03531	352.06805	0.02402
401.72239	0.0461	401.35397	0.03973	401.11534	0.02667
449.71906	0.05112	450.8624	0.04589	451.77732	0.03026
502.21992	0.05664	501.04888	0.04946	501.23327	0.03818
551.86661	0.06194	550.45592	0.05965	551.98749	0.04638
601.40901	0.06728	602.77251	0.06571	602.0932	0.04698
651.50732	0.07372	651.69664	0.06655	671.07216	0.04817
701.81118	0.08168	721.07848	0.07227	701.08102	0.04836
751.4138	0.08729	751.71114	0.07692	770.98056	0.05167
800.95108	0.09179	802.04726	0.07921	801.16989	0.05246
826.50229	0.09411	846.26947	0.08355	826.56731	0.0536
850.92387	0.09661	850.78041	0.08347	851.49088	0.05579
876.05104	0.09972	895.72765	0.08432	876.63416	0.05725
900.80658	0.10237	901.08187	0.0868	901.96404	0.05785
950.82339	0.10745	950.84284	0.09886	970.1741	0.06403
1000.8175	0.11635	1000.97049	0.10939	1001.86006	0.06767

MOF-177 Low-Pressure N2 Raw Isotherm Data

Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed
<i>100°C</i>	<i>100°C</i>	<i>110°C</i>	<i>110°C</i>	<i>120°C</i>	<i>120°C</i>
1.2605	-3.60E-04	1.27009	-5.00E-04	1.25622	-2.80E-04
23.17615	0.00152	23.32042	0.00143	23.10512	0.00148
41.7546	0.00347	42.69083	0.00278	41.83494	0.00262
61.79591	0.00515	61.11485	0.00414	61.68303	0.00393
81.73273	0.00645	80.27283	0.00572	82.05741	0.0055
100.06697	0.00769	100.01668	0.00718	102.43814	0.00685
124.57911	0.00974	126.69027	0.00912	127.33501	0.00824
152.01125	0.01221	151.22466	0.01072	151.64648	0.0097
176.59491	0.01411	176.46703	0.01306	176.48152	0.01148
201.45565	0.01608	202.11286	0.01496	201.78031	0.01362
252.36999	0.01995	251.98772	0.01885	251.36053	0.01705
302.06886	0.0234	302.40688	0.02184	301.65322	0.02197
350.84529	0.02704	349.6264	0.02509	351.51638	0.02664
401.07872	0.03086	401.57783	0.02927	401.40971	0.03039
451.06726	0.03475	451.77667	0.03237	449.93922	0.03349
501.61715	0.03876	501.47898	0.0363	501.56043	0.03784
551.22962	0.04166	551.45535	0.0393	551.59734	0.04105
600.70151	0.04532	600.62437	0.05053	601.38277	0.04386
651.17381	0.04913	651.29738	0.06002	651.91484	0.04748
701.30959	0.05323	702.28404	0.0582	701.44695	0.05273
751.35595	0.05693	771.13907	0.06327	751.91506	0.05549
801.04198	0.06079	802.45918	0.06217	801.15997	0.06108
826.42621	0.06483	845.9067	0.06408	826.63615	0.06495
851.76283	0.06672	851.62254	0.06384	851.31438	0.06346
896.62357	0.0692	895.92767	0.06683	896.3015	0.06572
921.07689	0.07071	901.99219	0.06714	901.0376	0.06359
951.0645	0.07365	951.37519	0.07091	970.65681	0.07204
1001.53383	0.07731	1001.66965	0.07467	1001.90213	0.07262

MOF-177 Low-Pressure N2 Raw Isotherm Data

Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed
<i>130°C</i>	<i>130°C</i>	<i>140°C</i>	<i>140°C</i>	<i>150°C</i>	<i>150°C</i>
1.29006	-7.80E-04	1.2843	-6.80E-04	1.29753	-8.80E-04
23.46955	5.60E-04	24.75565	2.50E-04	24.78636	2.20E-04
39.72763	0.0014	40.22509	0.00106	39.89174	0.00101
61.62023	0.00268	59.39366	0.00186	61.94352	0.00208
81.85212	0.00378	82.04854	0.00298	81.79705	0.00319
102.0766	0.00467	99.85902	0.00377	102.10467	0.00398
126.96191	0.00633	124.86287	0.00487	127.32533	0.00499
149.69443	0.00744	151.94978	0.00605	149.71258	0.00579
176.92116	0.00918	174.7929	0.00649	176.98158	0.00728
201.65422	0.01078	201.53665	0.0076	201.84913	0.00824
251.67268	0.01346	251.79995	0.0098	252.06376	0.01066
302.10316	0.0162	302.06328	0.01279	300.95371	0.01322
351.82621	0.01906	351.64007	0.01416	351.54205	0.01617
401.18984	0.022	402.5216	0.01617	402.04296	0.01878
450.98019	0.02422	451.29502	0.0224	451.84958	0.02062
501.05384	0.0274	501.32355	0.02873	501.76065	0.02409
551.56227	0.03179	552.65072	0.02769	552.39668	0.02519
601.60765	0.03228	622.02451	0.02523	621.7893	0.02719
670.78398	0.03648	671.70338	0.02514	651.63862	0.0274
701.44313	0.03778	721.78236	0.02732	720.74867	0.02959
752.12509	0.03932	751.75826	0.02915	751.25748	0.03116
801.25534	0.04255	801.95482	0.03109	800.92667	0.03484
826.67529	0.04538	846.20014	0.03275	825.7731	0.03776
851.50057	0.04692	851.39006	0.03311	851.46728	0.04209
875.58656	0.0486	876.01678	0.0356	876.35863	0.04046
901.6645	0.05056	901.5872	0.03648	921.29579	0.04225
951.7456	0.05292	970.96326	0.04212	951.53037	0.04202
1000.48054	0.05562	1000.56459	0.04931	1021.42714	0.04399

MOF-177 Low-Pressure N2 Raw Isotherm Data

Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed	Absolute Pressure	Quantity Adsorbed
<i>160°C</i>	<i>160°C</i>	<i>170°C</i>	<i>170°C</i>	<i>180°C</i>	<i>180°C</i>
1.26441	-3.50E-04	1.31263	-0.00107	1.27235	-4.50E-04
24.83177	9.80E-04	24.99693	-9.00E-05	25.00234	8.20E-04
39.8904	0.00154	40.05344	3.80E-04	42.08575	0.00126
60.9925	0.00259	61.19964	9.10E-04	70.71166	0.0023
81.41932	0.00351	81.64952	0.00156	79.53612	0.00266
101.81369	0.00463	102.08138	0.00226	101.42184	0.00362
125.26201	0.00573	127.32187	0.00275	126.24598	0.00428
149.63443	0.00712	149.64331	0.00361	152.33116	0.00516
177.08936	0.00921	176.35041	0.00408	177.62622	0.00639
201.96541	0.00987	201.59014	0.00487	201.44629	0.00837
252.29433	0.01213	252.24134	0.00699	252.03963	0.01163
301.83361	0.01415	301.95371	0.00764	301.51527	0.0143
351.80477	0.01656	351.9558	0.01091	351.91141	0.01679
401.96415	0.01837	402.0729	0.01392	401.63804	0.0173
452.13996	0.01935	450.80499	0.01731	451.6221	0.01659
501.87978	0.02141	501.75752	0.01918	520.51029	0.01942
552.05979	0.02301	551.66712	0.02197	551.14308	0.02329
600.54027	0.02766	601.88448	0.02084	601.45523	0.02613
651.27236	0.03049	671.74569	0.02141	670.82455	0.0292
700.51669	0.03442	702.06352	0.01963	701.36411	0.03139
751.36083	0.03551	771.61926	0.0215	751.13404	0.03518
820.60434	0.03618	801.82926	0.02018	801.48229	0.03844
845.75169	0.03657	846.57291	0.02302	826.16483	0.0409
851.00956	0.03523	851.77601	0.02298	850.78342	0.04552
896.11108	0.03775	896.23493	0.02696	876.53131	0.04964
900.95069	0.03577	901.04997	0.03241	901.09391	0.05066
970.7936	0.03858	951.84935	0.03738	970.65656	0.05036
1000.58062	0.04378	1021.20458	0.03889	1020.61861	0.0506

MOF-177 Low-Pressure N2 Raw Isotherm Data

Absolute Pressure <i>200°C</i>	Quantity Adsorbed <i>200°C</i>
1.26891	-3.90E-04
25.40454	0.00112
41.61853	0.00168
60.01435	0.00234
81.7565	0.00328
99.757	0.0041
126.61653	0.00539
151.3861	0.0064
177.59235	0.00705
202.7607	0.00771
251.80892	0.00888
299.46173	0.011
351.86441	0.01218
401.94287	0.01378
451.50318	0.01791
502.05071	0.0209
552.38418	0.02103
621.54156	0.02355
651.84335	0.0238
721.71938	0.02638
751.47402	0.02911
801.45519	0.03148
845.19428	0.04055
850.77382	0.04274
877.19157	0.04248
921.30742	0.04443
951.69621	0.04516
1000.43375	0.04908