

Supplementary Materials

Theoretical Study on the Diels–Alder Reaction of Fullerenes: Analysis of Isomerism, Aromaticity, and Solvation

Diogo J. L. Rodrigues ¹, Luís M. N. B. F. Santos ¹, André Melo ² and Carlos F. R. A. C. Lima ^{1,*}

¹ Centro de Investigação em Química da Universidade do Porto, Department of Chemistry and Biochemistry, Faculty of Science, Institute of Molecular Sciences (IMS), University of Porto, Rua do Campo Alegre, P4169-007 Porto, Portugal

² Laboratório Associado para a Química Verde-REQUIMTE, Department of Chemistry and Biochemistry, Faculty of Science, University of Porto, Rua do Campo Alegre, P4169-007 Porto, Portugal

* Correspondence: carlos.lima@fc.up.pt

Table S1. Electronic energies obtained (in vacuum) for the various species studied at different theoretical levels. M06-2X/6-311++G(2d,p), B3LYP/6-31+G(d), and MP2/cc-pVDZ are single point energy calculations on the optimized M06-2X/6-31+G(d) geometries.

Species	E_{el} / Hartree			
	M06-2X/ 6-31+G(d)	M06-2X/ 6-311++G(2d,p)	B3LYP/ 6-31+G(d)	MP2/ cc-pVDZ ¹
anthracene	-539.308194	-539.444350	-539.548294	-537.848034 (-536.038262)
indene	-347.614828	-347.704859	-347.775603	-
C ₆₀	-2285.492704	-2285.994963	-2286.220335	-2279.675979 (-2271.964664)
AC ₆₀ MA	-2824.837241	-2825.471834	-2825.765670	-2817.587061 (-2808.014434)
C ₇₀	-2666.503092	-2667.089136	-2667.356359	-
AIC ₇₀ MA <i>a</i>	-3205.848078	-3206.566391	-3206.901523	-
AIC ₇₀ MA <i>b</i>	-3205.846171	-3206.564118	-3206.896679	-
AIC ₇₀ MA <i>c</i>	-3205.818709	-	-	-
AIC ₇₀ MA <i>d</i>	-3205.774922	-	-	-
ICMA	-2633.151952	-2633.740334	-2634.007738	-
AICBA <i>trans</i> -1	-3172.494885	-3173.215574	-3173.550477	-
AICBA <i>trans</i> -2 <i>a</i>	-3172.495132	-	-	-
AICBA <i>trans</i> -2 <i>b</i>	-3172.495216	-	-	-
AICBA <i>trans</i> -3 <i>a</i>	-3172.496658	-	-	-
AICBA <i>trans</i> -3 <i>b</i>	-3172.496348	-3173.217473	-3173.552751	-
AICBA <i>trans</i> -4 <i>a</i>	-3172.494920	-	-	-
AICBA <i>trans</i> -4 <i>b</i>	-3172.494882	-	-	-
AICBA <i>e</i> -face <i>a</i>	-3172.496894	-3173.217558	-3173.552494	-
AICBA <i>e</i> -face <i>b</i>	-3172.496743	-	-	-
AICBA <i>e</i> -edge	-3172.496762	-	-	-
AICBA <i>cis</i> -3 <i>a</i>	-3172.490488	-	-	-
AICBA <i>cis</i> -3 <i>b</i>	-3172.490574	-	-	-
AICBA <i>cis</i> -2 <i>a</i>	-3172.489805	-	-	-
AICBA <i>cis</i> -2 <i>b</i>	-3172.484859	-3173.210505	-3173.543610	-

¹ The calculated Hartree-Fock energy is shown in parenthesis.

Table S2. Electronic energies obtained for the species in *m*-xylene, simulated using SMD – Solvent Model based on Density. The energies were obtained through single point calculations on the optimized geometries obtained in vacuum, at the M06-2X/6-31+G(d) level. For a few representative molecules the geometries were reoptimized in solution using the same level of theory.

Species	$E_{el}^{m\text{-xylene}}$ (single point) / Hartree	$E_{el}^{m\text{-xylene}}$ (opt in <i>m</i> – xylene) / Hartree
anthracene	-539.324296	-539.324302
indene	-347.626159	-347.626165
C_{60}	-2285.548057	-2285.548311
AC ₆₀ MA	-2824.900524	-2824.900552
C_{70}	-2666.565639	-2666.565789
AIC ₇₀ MA <i>a</i>	-3205.919287	-3205.919317
AIC ₇₀ MA <i>b</i>	-3205.917180	-
ICMA	-2633.211855	-2633.211890
AICBA <i>trans</i> -1	-3172.563408	-
AICBA <i>trans</i> -2 <i>a</i>	-3172.564002	-
AICBA <i>trans</i> -2 <i>b</i>	-3172.563872	-
AICBA <i>trans</i> -3 <i>a</i>	-3172.565535	-
AICBA <i>trans</i> -3 <i>b</i>	-3172.565046	-
AICBA <i>trans</i> -4 <i>a</i>	-3172.563268	-
AICBA <i>trans</i> -4 <i>b</i>	-3172.565046	-
AICBA <i>e</i> -face <i>a</i>	-3172.565521	-3172.565551
AICBA <i>e</i> -face <i>b</i>	-3172.565133	-
AICBA <i>e</i> -edge	-3172.565868	-
AICBA <i>cis</i> -3 <i>a</i>	-3172.559316	-
AICBA <i>cis</i> -3 <i>b</i>	-3172.558671	-
AICBA <i>cis</i> -2 <i>a</i>	-3172.558345	-
AICBA <i>cis</i> -2 <i>b</i>	-3172.552854	-

Table S3 Thermal corrections to enthalpy (including ZPE) from $T = 0$ to 298.15 K, $\Delta H_{\text{thermal}}$, and absolute enthalpies, at $T = 298.15$ K, obtained from optimization and frequencies calculations for the various species using M06-2X/6-31+G(d).

Species	$\Delta H_{\text{thermal}} / \text{Hartree}$	$H(T = 298.15 \text{ K}) / \text{Hartree}$
Indene	0.150539	-347.4642888
Anthracene	0.206977	-539.1012174
C_{60}	0.399011	-2285.093693
C_{70}	0.465784	-2666.037308
$IC_{60}MA$	0.553810	-2632.598142
$AC_{60}MA$	0.609736	-2824.227505
$AC_{70}MA \alpha$	0.678131	-3205.169947
$AIC_{60}BA \text{ } e\text{-face } \alpha$	0.766103	-3171.730791

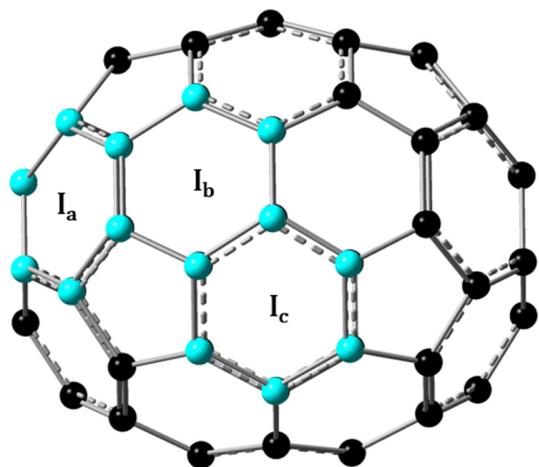


Figure S1. Designated types of hexagons in C_{70} . The same logic applies to Type-II hexagons, except they are adjacent to an addend.

Table S4. HOMA analysis, decomposed in EN and GEO values, for the hexagon rings in C₆₀ and C₇₀, and hexagons adjacent to the addends in the respective adducts.

Species	EN	GEO	HOMA	Ring Type
C ₆₀ ¹	0.267	0.529	0.204	I
AC ₆₀ MA ²	0.158	0.368	0.474	II
	0.162	0.363	0.475	II
IC ₆₀ MA	0.162	0.363	0.475	II
	0.163	0.369	0.468	II
	0.163	0.369	0.468	II
	0.161	0.349	0.490	II
	0.161	0.349	0.490	II
	0.158	0.355	0.488	II
AICBA <i>trans</i> -1	0.158	0.355	0.488	II
	0.165	0.364	0.470	II
	0.165	0.364	0.470	II
	0.156	0.349	0.495	II
	0.156	0.349	0.495	II
	0.159	0.351	0.490	II
	0.174	0.382	0.444	II
	0.155	0.353	0.492	II
AICBA <i>trans</i> -2 <i>a</i>	0.165	0.373	0.462	II
	0.159	0.349	0.492	II
	0.166	0.359	0.475	II
	0.165	0.366	0.469	II
	0.162	0.371	0.467	II
	0.162	0.366	0.472	II
	0.169	0.379	0.453	II
	0.170	0.370	0.460	II
AICBA <i>trans</i> -2 <i>b</i>	0.164	0.347	0.489	II
	0.160	0.369	0.472	II
	0.155	0.352	0.493	II
	0.164	0.373	0.463	II
	0.160	0.349	0.491	II
	0.170	0.371	0.459	II
	0.176	0.388	0.436	II
	0.170	0.375	0.455	II
AICBA <i>trans</i> -3 <i>a</i>	0.163	0.346	0.491	II
	0.182	0.392	0.426	II
	0.160	0.357	0.483	II
	0.157	0.345	0.498	II
	0.164	0.367	0.469	II
	0.167	0.365	0.469	II
	0.167	0.361	0.472	II
	0.164	0.356	0.479	II
AICBA <i>trans</i> -3 <i>b</i>	0.187	0.403	0.410	II
	0.162	0.366	0.471	II
	0.161	0.358	0.481	II
	0.154	0.344	0.502	II
	0.176	0.387	0.437	II
AICBA <i>trans</i> -4 <i>a</i>	0.080	0.217	0.703	III
	0.160	0.363	0.477	II

	0.173	0.377	0.449	II
	0.168	0.377	0.454	II
	0.160	0.363	0.477	II
	0.152	0.353	0.495	II
	0.163	0.381	0.456	II
	0.083	0.228	0.690	III
	0.165	0.378	0.457	II
	0.163	0.384	0.454	II
AICBA <i>trans</i> -4 <i>b</i>	0.165	0.378	0.457	II
	0.175	0.391	0.434	II
	0.157	0.351	0.492	II
	0.169	0.384	0.448	II
	0.084	0.222	0.694	III
	0.084	0.222	0.694	III
AICBA <i>e</i> -face <i>a</i>	0.161	0.365	0.474	II
	0.161	0.365	0.474	II
	0.156	0.347	0.497	II
	0.156	0.347	0.497	II
	0.086	0.232	0.682	III
	0.086	0.232	0.682	III
AICBA <i>e</i> -face <i>b</i>	0.159	0.354	0.487	II
	0.159	0.354	0.487	II
	0.160	0.359	0.481	II
	0.160	0.359	0.481	II
	0.084	0.220	0.696	III
	0.086	0.232	0.682	III
AICBA <i>e</i> -edge	0.164	0.362	0.474	II
	0.165	0.353	0.483	II
	0.155	0.361	0.484	II
	0.154	0.357	0.489	II
	0.219	0.462	0.319	Ia
C ₇₀ ³	0.473	0.705	-0.177	Ib
	0.253	0.259	0.489	Ic
	0.126	0.299	0.575	IIa
AIC ₇₀ MA <i>a</i>	0.126	0.299	0.575	IIa
	0.330	0.585	0.085	IIb
	0.330	0.585	0.085	IIb
	0.118	0.306	0.576	IIa
AIC ₇₀ MA <i>b</i>	0.118	0.306	0.576	IIa
	0.178	0.199	0.624	IIc
	0.178	0.199	0.624	IIc

¹ All 20 hexagons are equivalent.

² All 4 four hexagons adjacent to the addend are equivalent.

³ Ia and Ib hexagons exist in 10 equivalent unities and Ic rings in 5 equivalent unities.

Table S5. M06-2X/6-31+G(d) optimized geometries.

C₆₀

Anthracene

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
			X	Y	Z
1	6	0	3.652663	0.714593	-0.000019
2	6	0	2.475821	1.405672	0.000041
3	6	0	1.219600	0.718406	0.000033
4	6	0	1.219602	-0.718405	0.000018
5	6	0	2.475822	-1.405671	-0.000018
6	6	0	3.652664	-0.714592	-0.000058
7	6	0	0.000000	1.400640	0.000026
8	6	0	0.000001	-1.400641	0.000027
9	6	0	-1.219601	-0.718406	0.000022
10	6	0	-1.219602	0.718405	0.000010
11	6	0	-2.475821	1.405671	-0.000025
12	1	0	-2.470912	2.493147	-0.000062
13	6	0	-3.652663	0.714592	-0.000054
14	6	0	-3.652663	-0.714592	-0.000008
15	6	0	-2.475821	-1.405672	0.000027
16	1	0	-0.000005	2.489468	0.000039
17	1	0	4.598900	1.247714	-0.000049
18	1	0	2.470909	2.493147	0.000087
19	1	0	2.470910	-2.493147	-0.000025
20	1	0	4.598897	-1.247719	-0.000116
21	1	0	-0.000003	-2.489468	0.000042
22	1	0	-4.598898	1.247718	-0.000086
23	1	0	-4.598898	-1.247718	-0.000025
24	1	0	-2.470913	-2.493147	0.000064

Indene

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
			X	Y	Z
1	6	0	-0.229273	-0.686185	0.000045
2	6	0	-1.663420	-1.156195	0.000032
3	6	0	-0.211136	0.720159	-0.000036
4	6	0	-2.436045	0.140941	0.000024
5	6	0	-1.601730	1.194800	-0.000163
6	6	0	0.955768	-1.408064	0.000094
7	6	0	0.997046	1.414277	-0.000058
8	6	0	2.168267	-0.712014	0.000067
9	6	0	2.186769	0.684998	-0.000008
10	1	0	-1.896160	-1.768092	-0.881467
11	1	0	-1.896149	-1.767921	0.881654
12	1	0	-3.519346	0.186958	0.000044
13	1	0	-1.890978	2.240588	-0.000263
14	1	0	0.946677	-2.495516	0.000143
15	1	0	1.014951	2.501053	-0.000137
16	1	0	3.104918	-1.261990	0.000090
17	1	0	3.138628	1.208614	-0.000040

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)	Coordinates (Angstroms)		
				X	Y	Z
1	6	0	2.922830	-1.753120	-0.959790	
2	6	0	3.240993	-0.397478	-1.370838	
3	6	0	3.468725	0.582444	-0.414105	
4	6	0	3.388865	0.251837	0.997712	
5	6	0	3.085783	-1.044804	1.390662	
6	6	0	2.847166	-2.069469	0.389655	
7	6	0	1.939362	-2.283939	-1.886619	
8	6	0	1.649904	-1.256635	-2.870820	
9	6	0	2.453940	-0.090174	-2.551636	
10	6	0	1.928901	1.183238	-2.723839	
11	6	0	2.919433	1.914396	-0.594194	
12	6	0	2.789966	1.379089	1.689995	
13	6	0	1.913369	1.160776	2.744289	
14	6	0	1.595928	-0.195325	3.154159	
15	6	0	2.169032	-1.273392	2.493286	
16	6	0	1.364526	-2.439438	2.174214	
17	6	0	1.784002	-2.931546	0.874419	
18	6	0	0.843336	-3.439273	-0.011656	
19	6	0	0.922899	-3.108257	-1.423087	
20	6	0	0.355759	-1.098126	-3.347041	
21	6	0	-0.707340	-1.960557	-2.863109	
22	6	0	-0.430401	-2.943371	-1.922390	
23	6	0	-1.346698	-3.170435	-0.819052	
24	6	0	-0.559372	-3.477467	0.361486	
25	6	0	-0.960482	-3.007300	1.604720	
26	6	0	0.023023	-2.476014	2.530920	
27	6	0	-0.575293	-1.348865	3.222907	
28	6	0	0.193480	-0.233921	3.526741	
29	6	0	2.499845	2.406197	0.705620	
30	6	0	-1.939363	2.283939	1.886618	
31	6	0	-0.922900	3.108256	1.423085	
32	6	0	-0.843336	3.439272	0.011657	
33	6	0	-1.784003	2.931546	-0.874419	
34	6	0	-2.847166	2.069470	-0.389656	
35	6	0	-3.240993	0.397478	1.370838	
36	6	0	-2.453939	0.090174	2.551637	
37	6	0	-1.649904	1.256633	2.870820	
38	6	0	-0.355760	1.098125	3.347042	
39	6	0	0.707342	1.960557	2.863109	
40	6	0	0.430403	2.943371	1.922389	
41	6	0	0.559372	3.477466	-0.361486	
42	6	0	0.960482	3.007300	-1.604719	
43	6	0	-0.023023	2.476013	-2.530920	
44	6	0	-1.364527	2.439438	-2.174215	
45	6	0	-2.169033	1.273394	-2.493286	
46	6	0	-3.085783	1.044804	-1.390663	
47	6	0	-3.388865	-0.251836	-0.997712	
48	6	0	-3.468725	-0.582443	0.414106	
49	6	0	-1.928900	-1.183239	2.723840	
50	6	0	-2.166995	-2.208174	1.723380	
51	6	0	-2.919432	-1.914396	0.594194	
52	6	0	-2.499844	-2.406197	-0.705618	
53	6	0	-2.789966	-1.379088	-1.689995	
54	6	0	-1.913369	-1.160775	-2.744288	
55	6	0	-1.595928	0.195325	-3.154160	
56	6	0	-0.193481	0.233922	-3.526741	
57	6	0	0.575292	1.348866	-3.222907	
58	6	0	1.346698	3.170434	0.819053	
59	6	0	2.166996	2.208173	-1.723380	
60	6	0	-2.922829	1.753121	0.959790	

72	6	0	4.620942	-1.229582	0.699655
73	6	0	3.976749	0.000024	1.292597
74	1	0	3.996015	0.000041	2.387284
75	6	0	4.620889	1.229631	0.699646
76	6	0	5.131145	2.313597	1.402697
77	1	0	5.117029	2.316585	2.490142
78	6	0	5.657710	3.397948	0.697026
79	1	0	6.065094	4.247200	1.237763
80	6	0	5.657739	3.397922	-0.697054
81	1	0	6.065147	4.247155	-1.237806
82	6	0	5.131291	2.313508	-1.402721
83	1	0	5.117242	2.316469	-2.490167
84	6	0	4.620959	1.229582	-0.699669

AC₆₀MA

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
			X	Y	Z
1	6	0	2.467649	-0.000003	-0.800841
2	6	0	2.467647	0.000009	0.800840
3	6	0	1.709899	1.170131	1.427746
4	6	0	1.284379	2.277091	0.740834
5	6	0	1.284379	2.277079	-0.740875
6	6	0	1.709906	1.170111	-1.427771
7	6	0	0.966108	0.725386	-2.573810
8	6	0	0.966107	-0.725412	-2.573794
9	6	0	1.709898	-1.170124	-1.427753
10	6	0	1.284383	-2.277085	-0.740838
11	6	0	1.284381	-2.277070	0.740876
12	6	0	1.709901	-1.170101	1.427775
13	6	0	0.966106	-0.725369	2.573807
14	6	0	0.966108	0.725428	2.573796
15	6	0	-0.150359	1.422936	3.026837
16	6	0	-0.591442	2.590399	2.307782
17	6	0	0.110575	2.996514	1.175453
18	6	0	-0.614117	3.442077	-0.000030
19	6	0	0.110575	2.996493	-1.175504
20	6	0	-0.591442	2.590362	-2.307827
21	6	0	-0.150359	1.422886	-3.026862
22	6	0	-1.323346	0.693571	-3.480309
23	6	0	-1.323347	-0.693617	-3.480296
24	6	0	-0.150359	-1.422925	-3.026836
25	6	0	-0.591440	-2.590386	2.307783
26	6	0	0.110576	-2.996502	-1.175452
27	6	0	-0.614117	-3.442067	0.000030
28	6	0	0.110576	-2.996480	1.175502
29	6	0	-0.591441	-2.590348	2.307828
30	6	0	-0.150360	-1.422874	3.026861
31	6	0	-1.323348	-0.693558	3.480309
32	6	0	-1.323347	0.693630	3.480297
33	6	0	-2.495540	1.421129	3.031411
34	6	0	-2.042018	2.594032	2.303320
35	6	0	-2.732817	3.018828	1.175820
36	6	0	-2.001908	3.459333	-0.000030
37	6	0	-2.732817	3.018808	-1.175870
38	6	0	-2.042018	2.593995	-2.303364
39	6	0	-2.495539	1.421079	-3.031435
40	6	0	-3.617801	0.726215	-2.598740
41	6	0	-3.617801	-0.726248	-2.598727
42	6	0	-2.495540	-1.421117	-3.031412
43	6	0	-2.042016	-2.594019	-2.303319
44	6	0	-2.732815	-3.018815	-1.175820
45	6	0	-2.001907	-3.459319	0.000030
46	6	0	-2.732816	-3.018795	1.175871
47	6	0	-2.042018	-2.593981	2.303364
48	6	0	-2.495541	-1.421066	3.031436
49	6	0	-3.617802	-0.726203	2.598739
50	6	0	-3.617802	0.726260	2.598727
51	6	0	-4.339512	1.173923	1.422042
52	6	0	-3.905450	2.295505	0.727063
53	6	0	-3.905450	2.295492	-0.727102
54	6	0	-4.339511	1.173898	-1.422063
55	6	0	-4.786460	0.000001	-0.694365
56	6	0	-4.339513	-1.173910	-1.422042
57	6	0	-3.905448	-2.295491	-0.727063
58	6	0	-3.905448	-2.295478	0.727101
59	6	0	-4.339513	-1.173886	1.422062
60	6	0	-4.786460	0.000013	0.694364
61	6	0	3.976746	-0.000012	-1.292606
62	1	0	3.995995	-0.000028	-2.387293
63	6	0	4.620878	-1.229634	-0.699657
64	6	0	5.131062	-2.313644	-1.402693
65	1	0	5.116971	-2.316652	-2.490138
66	6	0	5.657456	-3.398071	-0.697009
67	1	0	6.064735	-4.247372	-1.237750
68	6	0	5.657534	-3.398015	0.697070
69	1	0	6.064839	-4.247292	1.237829
70	6	0	5.131162	-2.313556	1.402721
71	1	0	5.117093	-2.316499	2.490167

C₇₀

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
			X	Y	Z
1	6	0	1.201751	3.091604	1.547133
2	6	0	0.000205	3.441961	0.884986
3	6	0	-1.201494	3.091714	1.546979
4	6	0	-1.201400	2.204703	2.663771
5	6	0	-0.000035	1.637623	3.152965
6	6	0	1.201688	2.204341	2.663699
7	6	0	2.440369	1.447541	2.635216
8	6	0	3.219795	1.882746	1.497261
9	6	0	2.440501	2.892961	0.816459
10	6	0	2.440786	2.953077	-0.562238
11	6	0	1.201992	3.215218	-1.273475
12	6	0	0.000184	3.505970	-0.583464
13	6	0	-1.201551	3.215279	-1.273427
14	6	0	-2.440079	2.953488	-0.562471
15	6	0	-2.440026	2.893103	0.816207
16	6	0	-3.219629	1.883112	1.497279
17	6	0	-2.440171	1.447798	2.635114
18	6	0	-2.440212	0.117982	3.004049
19	6	0	-1.201739	-0.516110	3.418378
20	6	0	-0.000063	0.221385	3.545606
21	6	0	1.201629	-0.516185	3.418378
22	6	0	2.440141	0.117545	3.003885
23	6	0	3.219454	-0.842420	2.253553
24	6	0	3.966919	-0.432413	1.155980
25	6	0	3.966908	0.965438	0.767930
26	6	0	3.967283	1.028417	-0.680749
27	6	0	3.220345	2.005798	-1.327847
28	6	0	2.440418	1.670740	-2.499156
29	6	0	1.201736	2.427147	-2.462032
30	6	0	0.000159	1.905105	-2.998832
31	6	0	-1.201410	2.427208	-2.462036
32	6	0	-2.440134	1.670910	-2.499127
33	6	0	-3.220001	2.006204	-1.328174
34	6	0	-3.966873	1.028804	-0.680689
35	6	0	-3.966553	0.965832	0.767877
36	6	0	-3.967178	-0.431941	1.155913
37	6	0	-3.219625	-0.842144	2.253421
38	6	0	-2.440478	-2.059070	2.190516
39	6	0	-1.202059	-1.852208	2.919544
40	6	0	-0.000123	-2.492578	2.531963
41	6	0	1.201540	-1.852357	2.919454
42	6	0	2.440244	-2.059392	2.190703
43	6	0	2.440197	-2.821589	1.039991
44	6	0	3.219380	-2.404014	-0.104560
45	6	0	3.966334	-1.232904	-0.053369
46	6	0	3.966915	-0.330556	-1.188261
47	6	0	3.220022	-0.643527	-2.317803
48	6	0	2.440307	0.377869	-2.981647
49	6	0	1.201502	-0.217464	-3.450294
50	6	0	0.000071	0.528911	-3.512929
51	6	0	-1.201547	-0.217248	-3.450313
52	6	0	-2.440233	0.378040	-2.981761
53	6	0	-3.219986	-0.643144	-2.317843
54	6	0	-3.966875	-0.329952	-1.188269
55	6	0	-3.966687	-1.232597	-0.053528
56	6	0	-3.219789	-2.403562	-0.104581
57	6	0	-2.440727	-2.821462	1.040039
58	6	0	-1.201749	-3.411100	0.565324
59	6	0	-0.000226	-3.304117	1.306725
60	6	0	1.201179	-3.411245	0.565287
61	6	0	1.201133	-3.348915	-0.859650
62	6	0	2.439833	-2.719709	-1.281142
63	6	0	2.440506	-1.861000	-2.361570
64	6	0	1.201564	-1.591707	-3.069492
65	6	0	-0.000041	-2.263768	-2.739327
66	6	0	-1.201630	-1.591443	-3.069724
67	6	0	-2.440493	-1.860634	-2.361623
68	6	0	-2.440271	-2.719547	-1.281323
69	6	0	1.201672	-3.348769	-0.859629
70	6	0	-0.000233	-3.178785	-1.589228

72	1	0	-4.285902	0.000122	-2.615160
73	6	0	-5.119912	1.229589	-1.020746
74	6	0	-5.537652	2.312808	-1.783449
75	1	0	-5.386956	2.315165	-2.860502
76	6	0	-6.148527	3.398033	-1.150315
77	1	0	-6.482609	4.247433	-1.738766
78	6	0	-6.324042	3.398934	0.232767
79	1	0	-6.795807	4.248307	0.717831
80	6	0	-5.890698	2.314893	0.999867
81	1	0	-6.014214	2.318423	2.080487
82	6	0	-5.296590	1.230084	0.367473
83	6	0	-4.732500	0.000030	1.036884
84	1	0	-4.891450	-0.000064	2.119957
85	6	0	-5.296922	-1.229819	0.367374
86	6	0	-5.891558	-2.314377	0.999860
87	1	0	-6.015239	-2.317804	2.080344
88	6	0	-6.324865	-3.398464	0.232723
89	1	0	-6.796903	-4.247666	0.717821
90	6	0	-6.149090	-3.397801	-1.150339
91	1	0	-6.483291	-4.247222	-1.738692
92	6	0	-5.537828	-2.312825	-1.783470
93	1	0	-5.386931	-2.315268	-2.860493
94	6	0	-5.119945	-1.229610	-1.020822

AC₇₀MA isomer a

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
			X	Y	Z
1	6	0	3.338292	2.559794	1.660906
2	6	0	2.018900	3.070936	1.687297
3	6	0	1.171860	2.559010	2.700050
4	6	0	1.537865	1.410561	3.462159
5	6	0	2.762557	0.734992	3.231494
6	6	0	3.705115	1.410515	2.421362
7	6	0	4.722504	0.689810	1.674819
8	6	0	5.001278	1.412649	0.454390
9	6	0	4.129827	2.565257	0.442690
10	6	0	3.565420	2.994505	-0.741258
11	6	0	2.182324	3.434704	-0.763041
12	6	0	1.415253	3.517859	0.423730
13	6	0	0.010494	3.406534	0.271315
14	6	0	-0.839369	2.964298	1.357854
15	6	0	-0.273356	2.561145	2.556362
16	6	0	-0.804086	1.416910	3.233025
17	6	0	0.320664	0.689604	3.783756
18	6	0	0.320650	-0.689961	3.783667
19	6	0	1.537898	-1.410858	3.462082
20	6	0	2.762547	-0.735233	3.231410
21	6	0	3.705134	-1.410678	2.421258
22	6	0	4.722502	-0.689896	1.674762
23	6	0	5.001265	-1.412613	0.454280
24	6	0	5.269675	-0.724174	-0.724996
25	6	0	5.269620	0.724262	-0.724929
26	6	0	4.674077	1.173209	-1.968252
27	6	0	3.843588	2.287877	-1.972527
28	6	0	2.616706	2.278407	-2.737897
29	6	0	1.601474	2.995565	-1.989468
30	6	0	0.235711	2.631741	-2.068054
31	6	0	-0.571324	2.970622	-0.954512
32	6	0	-1.794813	2.258546	-0.651901
33	6	0	-1.970925	2.263611	0.809251
34	6	0	-2.489810	1.166867	1.452389
35	6	0	-1.878928	0.722773	2.671139
36	6	0	-1.878891	-0.723092	2.671107
37	6	0	-0.804091	-1.417286	3.232982
38	6	0	-0.273316	-2.561451	2.556199
39	6	0	1.171903	-2.559241	2.699854
40	6	0	2.018953	-3.071096	1.687088
41	6	0	3.338323	-2.559898	1.660695
42	6	0	4.129878	-2.565271	0.442498
43	6	0	3.565464	-2.994421	-0.741476
44	6	0	3.843643	-2.287714	-1.972697
45	6	0	4.674117	-1.173054	-1.968343
46	6	0	4.308574	0.000121	-2.740328
47	6	0	3.131353	0.000114	-3.478046
48	6	0	2.269300	1.162749	-3.474969
49	6	0	0.890886	0.713599	-3.490757
50	6	0	-0.129215	1.449017	-2.841256
51	6	0	-1.272254	0.712775	-2.433616
52	6	0	-2.140465	1.159051	-1.377729
53	6	0	-2.971107	-0.000074	-0.845568
54	6	0	-3.175762	-0.000056	0.742804
55	6	0	-2.489899	-1.167145	1.452395
56	6	0	-1.970840	-2.263688	0.809096
57	6	0	-0.839279	-2.964437	1.357612
58	6	0	0.010550	-3.406620	0.271069
59	6	0	1.415315	-3.517907	0.423461
60	6	0	2.182385	-3.434662	-0.763290
61	6	0	1.601529	-2.995426	-1.989680
62	6	0	2.616745	-2.278266	-2.738106
63	6	0	2.269348	-1.162524	-3.475045
64	6	0	0.890899	-0.713433	-3.490859
65	6	0	-0.129145	-1.448871	-2.841315
66	6	0	-1.272202	-0.712629	-2.433672
67	6	0	-2.140266	-1.158985	-1.377767
68	6	0	-1.794868	-2.258654	-0.652064
69	6	0	-0.571320	-2.970641	-0.954731
70	6	0	0.235720	-2.631696	-2.068232
71	6	0	-4.405873	-0.000053	-1.526994

AC₇₀MA isomer b

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
			X	Y	Z
1	6	0	2.302069	0.486928	3.439516
2	6	0	0.942505	0.107683	3.529681
3	6	0	0.671887	-1.279216	3.436912
4	6	0	1.666218	-2.199079	3.003312
5	6	0	2.965520	-1.760595	2.640889
6	6	0	3.300763	-0.434662	3.001802
7	6	0	4.311148	0.316229	2.278551
8	6	0	3.944538	1.715702	2.288432
9	6	0	2.688166	1.814717	2.996917
10	6	0	1.722720	2.704404	2.570355
11	6	0	0.326456	2.304733	2.567301
12	6	0	-0.078610	1.054638	3.065289
13	6	0	-1.289059	0.538794	2.523648
14	6	0	-1.575224	-0.885048	2.537213
15	6	0	-0.622641	-1.776908	2.996390
16	6	0	-0.428015	-3.012746	2.297533
17	6	0	0.995334	-3.267646	2.283067
18	6	0	1.587042	-3.812432	1.161466
19	6	0	2.876318	-3.317889	0.712636
20	6	0	3.595671	-2.344972	1.449967
21	6	0	4.512973	-1.557232	0.713363
22	6	0	4.907220	-0.233907	1.161905
23	6	0	5.163500	0.588959	0.000009
24	6	0	4.810398	1.933044	0.000019
25	6	0	4.184898	2.511662	1.174004
26	6	0	3.169908	3.444599	0.725462
27	6	0	1.964661	3.535875	1.413415
28	6	0	0.714999	3.620756	0.689533
29	6	0	-0.294683	2.865999	1.408653
30	6	0	-1.354489	2.210349	0.740826
31	6	0	-1.924187	1.107332	1.406150
32	6	0	-2.899565	0.107909	0.791314
33	6	0	-2.407264	-1.191204	1.415967
34	6	0	-2.223495	-2.370920	0.740560
35	6	0	-1.206006	-3.297835	1.174520
36	6	0	-0.580317	-3.869761	-0.000021
37	6	0	0.786765	-4.130199	-0.000016
38	6	0	1.587051	-3.812431	-1.161505
39	6	0	2.876321	-3.317877	-0.712655
40	6	0	3.595681	-2.344973	-1.449980
41	6	0	4.512978	-1.557223	-0.713372
42	6	0	4.907216	-0.233898	-1.161892
43	6	0	4.311160	0.316244	-2.278541
44	6	0	3.944538	1.715722	-2.288394
45	6	0	4.184901	2.511680	-1.173975
46	6	0	3.169911	3.444614	-0.725416
47	6	0	1.964667	3.535876	-1.413371
48	6	0	0.714982	3.620768	-0.689496
49	6	0	-0.294678	2.866011	-1.408619
50	6	0	-1.354501	2.210363	-0.740810
51	6	0	-1.924203	1.107363	-1.406157
52	6	0	-2.899561	0.107910	-0.791342
53	6	0	-2.407237	-1.191187	-1.415981
54	6	0	-2.223489	-2.370919	-0.740605
55	6	0	-1.205999	-3.297825	-1.174560
56	6	0	-0.428004	-3.012734	-2.297572
57	6	0	0.995346	3.267630	-2.283092
58	6	0	1.666235	-2.199057	-3.003338
59	6	0	2.965525	-1.760577	-2.640899
60	6	0	3.300776	-0.434637	3.001788
61	6	0	2.302079	0.486955	-3.439498
62	6	0	2.688178	1.814743	-2.996893

63	6	0	1.722727	2.704422	-2.570315	54	6	0	-2.223489	-2.370919	-0.740605
64	6	0	0.326462	2.304753	-2.567284	55	6	0	-1.205999	-3.297825	-1.174560
65	6	0	-0.078602	1.054662	-3.065267	56	6	0	-0.428004	-3.012734	-2.297572
66	6	0	-1.289057	0.538816	-2.523652	57	6	0	0.995346	-3.267630	-2.283092
67	6	0	-1.575208	-0.885021	-2.537229	58	6	0	1.666235	-2.199057	-3.003338
68	6	0	-0.622623	-1.776883	-2.996399	59	6	0	2.965525	-1.760577	-2.640899
69	6	0	0.671896	-1.279189	-3.436919	60	6	0	3.300776	-0.434637	-3.001788
70	6	0	0.942521	0.107710	-3.529678	61	6	0	2.302079	0.486955	-3.439498
71	6	0	-4.374638	0.426879	-1.290899	62	6	0	2.688178	1.814743	-2.996893
72	1	0	-4.387619	0.429866	-2.385410	63	6	0	1.722727	2.704422	-2.570315
73	6	0	-4.748865	1.764144	-0.699815	64	6	0	0.326462	2.304753	-2.567284
74	6	0	-5.019554	2.931108	-1.403155	65	6	0	-0.078602	1.054662	-3.065267
75	1	0	-5.004892	2.930721	-2.490610	66	6	0	-1.289057	0.538816	-2.523652
76	6	0	-5.306526	4.102007	-0.697197	67	6	0	-1.575208	-0.885021	-2.537229
77	1	0	-5.526740	5.017560	-1.238070	68	6	0	-0.622623	-1.776883	-2.996399
78	6	0	-5.306611	4.102017	0.697083	69	6	0	0.671896	-1.279189	-3.436919
79	1	0	-5.526838	5.017589	1.237918	70	6	0	0.942521	0.107710	-3.529678
80	6	0	-5.019603	2.931155	1.403083	71	6	0	-4.374638	0.426879	-1.290899
81	1	0	-5.004959	2.930802	2.490538	72	1	0	-4.387619	0.429866	-2.385410
82	6	0	-4.748862	1.764175	0.699782	73	6	0	-4.748865	1.764144	-0.699815
83	6	0	-4.374632	0.426938	1.290903	74	6	0	-5.019554	2.931108	-1.403155
84	1	0	-4.387580	0.429952	2.385412	75	1	0	-5.004892	2.930721	-2.490610
85	6	0	-5.263685	-0.639866	0.699552	76	6	0	-5.306526	4.102007	-0.697197
86	6	0	-5.990300	-1.592336	1.402937	77	1	0	-5.526740	5.017560	-1.238070
87	1	0	-5.976642	-1.598684	2.490353	78	6	0	-5.306611	4.102017	0.697083
88	6	0	-6.733693	-2.541295	0.697180	79	1	0	-5.526838	5.017589	1.237918
89	1	0	-7.309075	-3.286760	1.238140	80	6	0	-5.019603	2.931155	1.403083
90	6	0	-6.733642	-2.541363	-0.697090	81	1	0	-5.004959	2.930802	2.490538
91	1	0	-7.308988	-3.286873	-1.238026	82	6	0	-4.748862	1.764175	0.699782
92	6	0	-5.990208	-1.592463	-1.402877	83	6	0	-4.374632	0.426938	1.290903
93	1	0	-5.976495	-1.598897	-2.490292	84	1	0	-4.387580	0.429952	2.385412
94	6	0	-5.263655	-0.639922	-0.699521	85	6	0	-5.263685	-0.639866	0.699552

AC₇₀MA isomer c

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
	X	Y	Z		
1	6	0	2.302069	0.486928	3.439516
2	6	0	0.942505	0.107683	3.529681
3	6	0	0.671887	-1.279216	3.436912
4	6	0	1.666218	-2.199079	3.003312
5	6	0	2.965520	-1.760595	2.640889
6	6	0	3.300763	-0.434662	3.001802
7	6	0	4.311148	0.316229	2.278551
8	6	0	3.944538	1.715702	2.288432
9	6	0	2.688166	1.814717	2.996917
10	6	0	1.722720	2.704404	2.570355
11	6	0	0.326456	2.304733	2.567301
12	6	0	-0.078610	1.054638	3.065289
13	6	0	-1.289059	0.538794	2.523648
14	6	0	-1.575224	-0.885048	2.537213
15	6	0	-0.622641	-1.776908	2.996390
16	6	0	-0.428015	-3.012746	2.297533
17	6	0	0.995334	-3.267646	2.283067
18	6	0	1.587042	-3.812432	1.161466
19	6	0	2.876318	-3.317889	0.712636
20	6	0	3.595671	-2.344972	1.449967
21	6	0	4.512973	-1.557232	0.713363
22	6	0	4.907220	-0.233907	1.161905
23	6	0	5.163500	0.588959	0.000009
24	6	0	4.810398	1.933044	0.000019
25	6	0	4.184898	2.511662	1.174004
26	6	0	3.169908	3.444599	0.725462
27	6	0	1.964661	3.535875	1.413415
28	6	0	0.714999	3.620756	0.689533
29	6	0	-0.294683	2.865999	1.408653
30	6	0	-1.354489	2.210349	0.740826
31	6	0	-1.924187	1.107332	1.406150
32	6	0	-2.899565	0.107909	0.791314
33	6	0	-2.407264	-1.191204	1.415967
34	6	0	-2.223495	-2.370920	0.740560
35	6	0	-1.206006	-3.297835	1.174520
36	6	0	-0.580317	-3.869761	-0.000021
37	6	0	0.786765	-4.130199	-0.000016
38	6	0	1.587051	-3.812431	1.161505
39	6	0	2.876321	-3.317877	-0.712655
40	6	0	3.595681	-2.344973	1.449980
41	6	0	4.512978	-1.557223	-0.713372
42	6	0	4.907216	-0.233898	-1.161892
43	6	0	4.311160	0.316244	-2.278541
44	6	0	3.944538	1.715722	-2.288394
45	6	0	4.184901	2.511680	-1.173975
46	6	0	3.169911	3.444614	-0.725416
47	6	0	1.964667	3.535876	-1.413371
48	6	0	0.714982	3.620768	-0.689496
49	6	0	-0.294678	2.866011	-1.408619
50	6	0	-1.354501	2.210363	-0.740810
51	6	0	-1.924203	1.107363	-1.406157
52	6	0	-2.899561	0.107910	-0.791342
53	6	0	-2.407237	-1.191187	-1.415981

AC₇₀MA isomer d

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
	X	Y	Z		
1	6	0	3.338292	2.559794	1.660906
2	6	0	2.018900	3.070936	1.687297
3	6	0	1.171860	2.559010	2.700050
4	6	0	1.537865	1.410561	3.462159
5	6	0	2.762557	0.734992	3.231494
6	6	0	3.705115	1.410515	2.421362
7	6	0	4.722504	0.689810	1.674819
8	6	0	5.001278	1.412649	0.454390
9	6	0	4.129827	2.565257	0.442690
10	6	0	3.565420	2.994505	-0.741258
11	6	0	2.182324	3.434704	-0.763041
12	6	0	1.415253	3.517859	0.423730
13	6	0	0.010494	3.406534	0.271315
14	6	0	-0.839369	2.964298	1.357854
15	6	0	-0.273356	2.561145	2.556362
16	6	0	-0.804086	1.416910	3.233025
17	6	0	0.320664	0.689604	3.783756
18	6	0	0.320650	-0.68961	3.783667
19	6	0	1.537898	-1.410858	3.462082
20	6	0	2.762547	-0.735233	3.231410
21	6	0	3.705134	-1.410678	2.421258
22	6	0	4.722502	-0.689896	1.674762
23	6	0	5.001265	-1.412613	0.454280
24	6	0	5.269675	-0.724174	-0.724996
25	6	0	5.269620	0.724262	-0.724929
26	6	0	4.674077	1.173209	-1.968252
27	6	0	3.843588	2.287877	-1.972527
28	6	0	2.616706	2.278407	-2.737897
29	6	0	1.601474	2.995565	-1.989468
30	6	0	0.235711	2.631741	-2.068054
31	6	0	-0.571324	2.970622	-0.954512
32	6	0	-1.794813	2.258546	-0.651901
33	6	0	-1.970925	2.263611	0.809251
34	6	0	-2.488910	1.166867	1.452389
35	6	0	-1.878928	0.722773	2.671139
36	6	0	-1.878891	-0.723092	2.671107
37	6	0	-0.804091	-1.417286	3.232982
38	6	0	-0.273316	-2.561451	2.556199
39	6	0	1.171903	-2.559241	2.699854
40	6	0	2.018953	-3.071096	1.687088
41	6	0	3.338323	-2.559898	1.660695
42	6	0	4.129878	-2.565271	0.442498
43	6	0	3.565464	-2.994421	-0.741476
44	6	0	3.843643	-2.287714	-1.972697

45	6	0	4.674117	-1.173054	-1.968343	37	6	0	-0.919194	-2.655174	-2.307978
46	6	0	4.308574	0.000121	-2.740328	38	6	0	-2.318258	-2.271979	-2.304032
47	6	0	3.131353	0.000114	-3.478046	39	6	0	-3.096822	-2.497776	-1.176236
48	6	0	2.269300	1.162749	-3.474969	40	6	0	-4.034559	-1.488835	-0.727037
49	6	0	0.890886	0.713599	-3.490757	41	6	0	-4.034584	-1.488687	0.727248
50	6	0	-0.129215	1.449017	-2.841256	42	6	0	-4.152737	-0.291034	1.420985
51	6	0	-1.272254	0.712775	-2.433616	43	6	0	-3.338936	-0.051159	2.598239
52	6	0	-2.140465	1.159051	-1.377729	44	6	0	-2.950161	1.348326	2.597861
53	6	0	-2.971107	-0.000074	-0.845568	45	6	0	-1.682687	1.171473	3.031088
54	6	0	-3.175762	-0.000056	0.742804	46	6	0	2.308319	0.352138	1.435303
55	6	0	-2.489899	-1.167145	1.452395	47	6	0	-0.660977	3.548335	-0.000363
56	6	0	-1.970840	-2.263688	0.809096	48	6	0	0.670522	3.158682	-0.000301
57	6	0	-0.839279	-2.964437	1.357612	49	6	0	1.250119	2.536374	-1.176109
58	6	0	0.010550	-3.406620	0.271069	50	6	0	0.465598	2.333348	-2.309085
59	6	0	1.415315	-3.517907	0.423461	51	6	0	-0.931362	2.725039	-2.304326
60	6	0	2.182385	-3.434662	-0.763290	52	6	0	-2.805935	2.936698	-0.727456
61	6	0	1.601529	-2.995426	-1.989680	53	6	0	-2.805955	2.936848	0.726792
62	6	0	2.616745	-2.278266	-2.738106	54	6	0	-1.483071	3.319441	1.175848
63	6	0	2.269348	-1.162523	-3.475045	55	6	0	-0.931423	2.725522	2.303763
64	6	0	0.890899	-0.713433	-3.490859	56	6	0	0.465534	2.333836	2.308643
65	6	0	-0.129145	-1.448871	-2.841315	57	6	0	1.250087	2.536629	1.175651
66	6	0	-1.272202	-0.712629	-2.433672	58	6	0	2.190466	1.530332	-0.741481
67	6	0	-2.140266	-1.158985	-1.377767	59	6	0	2.308370	0.351832	-1.435293
68	6	0	-1.794868	-2.258654	-0.652064	60	6	0	1.470223	0.121783	-2.578900
69	6	0	-0.571320	-2.970641	-0.954731	61	6	0	0.578381	1.091620	-3.029262
70	6	0	0.235720	-2.631896	-2.068232	62	6	0	-0.747362	0.702858	-3.480802
71	6	0	-4.405873	-0.000053	-1.526994	63	6	0	-1.682605	1.716842	-3.031467
72	1	0	-4.285902	0.000122	-2.615160	64	6	0	-2.950097	1.347792	-2.598201
73	6	0	-5.119912	1.229589	-1.020746	65	6	0	-3.524966	1.972131	-1.422000
74	6	0	-5.537652	2.312808	-1.783449	66	6	0	-3.525003	1.972423	1.421518
75	1	0	-5.386956	2.315165	-2.860502	67	6	0	-4.269710	0.960093	0.693982
76	6	0	-6.148527	3.398033	-1.150315	68	6	0	-4.269691	0.959950	-0.694274
77	1	0	-6.482609	4.247433	-1.738766	69	6	0	-4.152697	-0.291328	-1.421020
78	6	0	-6.324042	3.398934	0.232767	70	6	0	-3.338861	-0.051690	-2.598302
79	1	0	-6.795807	4.248307	0.717831	71	6	0	-2.442434	-1.020657	-3.031313
80	6	0	-5.890698	2.314893	0.999987	72	6	0	-1.118270	-0.633326	-3.480634
81	1	0	-6.014214	2.318423	2.080487	73	6	0	-0.181868	-1.648485	-3.027222
82	6	0	-5.296590	1.230084	0.367473	74	6	0	1.082000	-1.276037	-2.577452
83	6	0	-4.732500	0.000030	1.036884	75	6	0	2.190454	1.530485	0.741246
84	1	0	-4.891450	-0.000064	2.119957	76	6	0	2.715536	-0.971935	-0.802955
85	6	0	-5.296922	-1.229819	0.367374	77	6	0	-1.483041	3.319199	-1.176558

ICMA

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
			X	Y	Z
1	6	0	4.194329	-1.418024	1.131578
2	1	0	4.303092	-1.763086	2.162095
3	6	0	5.102585	-0.290164	0.700824
4	6	0	5.798218	0.673012	1.414833
5	1	0	5.786340	0.685682	2.501864
6	6	0	6.525270	1.630075	0.697353
7	1	0	7.093735	2.384852	1.232949
8	6	0	6.525434	1.629740	-0.697852
9	1	0	7.094019	2.384271	-1.233663
10	6	0	5.798495	0.672350	-1.415015
11	1	0	5.786779	0.684481	-2.502056
12	6	0	5.102657	-0.290414	-0.700661
13	6	0	4.194320	-1.418350	-1.131124
14	1	0	4.303166	-1.763779	-2.161502
15	6	0	4.440727	-2.436254	0.000393
16	1	0	5.464576	-2.819420	0.000381
17	1	0	3.731930	-3.271332	0.000516
18	6	0	-0.351861	-3.233664	1.176208
19	6	0	0.971423	-2.853007	0.741621
20	6	0	1.681636	-1.903050	1.431801
21	6	0	1.081937	-1.275503	2.577748
22	6	0	-0.181954	-1.647842	3.027543
23	6	0	-0.919261	-2.654689	2.308508
24	6	0	-1.168546	-3.470324	0.000349
25	6	0	-0.351840	-3.233936	-1.175544
26	6	0	0.971440	-2.853170	-0.741002
27	6	0	1.681662	-1.903383	-1.431389
28	6	0	2.715506	-0.971787	0.803275
29	6	0	1.470139	0.122323	2.578937
30	6	0	0.578304	1.092248	3.029096
31	6	0	-0.747455	0.703576	3.480654
32	6	0	-1.118370	-0.632605	3.480753
33	6	0	-2.442516	-1.020038	3.031474
34	6	0	-2.318327	-2.271502	2.304452
35	6	0	-3.096862	-2.497527	1.176683
36	6	0	-2.510041	-3.116291	0.000297

AICBA trans-1

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
			X	Y	Z
1	6	0	-5.680698	0.887427	1.131000
2	1	0	-5.840507	1.211652	2.161654
3	6	0	-6.405875	-0.366476	0.700881
4	6	0	-6.937223	-1.429328	1.414911
5	1	0	-6.921806	-1.440718	2.501945
6	6	0	-7.499669	-2.491472	0.697766
7	1	0	-7.940204	-3.327753	1.233038
8	6	0	-7.499659	-2.491557	-0.697456
9	1	0	-7.940196	-3.327894	-1.232634
10	6	0	-6.937160	-1.429503	-1.414695
11	1	0	-6.921705	-1.440986	-2.501731
12	6	0	-6.405802	-0.366606	-0.700742
13	6	0	-5.680645	0.887252	-1.313077
14	1	0	-5.840633	1.211288	-2.161761
15	6	0	-6.078811	1.855493	-0.000108
16	1	0	-7.148776	2.079987	-0.000193
17	1	0	-5.502991	2.787198	-0.000132
18	6	0	-1.454740	3.363047	1.177086
19	6	0	-2.705986	2.791218	0.741272
20	6	0	-3.269991	1.747378	1.432654
21	6	0	-2.587188	1.217872	2.580551
22	6	0	-1.393587	1.775967	3.034075
23	6	0	-0.811059	2.879183	2.312987
24	6	0	-0.680042	3.710985	-0.000247
25	6	0	-1.454726	3.362908	-1.177547
26	6	0	-2.705958	2.791095	-0.741666
27	6	0	-3.270047	1.747275	-1.432968
28	6	0	-4.150961	0.670264	0.803198
29	6	0	-2.758599	-0.223008	2.581553
30	6	0	-1.731054	-1.047767	3.035703
31	6	0	-0.480455	-0.463168	3.486716
32	6	0	-0.316339	0.913287	3.486604
33	6	0	0.933688	1.497985	3.032879
34	6	0	0.629006	2.707324	2.312812
35	6	0	1.368963	3.025620	1.176537
36	6	0	0.698054	3.547240	-0.000229
37	6	0	-0.811049	2.878871	-2.313380
38	6	0	0.629017	2.707016	-2.313162
39	6	0	1.368964	3.025466	-1.176924
40	6	0	2.450151	2.176666	-0.741278
41	6	0	2.450124	2.176736	0.741005
42	6	0	2.745711	1.026895	1.428767
43	6	0	1.950649	0.672796	2.575699
44	6	0	1.788276	-0.768164	2.575898
45	6	0	0.596		

46	6	0	-3.549275	-0.576490	1.437622	30	6	0	-1.796788	-0.909057	-3.129506
47	6	0	-0.119299	-3.261049	0.000218	31	6	0	-0.886071	-2.042941	-3.135852
48	6	0	-1.496940	-3.094430	0.000206	32	6	0	-1.158509	-3.154681	-2.350593
49	6	0	-2.167828	-2.572127	-1.176301	33	6	0	-0.090209	-3.803108	-1.611084
50	6	0	-1.427366	-2.256384	-2.313131	34	6	0	-0.632002	-4.246281	-0.337089
51	6	0	0.012779	-2.429881	-2.313262	35	6	0	0.148637	-4.175255	0.810368
52	6	0	1.907886	-2.345363	-0.740872	36	6	0	-0.437130	-3.711811	2.057327
53	6	0	1.907897	-2.345308	0.741183	37	6	0	-1.211641	-1.408411	3.530703
54	6	0	0.656324	-2.914371	1.177576	38	6	0	0.182606	-1.798457	3.475611
55	6	0	0.012778	-2.429584	2.313585	39	6	0	0.562193	-2.923227	2.755818
56	6	0	-1.427368	-2.256103	2.313426	40	6	0	1.753835	-2.893801	1.930417
57	6	0	-2.167836	-2.571985	1.176639	41	6	0	1.501251	-3.664534	0.738060
58	6	0	-3.249696	-1.722897	-0.741619	42	6	0	2.016619	-3.223136	-0.479057
59	6	0	-3.549235	-0.576668	-1.437555	43	6	0	1.201280	-3.296648	-1.675689
60	6	0	2.758593	-0.223312	-2.581533	44	6	0	1.489685	-2.132877	-2.493995
61	6	0	-1.731028	-1.048140	-3.035545	45	6	0	0.464330	-1.524965	-3.217803
62	6	0	-0.480419	-0.463625	-3.486658	46	6	0	-3.358793	0.230182	-1.596684
63	6	0	0.596057	-1.327138	-3.033271	47	6	0	0.928636	1.834633	-1.810378
64	6	0	1.788314	-0.768554	-2.575810	48	6	0	-0.413322	2.202153	-1.767142
65	6	0	2.468102	-1.298697	-1.428333	49	6	0	-0.982490	2.664080	-0.529001
66	6	0	2.467994	-1.298453	1.428462	50	6	0	-0.169670	2.737940	0.603739
67	6	0	3.358513	-0.225147	0.800511	51	6	0	1.225529	2.368763	0.534492
68	6	0	3.358532	-0.225196	-0.800474	52	6	0	2.939007	0.961605	-0.758163
69	6	0	2.745614	1.026683	-1.428868	53	6	0	2.413412	0.034358	-1.855591
70	6	0	1.959627	0.672418	-2.575779	54	6	0	1.336370	0.663302	-2.564100
71	6	0	0.933679	1.497576	-3.033052	55	6	0	0.385960	-0.086885	-3.252669
72	6	0	-0.316349	0.912834	-3.486732	56	6	0	-1.015203	0.295761	-3.203868
73	6	0	-1.393599	1.775587	-3.034362	57	6	0	-1.408526	1.409741	-2.467677
74	6	0	-2.587199	1.217572	-2.580743	58	6	0	-2.335980	2.167213	-0.434610
75	6	0	-3.249701	-1.722788	0.741839	59	6	0	-2.835943	1.759641	0.775776
76	6	0	-4.150979	0.670106	-0.803275	60	6	0	-1.993799	1.806689	1.938342
77	6	0	0.656326	-2.914506	-1.177184	61	6	0	-0.693095	2.298279	1.869912
78	6	0	4.857025	-0.402304	1.292031	62	6	0	0.371235	1.645232	2.610543
79	1	0	4.875729	-0.404216	2.388668	63	6	0	1.566110	1.679243	1.802292
80	6	0	5.642010	0.742979	0.699750	64	6	0	2.424344	0.609497	1.795060
81	6	0	6.274232	1.760679	1.402949	65	6	0	3.307099	0.216338	0.610430
82	1	0	6.259387	1.765644	2.490370	66	6	0	2.481366	-1.336154	-1.815405
83	6	0	6.928288	2.777109	0.697181	67	6	0	2.815596	-2.022451	-0.546398
84	1	0	7.425056	3.574010	1.237674	68	6	0	3.061926	-1.291797	0.587145
85	6	0	6.922831	2.777157	-0.696925	69	6	0	2.505256	-1.723643	1.838325
86	1	0	7.425067	3.574096	-1.237356	70	6	0	2.112537	-0.547039	2.588303
87	6	0	6.274214	1.760789	-1.402764	71	6	0	0.979590	-0.583848	3.400030
88	1	0	6.259361	1.765620	-2.490183	72	6	0	0.085466	0.542342	3.409830
89	6	0	5.641991	0.743041	-0.699631	73	6	0	-1.272234	0.030690	3.484488
90	6	0	4.857030	-0.402210	-1.291959	74	6	0	-2.288773	0.646127	2.758612
91	1	0	4.875704	-0.404178	2.386600	75	6	0	-2.604749	1.376232	-1.660764
92	6	0	5.354425	-1.698225	-0.699679	76	6	0	-3.899500	0.683295	0.939733
93	6	0	5.737672	-2.833496	-1.402627	77	6	0	1.765815	1.934436	-0.646725
94	1	0	5.723475	-2.834770	-2.490095	78	6	0	4.829490	0.516765	0.940155
95	6	0	6.136578	-3.971409	-0.697081	79	1	0	5.098550	0.010497	1.872866
96	1	0	6.442586	-4.861611	-1.238713	80	6	0	4.961167	2.017322	1.034097
97	6	0	6.136532	-3.971469	0.696975	81	6	0	5.305800	2.746709	2.165114
98	1	0	6.442491	-4.861722	1.238552	82	1	0	5.540884	2.235031	3.095553
99	6	0	5.737620	-2.833597	1.402583	83	6	0	5.342077	4.141377	2.092762
100	1	0	5.723352	-2.834933	2.490050	84	1	0	5.616353	4.719830	2.969986
101	6	0	5.354422	-1.698271	0.699695	85	6	0	5.021826	4.793491	0.902952

AICBA trans-2 a

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
			X	Y	Z
1	6	0	-5.747329	0.037750	-0.575875
2	1	0	-6.185779	-0.701316	-1.249888
3	6	0	-5.954768	1.489207	-0.943666
4	6	0	-6.253710	2.115370	-2.143796
5	1	0	-6.437790	1.540907	-3.048316
6	6	0	-6.317206	3.513586	-2.161697
7	1	0	-6.566757	4.028198	-3.085100
8	6	0	-6.058486	4.256023	-1.008993
9	1	0	-6.109252	5.340383	-1.047538
10	6	0	-5.730367	3.620960	0.194313
11	1	0	-5.510277	4.201596	1.086652
12	6	0	-5.697106	2.235313	0.214631
13	6	0	-5.333340	1.247243	1.293317
14	1	0	-5.394861	1.600501	2.323423
15	6	0	-6.213708	0.042439	0.892736
16	1	0	-7.281198	0.257575	0.990750
17	1	0	-5.969287	-0.878503	1.432890
18	6	0	-2.586233	-3.403149	0.898620
19	6	0	-3.497239	-2.282399	0.897761
20	6	0	-3.816933	-1.648405	-0.277313
21	6	0	-3.214842	-2.097862	-1.503068
22	6	0	-2.349900	-3.190195	-1.525226
23	6	0	-2.027558	-3.863160	-0.290799
24	6	0	-1.771168	-3.328459	2.096420
25	6	0	-2.171642	-2.152676	2.846517
26	6	0	-3.233538	-1.494228	2.124848
27	6	0	-3.300495	-0.122470	2.090200
28	6	0	-4.192654	-0.172620	-0.387777
29	6	0	-2.931970	-0.934535	-2.320667

AICBA trans-2 b

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
			X	Y	Z
1	6	0	-5.283707	-0.474739	-1.758655
2	1	0	-5.300297	0.018620	-2.750694
3	6	0	-6.547567	-0.491625	-0.810619
4	6	0	-7.701566	0.218198	-0.549483
5	1	0	-7.927244	0.969356	-1.049972
6	6	0	-8.517549	-0.223028	0.482953
7	1	0	-9.310746	0.225558	0.663891
8	6	0	-8.270478	-1.424946	1.190924
9	1	0	-8.914206	-1.703474	1.800158
10	6	0	-7.193584	-2.252965	0.906117
11	1	0	-7.095987	-3.074425	1.331955
12	6	0	-6.274333	-1.820815	-0.027680

AICBA *trans*-3 a

91	1	0	5.349830	0.846698	-0.262166	73	6	0	0.715709	-2.023757	-1.481002
92	6	0	5.143475	-1.059211	-1.297628	74	6	0	-0.634250	-2.331930	-1.302815
93	6	0	5.854612	-0.752924	-2.450748	75	6	0	-3.623745	-0.220725	1.270783
94	1	0	6.301816	0.230823	-2.573190	76	6	0	-2.971877	-1.682397	-1.251837
95	6	0	5.985263	-1.720606	-3.449856	77	6	0	0.258972	-0.034873	3.566551
96	1	0	6.545666	-1.492021	-4.351535	78	6	0	4.819215	-0.487294	0.815589
97	6	0	5.395165	-2.974546	-3.297024	79	1	0	5.160860	0.121855	1.658712
98	1	0	5.498821	-3.720286	-4.079647	80	6	0	5.553189	-0.171042	-0.464722
99	6	0	4.667194	-3.276025	-2.143277	81	6	0	6.508682	0.821442	-0.642805
100	1	0	4.194548	-4.248567	-2.026654	82	1	0	6.814976	1.442167	0.195984
101	6	0	4.550428	-2.317800	-1.144253	83	6	0	7.066095	1.012762	-1.909448

AICBA trans-3 b

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)			Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
			X	Y	Z				X	Y	Z
1	6	0	-5.179444	-0.773473	-1.906577	73	6	0	0.715709	-2.023757	-1.481002
2	1	0	-5.770374	0.068267	-2.274453	74	6	0	-0.634250	-2.331930	-1.302815
3	6	0	-5.848714	-1.673386	-0.892723	75	6	0	-3.623745	-0.220725	1.270783
4	6	0	-6.908736	-1.476057	-0.021055	76	6	0	-2.971877	-1.682397	-1.251837
5	1	0	-7.465386	-0.542242	-0.014099	77	6	0	0.258972	-0.034873	3.566551
6	6	0	-7.248654	-2.515625	0.852388	78	6	0	4.819215	-0.487294	0.815589
7	1	0	-8.085979	-2.392746	1.533312	79	1	0	5.160860	0.121855	1.658712
8	6	0	-6.522593	-3.707255	0.863713	80	6	0	5.553189	-0.171042	-0.464722
9	1	0	-6.803014	-4.499180	1.552279	81	6	0	6.508682	0.821442	-0.642805
10	6	0	-5.435385	-3.891632	0.002308	82	1	0	6.814976	1.442167	0.195984
11	1	0	-4.857653	-4.812308	0.025996	83	6	0	7.066095	1.012762	-1.909448
12	6	0	-5.119163	-2.870266	-0.879550	84	1	0	7.818956	1.781305	-2.057070
13	6	0	-4.000143	-2.703836	-1.880414	85	6	0	6.656382	0.225597	-2.984743
14	1	0	-3.515733	-3.620423	-2.224209	86	1	0	7.091839	0.382707	-3.967172
15	6	0	-4.683654	-1.810366	-2.933498	87	6	0	5.682881	-0.760939	-2.807485
16	1	0	-5.505909	-2.320210	-3.442712	88	1	0	5.351492	-1.366098	-3.648173
17	1	0	-3.989396	-1.395566	-3.672088	89	6	0	5.139394	-0.959335	-1.544447
18	6	0	-1.133851	1.711062	-3.131874	90	6	0	4.054123	-1.943248	-1.177404
19	6	0	-2.076456	0.636557	-2.919593	91	1	0	3.746985	-2.566443	-2.023461
20	6	0	-3.149321	0.810456	-2.080047	92	6	0	4.510576	-2.756596	0.009353
21	6	0	-3.309817	2.066109	-1.400352	93	6	0	4.498390	-4.141703	0.114619
22	6	0	-2.426077	3.122233	-1.613329	94	1	0	4.167858	-4.751370	-0.723164
23	6	0	-1.310226	2.941155	-2.500099	95	6	0	4.911685	-4.739460	1.307660
24	6	0	0.193197	1.139379	-3.237342	96	1	0	4.911100	-5.821773	1.397473
25	6	0	0.085589	-0.287534	-3.086229	97	6	0	5.318015	-3.953556	2.385125
26	6	0	-1.307512	-0.629203	-2.893398	98	1	0	5.632230	-4.425806	3.311343
27	6	0	-1.660846	-1.634216	-2.031910	99	6	0	5.318294	-2.560464	2.281980
28	6	0	-3.807167	-0.310338	-1.277436	100	1	0	5.621390	-1.944454	3.125369
29	6	0	-3.804172	1.794586	-0.064255	101	6	0	4.921753	-1.967916	1.089830

AICBA trans-4 a

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)			Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
			X	Y	Z				X	Y	Z
1	6	0	-4.008165	2.510058	-1.926050	1	6	0	-4.3879308	2.655190	-3.000911
2	1	0	-3.879308	2.655190	-3.000911	2	1	0	-3.903697	3.747418	-1.064093
3	6	0	-3.903697	3.747418	-1.064093	3	6	0	-3.021864	4.979862	-1.267925
4	6	0	-3.302186	5.220798	-2.212540	4	6	0	-2.820823	5.220798	-2.212540
5	1	0	-3.332431	5.910851	-0.223290	5	1	0	-3.884485	6.890425	-0.363645
6	6	0	-3.332431	5.910851	-0.223290	6	6	0	-3.928451	5.595824	0.998171
7	1	0	-2.884485	6.890425	-0.363645	7	1	0	-3.938800	6.333432	1.795625
8	6	0	-3.938800	6.333432	1.795625	8	6	0	-4.509188	4.340052	1.210033
9	1	0	-4.509188	4.340052	1.210033	9	1	0	-4.955683	4.090359	2.169437
10	6	0	-4.955683	4.090359	2.169437	10	6	0	-4.499752	3.430147	0.164329
11	1	0	-4.499752	3.430147	0.164329	11	1	0	-4.2886455	-3.224897	-1.566667
12	6	0	-4.2886455	-3.224897	-1.566667	12	6	0	-3.964071	1.996465	0.058765
13	6	0	-3.964071	1.996465	0.058765	13	6	0	-5.704027	1.669100	0.792388
14	1	0	-5.704027	1.669100	0.792388	14	1	0	-5.345626	1.924235	-1.432461
15	6	0	-5.345626	1.924235	-1.432461	15	6	0	-6.198112	2.563616	-1.676984
16	1	0	-6.198112	2.563616	-1.676984	16	1	0	-5.532430	0.904847	-1.786929
17	1	0	-5.532430	0.904847	-1.786929	17	1	0	-2.690777	-2.170351	-2.541314
18	6	0	-2.690777	-2.170351	-2.541314	18	6	0	-3.359477	-0.981752	-2.066244
19	6	0	-3.359477	-0.981752	-2.066244	19	6	0	-2.801301	0.256014	-2.268584
20	6	0	-2.801301	0.256014	-2.268584	20	6	0	-1.531326	0.348443	-2.935889
21	6	0	-1.531326	0.348443	-2.935889	21	6	0	-0.886068	-0.780810	-3.425985
22	6	0	-0.886068	-0.780810	-3.425985	22	6	0	-1.479253	-2.076017	-3.224677
23	6	0	-1.479253	-2.076017	-3.224677	23	6	0	-2.886455	-3.224897	-1.566667
24	6	0	-2.886455	-3.224897	-1.566667	24	6	0	-3.682203	-2.697219	-0.475485
25	6	0	-3.682203	-2.697219	-0.475485	25	6	0	-3.984682	-1.313014	-0.762872
26	6	0	-3.984682	-1.313014	-0.762872	26	6	0	-0.557722	-0.918319	-3.275783
27	6	0	-0.557722	-0.918319	-3.275783	27	6	0	-4.006196	-0.386220	0.247153
28	6	0	-4.006196	-0.386220	0.247153	28	6	0	-2.992628	1.454048	-1.339181
29	6	0	-2.992628	1.454048	-1.339181	29	6	0	-0.767914	1.401818	2.288491
30	6	0	-0.767914	1.401818	2.288491	30	6	0	0.616130	1.268615	-2.141189
31	6	0	0.616130	1.268615	-2.141189	31	6	0	1.286776	0.079295	-2.638721
32	6	0	1.286776	0.079295	-2.638721	32	6	0	0.557722	-0.918319	-3.275783
33	6	0	0.557722	-0.918319	-3.275783	33	6	0	0.846350	-2.296515	-2.983110
34	6	0	0.846350	-2.296515	-2.983110	34	6	0	-0.411846	-3.018803	-2.945459
35	6	0	-0.411846	-3.018803	-2.945459	35	6	0	-0.604928	-4.026532	-2.007204
36	6	0	-0.604928	-4.026532	-2.007204	36	6	0	-1.871164	-4.138215	-1.310534
37	6	0	-1.871164	-4.138215	-1.310534	37	6	0	-3.433135	-3.112493	0.829547
38	6	0	-3.433135	-3.112493	0.829547	38	6	0	-2.367207	-4.058122	1.101331
39	6	0	-2.367207	-4.058122	1.101331	39	6	0	-1.601184	-4.558026	0.055331
40	6	0	-1.601184	-4.558026	0.055331	40	6	0	-0.168361	-4.693697	0.204802
41	6	0	-0.168361	-4.693697	0.204802	41	6				

57	6	0	0.484389	2.172611	0.085022	41	6	0	3.065946	1.220757	0.571030
58	6	0	-1.566581	1.973674	1.233123	42	6	0	2.867754	1.964164	-0.561820
59	6	0	-2.766131	1.308276	1.279003	43	6	0	2.482276	1.300845	-1.829690
60	6	0	-2.942951	0.244466	2.230884	44	6	0	1.540398	2.162679	-2.502883
61	6	0	-1.948916	-0.078013	3.150569	45	6	0	0.472314	1.622408	-3.218692
62	6	0	-1.665655	-1.471666	3.451566	46	6	0	-2.771944	-1.085930	-1.649201
63	6	0	-0.229673	-1.606760	3.600285	47	6	0	-2.216267	3.470423	-1.505970
64	6	0	0.413105	-2.743041	3.128537	48	6	0	-3.150618	2.442613	-1.482590
65	6	0	1.678869	-2.624354	2.426415	49	6	0	-3.751405	2.034879	-0.227333
66	6	0	2.891621	-1.965544	-0.046244	50	6	0	-3.400540	2.683944	0.953934
67	6	0	2.285637	-3.262615	0.146967	51	6	0	-2.417355	3.750709	0.933198
68	6	0	1.702127	-3.599004	1.365672	52	6	0	-0.418577	4.418410	-0.333006
69	6	0	0.446316	-4.324721	1.395223	53	6	0	0.079326	3.931674	-1.609764
70	6	0	-0.351025	-3.797424	2.488381	54	6	0	-1.034435	3.355865	-2.337943
71	6	0	-1.727725	-3.667310	2.344831	55	6	0	-0.843794	2.227595	-3.126247
72	6	0	-2.398178	-2.477845	2.836527	56	6	0	-1.828451	1.161153	-3.114599
73	6	0	-3.448615	-2.139373	1.892472	57	6	0	-2.955847	1.260516	-2.299619
74	6	0	-3.709909	-0.804864	1.592313	58	6	0	-3.934844	0.601528	-0.255648
75	6	0	-0.939097	2.307848	-0.064456	59	6	0	-3.742984	-0.139525	0.882253
76	6	0	-3.668450	1.091952	0.071483	60	6	0	-3.336928	0.521761	2.093242
77	6	0	1.562800	-0.180415	2.695163	61	6	0	-3.187516	1.905423	2.147526
78	6	0	3.788548	1.819101	-1.248941	62	6	0	-2.076268	2.486466	2.880213
79	1	0	3.603738	2.135770	-2.280545	63	6	0	-1.598984	3.630880	2.126458
80	6	0	5.031044	0.973348	-1.114187	64	6	0	-0.236979	3.902878	2.065079
81	6	0	5.852753	0.544169	-2.148639	65	6	0	0.366845	4.307453	0.808261
82	1	0	5.641605	0.839067	-3.173977	66	6	0	1.335278	3.342028	-1.684233
83	6	0	6.948604	-0.271648	-1.856717	67	6	0	2.152350	3.217804	-0.492474
84	1	0	7.600211	-0.606907	-2.658273	68	6	0	1.681276	3.699841	0.725979
85	6	0	7.205892	-0.661695	-0.543310	69	6	0	1.886615	2.918492	1.918777
86	1	0	8.057454	-1.299234	-0.324462	70	6	0	0.705095	3.040853	2.754761
87	6	0	6.370031	-0.241573	0.494165	71	6	0	0.246700	1.946817	3.475737
88	1	0	6.560168	-0.555480	1.518015	72	6	0	-1.173508	1.663677	3.540100
89	6	0	5.288598	0.580948	0.204090	73	6	0	-1.338097	0.219544	3.496184
90	6	0	4.262601	1.094562	1.185286	74	6	0	-2.391813	-0.336941	2.776986
91	1	0	4.479426	0.797252	2.216450	75	6	0	-3.434143	0.114310	-1.563545
92	6	0	4.137453	2.590537	1.026784	76	6	0	-3.271586	-1.586824	0.886456
93	6	0	4.205033	3.536908	2.041364	77	6	0	-1.835845	4.134172	-0.269164
94	1	0	4.393984	3.227837	3.066882	78	6	0	4.027105	-1.868369	-1.276985
95	6	0	4.025145	4.886510	1.728898	79	1	0	3.760671	-2.366991	-2.214540
96	1	0	4.084137	5.634234	2.514426	80	6	0	4.361349	-2.844241	-0.174661
97	6	0	3.765825	5.277226	0.415986	81	6	0	4.296406	-4.229705	-0.250656
98	1	0	3.621669	6.328176	0.183017	82	1	0	4.006861	-4.714345	-1.180287
99	6	0	3.684880	4.322985	-0.601081	83	6	0	4.605131	4.990670	0.879710
100	1	0	3.468521	4.621972	-1.624108	84	1	0	4.563715	-6.074720	0.827893
101	6	0	3.879016	2.982909	-0.291412	85	6	0	4.959944	4.365516	2.074191

AICBA trans-4 b

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
			X	Y	Z
1	6	0	-3.644677	-3.380478	-0.776271
2	1	0	-3.233520	-4.045944	-1.538401
3	6	0	-5.047584	-2.872740	-1.013733
4	6	0	-5.812722	-2.746933	-2.162682
5	1	0	-5.441596	-3.089294	-3.125456
6	6	0	-7.083431	-2.170646	-2.050805
7	1	0	-7.710958	-2.079344	-2.932690
8	6	0	-7.553355	-1.710170	-0.820365
9	1	0	-8.541761	-1.264278	-0.756462
10	6	0	-6.765917	-1.812786	0.332230
11	1	0	-7.127529	-1.436226	1.285830
12	6	0	-5.519845	-2.410348	0.222585
13	6	0	-4.405787	-2.634134	1.218911
14	1	0	-4.687175	-2.618285	2.274154
15	6	0	-3.772268	-3.923688	0.660590
16	1	0	-4.446679	-4.781854	0.724733
17	1	0	-2.809569	-4.171481	1.120800
18	6	0	0.954307	-2.286655	0.522491
19	6	0	-0.454736	-2.567239	0.584262
20	6	0	-1.244631	-2.471460	-0.540447
21	6	0	-0.644089	-2.034723	-1.754705
22	6	0	0.724938	-1.759088	-1.813494
23	6	0	1.545914	-1.911014	-0.661595
24	6	0	1.342791	-1.621027	1.783791
25	6	0	0.156509	-1.501020	2.598672
26	6	0	-0.959607	-2.079789	1.886385
27	6	0	-2.209987	-1.523784	1.981423
28	6	0	-2.730367	-2.118091	-0.529100
29	6	0	-1.585506	-1.175434	-2.453020
30	6	0	-1.125965	-0.091273	-3.191974
31	6	0	0.301649	0.194829	-3.254405
32	6	0	1.202712	-0.616638	-2.574142
33	6	0	2.323462	-0.060692	-1.869136
34	6	0	2.784752	-1.021316	-0.7711476
35	6	0	3.199785	-0.301401	0.596937
36	6	0	2.285056	-0.625996	1.778364
37	6	0	-0.031258	-0.380865	3.407997
38	6	0	0.947274	0.675420	3.392690
39	6	0	2.066114	0.552714	2.573588
40	6	0	2.547316	1.695657	1.825536

AICBA e-face a

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
			X	Y	Z
1	6	0	-0.865136	4.704651	-1.130755
2	1	0	-1.143346	4.933967	-2.161724
3	6	0	0.521179	5.124429	-0.700863
4	6	0	1.676081	5.403448	-1.414941
5	1	0	1.682578	5.387011	-2.501968
6	6	0	2.837879	5.712990	-0.697706
7	1	0	3.750566	5.957056	-1.233782
8	6	0	2.837821	5.713185	0.697686
9	1	0	3.750469	5.957388	1.233766
10	6	0	1.675974	5.403797	1.414908
11	1	0	1.682390	5.387590	2.501941
12	6	0	0.521146	5.124532	0.700809
13	6	0	-0.865157	4.704670	1.130695
14	1	0	-1.143415	4.934025	2.161642
15	6	0	-1.716719	5.314187	-0.000048
16	1	0	-1.691361	6.407278	-0.000037
17	1	0	-2.755387	4.966821	-0.000050
18	6	0	1.448065	-2.333277	-1.170817
19	6	0	0.591160	-3.393039	-0.726116
20	6	0	-0.567848	-3.728748	-1.423901
21	6	0	-0.930164	-2.972653	-2.592750
22	6	0	-0.111703	-1.921790	-3.003460
23	6	0	1.099307	-1.608363	-2.282325
24	6	0	2.262215	-1.782922	-0.000009

25	6	0	1.448062	-2.333251	1.170810	9	1	0	-7.679411	-3.221831	1.233035
26	6	0	0.591158	-3.393021	0.726125	10	6	0	-5.542613	-3.432951	1.414954
27	6	0	-0.567847	-3.728709	1.423926	11	1	0	-5.543055	-3.412350	2.501957
28	6	0	-1.782418	-4.052465	-0.693585	12	6	0	-4.363185	-3.575702	0.700831
29	6	0	-2.372289	-2.814204	-2.596789	13	6	0	-2.916947	-3.663510	1.130739
30	6	0	-2.937374	-1.618710	-3.025807	14	1	0	-2.734372	-3.975076	2.161581
31	6	0	-2.084982	-0.529829	-3.468396	15	6	0	-2.331837	-4.531901	-0.000074
32	6	0	-0.707180	-0.677786	-3.450666	16	1	0	-2.737911	-5.547106	0.000021
33	6	0	0.141232	0.412834	-3.001323	17	1	0	-1.236966	-4.569366	-0.000123
34	6	0	1.251838	-0.137317	-2.284846	18	6	0	1.494796	-1.526027	-1.169138
35	6	0	1.731138	0.510910	-1.169615	19	6	0	0.321076	-2.219831	-0.738028
36	6	0	2.419045	-0.189893	-0.000017	20	6	0	-0.866925	-2.127854	-1.431311
37	6	0	1.099316	-1.608336	2.282322	21	6	0	-0.924973	-1.270384	-2.568218
38	6	0	1.251848	-0.137289	2.284828	22	6	0	0.210162	-0.580321	-2.998230
39	6	0	1.731130	0.510916	1.169574	23	6	0	1.442976	-0.721023	-2.283322
40	6	0	1.124708	1.731120	0.738197	24	6	0	2.452107	-1.310804	-0.000001
41	6	0	1.124711	1.731119	-0.738252	25	6	0	1.494777	-1.525980	1.169111
42	6	0	0.078292	2.296970	-1.435888	26	6	0	0.321056	-2.219770	0.737999
43	6	0	-0.437498	1.608789	-2.570286	27	6	0	-0.866875	-2.127945	1.431364
44	6	0	-1.880868	1.760149	-2.577037	28	6	0	-2.251248	-2.270087	-0.802341
45	6	0	-2.687946	0.717947	-3.022879	29	6	0	-2.219849	-0.614818	-2.578087
46	6	0	-2.900895	-3.482766	-1.421282	30	6	0	-2.331761	0.698705	-3.024595
47	6	0	-4.747260	0.470775	0.000000	31	6	0	-1.147230	1.418576	-3.467208
48	6	0	-4.914409	-0.908375	0.000006	32	6	0	0.090328	0.795796	-3.449370
49	6	0	-4.556477	-1.682022	1.175560	33	6	0	1.266432	1.517175	-3.003536
50	6	0	-4.052415	-1.041227	2.302001	34	6	0	2.114724	0.596666	-2.282623
51	6	0	-3.893668	0.401804	2.305630	35	6	0	2.801779	1.016159	-1.171786
52	6	0	-3.391400	2.238287	0.741727	36	6	0	3.187811	0.111990	-0.000006
53	6	0	-3.391410	2.238286	-0.741758	37	6	0	1.442968	-0.721021	2.283327
54	6	0	-4.227981	1.143495	-1.174625	38	6	0	2.114721	0.596665	2.282642
55	6	0	-3.893679	0.401772	-2.305632	39	6	0	2.801775	1.016146	1.171795
56	6	0	-4.052426	-1.041259	-2.301986	40	6	0	2.656387	2.371330	0.726070
57	6	0	-4.556482	-1.682043	-1.175536	41	6	0	2.656389	2.371340	-0.726054
58	6	0	-3.969606	-2.927297	0.727133	42	6	0	1.864182	3.281858	-1.423209
59	6	0	-2.900896	-3.482756	1.421330	43	6	0	1.149679	2.844186	-2.593122
60	6	0	-2.372284	-2.814173	2.596808	44	6	0	-0.148523	3.492313	-2.596586
61	6	0	-2.937357	-1.618670	3.025828	45	6	0	-1.272426	2.795621	-3.025262
62	6	0	-2.084966	-0.529783	3.468398	46	6	0	-2.958262	-1.079493	-1.436362
63	6	0	-2.687938	0.717990	3.022877	47	6	0	-3.317304	3.272253	-0.000014
64	6	0	-1.880864	1.760183	2.577007	48	6	0	-3.924554	2.023363	-0.000023
65	6	0	-2.247628	2.550767	1.432748	49	6	0	-3.855657	1.175614	1.174766
66	6	0	-2.247625	2.550736	-1.432778	50	6	0	-3.173105	1.617702	2.306496
67	6	0	-1.000175	3.166323	-0.802548	51	6	0	-2.522791	2.916307	2.302213
68	6	0	-1.000150	3.166332	0.802497	52	6	0	-1.427340	4.454608	0.727337
69	6	0	0.078280	2.296972	1.435826	53	6	0	-1.427334	4.454609	-0.727340
70	6	0	-0.437493	1.608819	2.570244	54	6	0	-2.596557	3.727769	-1.175342
71	6	0	0.141246	0.412871	3.001294	55	6	0	-2.522782	2.916322	-2.302241
72	6	0	-0.707165	-0.677745	3.450669	56	6	0	-3.173105	1.617724	-2.306536
73	6	0	-0.111690	-1.921755	3.003469	57	6	0	-3.855660	1.175624	-1.174812
74	6	0	-0.930159	-2.972620	2.592776	58	6	0	-3.748681	-0.198085	0.741560
75	6	0	-3.969615	-2.927317	-0.727092	59	6	0	-2.958235	-1.079484	1.436310
76	6	0	-1.782421	-4.052440	0.693624	60	6	0	-2.219838	-0.614853	2.578055
77	6	0	-4.227979	1.143512	1.174614	61	6	0	-2.331757	0.698689	3.024536
78	6	0	3.969218	0.151352	-0.000001	62	6	0	-1.147243	1.418570	3.467197
79	1	0	4.094243	1.239155	-0.000015	63	6	0	-1.272447	2.795615	3.025255
80	6	0	4.552674	-0.501344	-1.229382	64	6	0	-0.148543	3.492308	2.596584
81	6	0	5.128314	0.148151	2.314138	65	6	0	-0.228709	4.340687	1.422119
82	1	0	5.217960	1.232068	-2.317593	66	6	0	-0.228699	4.340687	-1.422115
83	6	0	5.584912	-0.605870	-3.397754	67	6	0	1.019315	4.212399	-0.693568
84	1	0	6.042803	-0.107563	-4.247180	68	6	0	1.019309	4.212397	0.693578
85	6	0	5.450220	-1.993576	-3.396810	69	6	0	1.864166	3.281844	1.423219
86	1	0	5.801872	-2.572069	-4.246059	70	6	0	1.149659	2.844180	2.593133
87	6	0	4.857290	-2.644117	-2.312035	71	6	0	1.266416	1.517168	3.003540
88	1	0	4.737072	-3.725005	-2.314824	72	6	0	0.090309	0.795774	3.449362
89	6	0	4.416519	-1.894192	-1.228992	73	6	0	0.210149	-0.580346	2.998258
90	6	0	3.715868	-2.420374	0.000019	74	6	0	-0.924969	-1.270427	2.568226
91	1	0	3.627956	-3.511705	0.000015	75	6	0	-3.748667	-0.198087	-0.741603
92	6	0	4.416498	-1.894171	1.229033	76	6	0	-2.251310	-2.270073	0.802270
93	6	0	4.857223	-2.644075	2.312111	77	6	0	-2.596571	3.727769	1.175329
94	1	0	4.737003	-3.724963	2.314913	78	6	0	4.754335	-1.44323	-0.000027
95	6	0	5.450103	-1.993513	3.396900	79	1	0	5.273553	0.819619	-0.000073
96	1	0	5.801714	-2.571988	4.246178	80	6	0	5.056465	-0.967865	-1.229704
97	6	0	5.584797	-0.605807	3.397821	81	6	0	5.834135	-0.581011	-2.314217
98	1	0	6.042655	-0.107483	4.247255	82	1	0	6.321115	0.391471	-2.320222
99	6	0	5.128251	0.148192	2.314167	83	6	0	5.979425	-1.453245	-3.395952
100	1	0	5.217901	1.232108	2.317603	84	1	0	6.589943	-1.161944	-4.245529
101	6	0	4.552652	-0.501324	1.229401	85	6	0	5.339896	-2.691928	-3.393301
						86	1	0	5.453921	-3.362293	-4.240161
						87	6	0	4.546558	-3.073399	-2.308749
						88	1	0	4.033855	-4.032623	-2.309099
						89	6	0	4.414391	-2.210908	-1.227998
						90	6	0	3.568344	-2.439257	0.000043
						91	1	0	3.081621	-3.420057	0.000065
						92	6	0	4.414415	-2.210846	1.228045
						93	6	0	4.546607	-3.073280	2.308840
						94	1	0	4.033896	-4.032498	2.309277
						95	6	0	5.339980	-2.691751	3.393345
						96	1	0	5.454016	-3.362066	4.240245
						97	6	0	5.979528	-1.453077	3.395913
						98	1	0	6.590067	-1.161755	4.245468
						99	6	0	5.834220	-0.580901	2.314135
						100	1	0	6.321205	0.391578	2.319845
						101	6	0	5.056507	-0.967813	1.229670

AICBA e-face b

Center	Atomic Number	Atomic Type	X	Y	Z	Coordinates (Angstroms)

<tbl_r cells="7" ix

AICBA e-edge

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
			X	Y	Z
1	6	0	-4.162296	2.699186	1.254098
2	1	0	-5.116274	2.299363	1.604683
3	6	0	-4.222608	3.651862	0.083697
4	6	0	-5.171595	3.850387	-0.906672
5	1	0	-6.108063	3.298170	-0.906270
6	6	0	-4.892880	4.784852	-1.910513
7	1	0	-5.627376	4.972031	-2.688483
8	6	0	-3.680187	5.474626	-1.926833
9	1	0	-3.483931	6.193239	-2.717345
10	6	0	-2.712388	5.249413	-0.940542
11	1	0	-1.760445	5.773940	-0.968031
12	6	0	-3.003370	4.343179	0.068064
13	6	0	-2.194959	3.815437	1.231538
14	1	0	-1.356380	4.433036	1.560273
15	6	0	-3.313332	3.515136	2.248485
16	1	0	-3.824956	4.420326	2.586645
17	1	0	-2.974704	2.934789	3.113312
18	6	0	-1.320544	-2.418985	-3.258359
19	6	0	-0.277142	-3.326277	-2.822681
20	6	0	-0.538907	-4.255968	-1.821888
21	6	0	-1.854143	-4.321512	-1.220336
22	6	0	-2.855762	-3.453780	-1.640256
23	6	0	-2.583416	-2.479574	-2.681208
24	6	0	-0.706120	-1.130474	-3.523295
25	6	0	0.720135	-1.254456	-3.260154
26	6	0	0.981040	-2.601624	-2.829654
27	6	0	1.919410	-2.824058	-1.823457
28	6	0	0.442485	-4.494588	-0.779203
29	6	0	-1.687756	-4.608241	0.195865
30	6	0	-2.529766	-4.012930	1.128577
31	6	0	-3.567654	-3.100858	0.687116
32	6	0	-3.727597	-2.828622	-0.663788
33	6	0	-3.988349	-1.469684	-1.108326
34	6	0	-3.289150	-1.256397	-2.347945
35	6	0	-2.691157	-0.019789	-2.587227
36	6	0	-1.373395	0.037456	-3.189392
37	6	0	1.411219	-0.201864	-2.667252
38	6	0	0.713894	1.024692	-2.327117
39	6	0	-0.653597	1.146352	-2.585911
40	6	0	-1.506019	1.777645	-1.624036
41	6	0	-2.793567	1.048090	-1.618999
42	6	0	-3.473076	0.847316	-0.441557
43	6	0	-4.053193	-0.436431	-0.175803
44	6	0	-3.885280	-0.721782	1.238239
45	6	0	-3.659351	-2.028776	1.663733
46	6	0	-0.269611	-4.717970	0.466301
47	6	0	-0.581541	-1.319879	3.524012
48	6	0	0.090402	-2.495451	3.227429
49	6	0	1.413930	-2.443851	2.623567
50	6	0	2.002227	-1.214355	2.341739
51	6	0	1.301103	0.015371	2.661878
52	6	0	-0.982319	0.879217	2.815388
53	6	0	-2.269033	0.148469	2.820146
54	6	0	-2.001621	-1.202793	3.257495
55	6	0	-2.692265	-2.277304	2.700682
56	6	0	-1.987239	-3.502291	2.374018
57	6	0	-0.625563	-3.609826	2.632791
58	6	0	1.510663	-3.509053	1.662263
59	6	0	2.188712	-3.286316	0.465373
60	6	0	2.816121	-2.013156	0.203356
61	6	0	2.733095	-1.000247	1.123182
62	6	0	2.751942	0.489293	0.777284
63	6	0	1.598246	0.976613	1.654187
64	6	0	0.599233	1.826783	1.236093
65	6	0	-0.703819	1.796213	1.825874
66	6	0	-3.198802	0.386489	1.838157
67	6	0	-3.141687	1.558673	0.863202
68	6	0	-1.743364	2.348510	0.854572
69	6	0	-0.967348	2.257803	-0.450337
70	6	0	0.432422	2.118383	-0.200268
71	6	0	1.274066	1.538456	-1.123923
72	6	0	2.570878	0.803826	-0.780891
73	6	0	2.406766	-0.438347	-1.658080
74	6	0	2.646856	-1.721495	-1.240369
75	6	0	0.251363	-4.231071	1.659945
76	6	0	1.639855	-3.790337	-0.778601
77	6	0	0.034426	-0.033184	3.246603
78	6	0	4.113639	1.145496	1.256354
79	1	0	4.252275	0.941094	2.322956
80	6	0	4.006901	2.621073	0.957818
81	6	0	4.000039	3.652701	1.887979
82	1	0	4.106988	3.434566	2.948126
83	6	0	3.852050	4.969646	1.445800
84	1	0	3.853466	5.783788	2.164795
85	6	0	3.699398	5.243110	0.087110
86	1	0	3.583357	6.269535	-0.248620
87	6	0	3.691517	4.203134	-0.845758
88	1	0	3.558568	4.411742	-1.904823
89	6	0	3.852094	2.895121	-0.405927
90	6	0	3.823906	1.650168	-1.260282
91	1	0	3.715643	1.873566	-2.326569
92	6	0	5.048473	0.819386	-0.960185
93	6	0	5.938586	0.293274	-1.888370
94	1	0	5.805793	0.494192	-2.948921
95	6	0	6.999348	-0.499465	-1.443561
96	1	0	7.703357	-0.910289	-2.161167
97	6	0	7.155013	-0.770704	-0.084935
98	1	0	7.979816	-1.392073	0.251274
99	6	0	6.251403	-0.252237	0.845984
100	1	0	6.361389	-0.473277	1.905176
101	6	0	5.205159	0.546878	0.403397

AICBA cis-2 a

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
			X	Y	Z
1	6	0	1.348223	-4.038419	-1.698251
2	1	0	0.707548	-4.885643	-1.952258
3	6	0	2.463975	-4.312430	-0.728715
4	6	0	2.654270	-5.323068	0.199604
5	1	0	1.934085	-6.130774	0.303367
6	6	0	3.803600	-5.280920	0.996214
7	1	0	3.985675	-6.067387	1.722820
8	6	0	4.718471	-4.238095	0.861170
9	1	0	5.609862	-4.220633	1.481654
10	6	0	4.504463	-3.209581	-0.063929
11	1	0	5.223133	-2.406249	-0.152597
12	6	0	3.369736	-3.251367	-0.858295
13	6	0	2.803957	-3.232298	-1.920931
14	1	0	3.513273	-1.639595	-2.391098
15	6	0	2.113114	-3.346914	-2.842379
16	1	0	2.826687	-4.017075	-3.329292
17	1	0	1.460561	-2.889973	-3.593746
18	6	0	-3.774103	2.740571	1.209121
19	6	0	-3.408521	3.187096	-0.123901
20	6	0	-3.893362	2.511534	-1.237883
21	6	0	-4.770392	1.368412	-1.070259
22	6	0	-5.125390	0.944968	0.205750
23	6	0	-4.611751	1.643561	1.368541
24	6	0	-2.613800	2.897635	2.065787
25	6	0	-1.538092	3.443627	1.255763
26	6	0	-2.027798	3.624673	-0.087705
27	6	0	-1.183425	3.353384	-1.162254
28	6	0	-3.016735	2.240647	-2.361090
29	6	0	-4.445114	0.393732	-2.095130
30	6	0	-4.492021	-0.964604	-1.804084
31	6	0	-4.856871	-1.406048	-0.468502
32	6	0	-5.164499	-0.472259	0.513457
33	6	0	-4.669103	-0.650261	1.866485
34	6	0	-4.328231	0.665458	2.394112
35	6	0	-3.213186	0.803890	3.211482
36	6	0	-2.335948	1.949903	3.041309
37	6	0	-0.232162	3.001588	1.451070
38	6	0	0.060369	2.012589	2.471389
39	6	0	-0.972466	1.502512	3.256679
40	6	0	-1.001134	0.094869	3.547953
41	6	0	-2.387265	-0.343654	3.528649
42	6	0	-2.713225	-1.594428	0.322321
43	6	0	-3.880177	-1.752859	2.178181
44	6	0	-3.557963	-2.726546	1.149656
45	6	0	-4.039542	-2.558705	-0.141942
46	6	0	-3.358579	0.928474	-2.891737
47	6	0	-0.789490	-2.713066	-1.873103
48	6	0	-1.051926	-1.783237	-2.840285
49	6	0	-0.151068	-0.618798	-2.991209
50	6	0	0.961291	-0.470867	-2.176411
51	6	0	1.545139	-1.581991	-1.302603
52	6	0	0.019659	-3.012775	0.291742
53	6	0	-1.357255	-3.408567	0.279588
54	6	0	-1.861249	-3.230659	-1.069080
55	6	0	-3.175165	-2.823908	-1.279178
56	6	0	-3.455442	-1.846056	-2.301627
57	6	0	-2.405870	-1.330012	-3.058623
58	6	0	-0.967893	0.508379	-3.314812
59	6	0	-0.642681	1.766770	-2.806936
60	6	0	0.502051	1.912430	-1.968207
61	6	0	1.279337	0.812687	-1.654752
62	6	0	2.140370	0.709630	-0.398793
63	6	0	1.837451	-0.759391	-0.042981
64	6	0	1.416267	-1.150145	1.174496
65	6	0	0.507428	-2.306924	1.362063
66	6	0	-2.193175	-3.16714	

73	6	0	0.638300	2.752930	0.338621	57	6	0	-1.982574	3.044228	1.013764
74	6	0	0.173985	2.918969	-0.936309	58	6	0	-0.288711	2.070660	2.288188
75	6	0	-2.358365	0.086605	-3.356572	59	6	0	0.126104	0.872379	2.808162
76	6	0	-1.691913	2.647367	-2.321646	60	6	0	1.174885	0.073512	2.132968
77	6	0	0.528005	-2.823373	-1.122406	61	6	0	1.780167	0.499339	1.010005
78	6	0	3.664866	0.981599	-0.773888	62	6	0	2.304372	-0.454100	-0.075388
79	1	0	3.975234	0.306842	-1.576368	63	6	0	1.650497	0.196018	-1.286311
80	6	0	4.505528	0.820147	0.470380	64	6	0	1.062609	-0.506373	-2.319025
81	6	0	5.614075	-0.000539	0.620143	65	6	0	0.028055	0.101601	-3.091806
82	1	0	5.975870	-0.581742	-0.223297	66	6	0	-2.731443	0.787150	-3.138555
83	6	0	6.284821	-0.038476	1.844813	67	6	0	-2.312600	-0.576001	-3.432172
84	1	0	7.151829	-0.681767	1.966285	68	6	0	-0.966694	-0.908361	-3.407432
85	6	0	5.851576	0.753837	2.906060	69	6	0	-0.536178	-2.162597	-2.819371
86	1	0	6.371193	0.714379	3.858875	70	6	0	0.721878	-1.935390	-2.148180
87	6	0	4.772651	1.625718	2.737960	71	6	0	1.000531	-2.567274	-0.965239
88	1	0	4.458477	2.278440	3.549043	72	6	0	1.907640	-1.997105	0.126973
89	6	0	4.119337	1.668885	1.513104	73	6	0	1.043256	-2.269343	1.348716
90	6	0	3.022961	2.621351	1.113774	74	6	0	0.808828	-1.346984	2.332334
91	1	0	2.763859	3.323504	1.912799	75	6	0	-1.688436	2.380109	2.269926
92	6	0	3.438935	3.321772	-0.160507	76	6	0	-0.831211	-0.037861	3.384115
93	6	0	3.450873	4.692080	-0.383656	77	6	0	0.255172	2.130043	-1.745078
94	1	0	3.185994	5.379580	0.416385	78	6	0	3.887452	-0.391267	-0.201925
95	6	0	3.797980	5.174509	-1.648201	79	1	0	4.203509	0.633454	-0.404427
96	1	0	3.816426	6.244891	-1.830823	80	6	0	4.290167	-1.313981	-1.326003
97	6	0	4.112642	4.289158	-2.677742	81	6	0	4.896172	-0.940607	-2.519395
98	1	0	4.375390	4.672018	-3.659535	82	1	0	5.138678	0.102904	-2.708185
99	6	0	4.087336	2.910002	-2.454799	83	6	0	5.187189	-1.919126	-3.472689
100	1	0	4.320423	2.216600	-3.259834	84	1	0	5.666203	-1.637679	-4.405869
101	6	0	3.756962	2.432414	-1.193100	85	6	0	4.861466	-3.253773	-3.234040

AICBA cis-2 b

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
			X	Y	Z

1	6	0	1.226033	4.048653	1.656274
2	1	0	0.685065	4.597261	2.430257
3	6	0	1.617530	4.829554	0.424676
4	6	0	1.125449	5.998655	-0.133308
5	1	0	0.343074	6.570625	0.359365
6	6	0	1.662205	6.424733	-1.353651
7	1	0	1.306351	7.346852	-1.804119
8	6	0	2.643970	5.675308	-2.002693
9	1	0	3.041730	6.022351	-2.951958
10	6	0	3.118844	4.481023	-1.447852
11	1	0	3.870641	3.890669	-1.966586
12	6	0	2.606434	4.077712	-0.223743
13	6	0	2.834779	2.847175	0.623500
14	1	0	3.784968	2.338290	0.469939
15	6	0	2.570542	3.403821	2.034718
16	1	0	3.317607	4.142257	2.339103
17	1	0	2.482913	2.623186	2.798334
18	6	0	-3.415312	-2.776585	1.773392
19	6	0	-2.779146	-2.038152	2.845562
20	6	0	-3.179091	-0.738239	3.125753
21	6	0	-4.232191	-0.119825	2.346922
22	6	0	-4.839262	-0.825038	1.313014
23	6	0	-4.421644	-2.181757	1.020192
24	6	0	-2.395308	-3.578098	1.118477
25	6	0	-1.134812	-3.330242	1.792130
26	6	0	-1.366533	-2.381652	2.847957
27	6	0	-0.413195	-1.395867	3.092409
28	6	0	-2.185848	0.281794	3.420555
29	6	0	-3.890496	1.280669	2.165945
30	6	0	-4.171281	1.915599	0.963793
31	6	0	-4.798903	1.178939	-0.116348
32	6	0	-5.124967	-0.161460	0.053542
33	6	0	-4.880480	-1.109858	-1.016160
34	6	0	-4.448104	-2.359739	-0.420333
35	6	0	-3.473242	-3.128684	-1.045039
36	6	0	-2.426147	-3.751740	-0.258375
37	6	0	0.045313	-3.252669	1.052855
38	6	0	0.014375	-3.437806	-0.386222
39	6	0	-1.195641	-3.689365	-1.028953
40	6	0	-1.478947	-3.035290	-2.281507
41	6	0	-2.884999	-2.681271	-2.295649
42	6	0	-3.292765	-1.478374	-2.860067
43	6	0	-4.311972	-0.677138	-2.209086
44	6	0	-3.969519	0.721836	-2.386003
45	6	0	-4.211761	1.633239	-1.364919
46	6	0	-2.627693	1.520315	2.837332
47	6	0	-0.781691	2.959544	-1.090458
48	6	0	-0.759051	3.138343	0.268400
49	6	0	0.426808	2.782816	1.153129
50	6	0	1.575763	1.905225	0.436735
51	6	0	1.252696	1.528688	-0.998938
52	6	0	-0.372964	1.409289	-2.807218
53	6	0	-1.783607	1.752246	-2.832178
54	6	0	-2.031916	2.706014	-1.768154
55	6	0	-3.227166	2.651475	-1.054409
56	6	0	-3.200841	2.823469	0.376389

AICBA cis-3 a

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
			X	Y	Z

1	6	0	-1.950938	3.760230	1.228133
2	1	0	-2.245362	3.717996	2.279023
3	6	0	-3.074528	3.744204	0.220285
4	6	0	-4.401160	3.360516	0.310555
5	1	0	-4.814371	2.987557	1.244067
6	6	0	-5.198562	3.469364	-0.835766
7	1	0	-6.251467	3.202532	-0.785142
8	6	0	-4.661191	3.917563	-2.041935
9	1	0	-5.298405	3.990707	-2.918729
10	6	0	-3.311707	4.282644	-2.134045
11	1	0	-2.894375	4.629113	-3.076198
12	6	0	-2.535828	4.209223	-0.988504
13	6	0	-1.084244	4.526035	-0.716865
14	1	0	-0.590508	5.181677	-1.437559
15	6	0	-1.165967	4.998697	0.749313
16	1	0	-1.741117	5.922156	0.857513
17	1	0	-0.187999	5.113402	1.228026
18	6	0	3.775375	-2.390903	1.741172
19	6	0	3.502481	-3.101628	0.504218
20	6	0	4.028479	-2.636846	-0.694216
21	6	0	4.853702	-1.446324	-0.713450
22	6	0	5.112529	-0.761595	0.468176
23	6	0	4.560932	-1.242881	1.723174
24	6	0	2.576172	-2.434495	2.555473
25	6	0	1.565448	-3.170258	1.814124
26	6	0	2.134415	-3.583289	0.558551
27	6	0	1.342083	-3.558116	-0.586956
28	6	0	3.209927	-2.630254	-1.895557
29	6	0	4.554387	-0.710437	-1.930455
30	6	0	4.528452	0.680215	-1.911866
31	6	0	4.792059	1.392567	-0.673960
32	6	0	5.076364	0.686735	0.487722
33	6	0	4.492098	1.099851	1.752985
34	6	0	4.182978	-0.093515	2.519323
35	6	0	3.033964	-0.136804	3.303259
36	6	0	2.214783	-1.334156	3.319522
37	6	0	0.236448	-2.757355	1.857795
38	6	0	0.143051	-1.606072	2.655075
39	6	0	0.823688	-0.917179	3.381083
40	6	0	0.790155	0.521260	3.394423

41	6	0	2.146059	1.008319	3.352948	25	6	0	-1.152614	-2.897400	2.433335
42	6	0	2.434441	2.144793	2.602923	26	6	0	-1.083752	-3.854173	1.360487
43	6	0	3.634768	2.191268	1.793494	27	6	0	-1.729507	-3.575137	0.158590
44	6	0	3.335322	2.930668	0.580227	28	6	0	0.195376	-4.445463	-1.110201
45	6	0	3.912637	2.546310	-0.626738	29	6	0	2.471933	-3.968661	-1.406073
46	6	0	3.542796	-1.444104	-2.662667	30	6	0	3.380637	-2.952553	-1.684687
47	6	0	0.760857	2.196686	-2.481028	31	6	0	4.129215	-2.333380	-0.605219
48	6	0	1.127773	1.106883	-3.263950	32	6	0	3.943567	-2.761335	0.702442
49	6	0	0.310071	-0.077412	-3.237240	33	6	0	3.864344	-1.790129	1.781235
50	6	0	-0.825481	-0.106687	-2.422255	34	6	0	2.888580	-2.265258	2.744835
51	6	0	-1.205741	1.049681	-1.649367	35	6	0	2.057309	-1.359176	3.3948858
52	6	0	-0.320128	3.159744	-0.533428	36	6	0	0.651299	-1.670790	3.575948
53	6	0	1.191596	3.366530	-0.507143	37	6	0	-1.864190	-1.714633	2.247561
54	6	0	1.773637	2.932136	-1.746343	38	6	0	-1.325116	-0.459876	2.739151
55	6	0	3.108592	2.544673	-1.820901	39	6	0	-0.100627	-0.440313	3.400389
56	6	0	3.487664	1.393450	-2.624765	40	6	0	0.834255	0.614291	3.109161
57	6	0	2.518668	0.691449	-3.328239	41	6	0	2.163407	0.058274	3.107024
58	6	0	1.174599	-1.228366	-3.297447	42	6	0	3.085637	0.510389	2.166806
59	6	0	0.854214	-2.355837	-2.546170	43	6	0	3.957622	-0.433767	1.498993
60	6	0	-0.346308	-2.386759	-1.744171	44	6	0	4.150750	0.017589	0.131925
61	6	0	-1.165766	-1.290492	-1.681734	45	6	0	4.248076	-0.915852	-0.897093
62	6	0	-2.064501	-0.941871	-0.498562	46	6	0	1.185127	-3.991900	-2.070993
63	6	0	-1.806715	0.564576	-0.390587	47	6	0	1.559105	0.491937	-2.958969
64	6	0	-1.564909	1.219902	0.760061	48	6	0	1.054294	-0.708174	-3.449361
65	6	0	-0.938767	2.607729	0.842945	49	6	0	-0.341479	-1.010378	-3.262690
66	6	0	1.955858	3.350442	0.631893	50	6	0	-1.153474	-0.097355	-2.587062
67	6	0	1.384265	2.848968	1.902995	51	6	0	-0.612735	1.154103	-2.119866
68	6	0	0.093657	2.386584	1.941728	52	6	0	1.525358	2.341741	-1.381912
69	6	0	-0.207721	1.189528	2.680405	53	6	0	2.787660	1.500709	-1.249072
70	6	0	-1.222970	0.451272	1.972509	54	6	0	2.849936	0.519004	-2.295985
71	6	0	-1.205030	-0.920872	1.972955	55	6	0	3.576445	-0.659437	-2.143274
72	6	0	-1.737686	-1.776536	0.828513	56	6	0	3.038352	-1.916706	-2.639159
73	6	0	-0.584940	-2.768559	0.681986	57	6	0	1.806281	-1.939175	-3.277350
74	6	0	-0.039741	-3.152747	-0.514718	58	6	0	-0.470294	-2.418197	-2.984745
75	6	0	2.545581	-0.758986	-3.349833	59	6	0	-1.412300	-2.840787	-2.050753
76	6	0	1.895407	-3.073484	-1.838843	60	6	0	-2.277229	-1.887902	-1.393996
77	6	0	-0.442103	2.191242	-1.695967	61	6	0	-2.149526	-0.549196	-1.653738
78	6	0	-3.580650	-1.218999	-0.886957	62	6	0	-2.501675	0.563077	-0.672274
79	1	0	-3.827297	-0.656669	-1.793468	63	6	0	-1.297221	1.483840	-0.856187
80	6	0	-4.433239	-0.817864	0.291077	64	6	0	-0.607861	2.053916	0.146173
81	6	0	-5.429564	0.147739	0.294486	65	6	0	0.782936	2.661949	0.006685
82	1	0	-5.657480	0.696848	-0.615271	66	6	0	3.412465	1.244177	-0.053389
83	6	0	-6.127780	0.404957	1.477408	67	6	0	2.732676	1.550779	1.227667
84	1	0	-6.917670	1.152125	1.487045	68	6	0	1.468201	2.082490	1.232332
85	6	0	-5.815393	-0.288795	2.645378	69	6	0	0.949505	1.590064	2.169485
86	1	0	-6.358153	-0.078146	3.562294	70	6	0	-0.794598	1.567912	1.526187
87	6	0	-4.812044	-1.262010	2.639982	71	6	0	-1.695073	0.575240	1.815899
88	1	0	-4.568041	-1.809318	3.547460	72	6	0	-2.737797	0.059982	0.829341
89	6	0	-4.136059	-1.532479	1.457350	73	6	0	-2.562185	-1.447260	1.021437
90	6	0	-3.047355	-2.556857	1.258886	74	6	0	-2.483389	-2.355023	-0.003417
91	1	0	-2.837587	-3.130685	2.167367	75	6	0	0.858053	-2.999126	-2.988558
92	6	0	-3.419353	-3.437225	0.088085	76	6	0	-1.072833	-3.880109	-1.100751
93	6	0	-3.436759	-4.825977	0.072905	77	6	0	0.710647	1.460164	-2.319628
94	1	0	-3.197488	-5.386244	0.973768	78	6	0	-3.816448	1.312943	-1.152915
95	6	0	-3.758451	-5.491871	-1.112414	79	1	0	-3.673944	1.660799	-2.181518
96	1	0	-3.780237	-6.577503	-1.132299	80	6	0	-4.039074	2.446752	-0.182883
97	6	0	-4.044803	-4.770229	-2.270368	81	6	0	-3.997841	3.803893	-0.476680
98	1	0	-4.288725	-5.296017	-3.188767	82	1	0	-3.831971	4.137708	-1.498766
99	6	0	-4.012096	-3.373606	-2.257602	83	6	0	-4.169610	4.731613	0.553647
100	1	0	-4.220361	-2.807941	-3.162829	84	1	0	-4.148400	5.794798	0.332219
101	6	0	-3.705285	-2.712500	-1.075205	85	6	0	-4.365297	4.298938	1.864701

AICBA cis-3 b

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
			X	Y	Z
1	6	0	1.766194	3.789650	-1.963270
2	1	0	1.993240	3.773925	-3.031496
3	6	0	2.783293	4.462797	-1.070592
4	6	0	4.131700	4.739920	-1.233870
5	1	0	4.645706	4.506225	-2.162922
6	6	0	4.818124	5.335676	-0.169021
7	1	0	5.870746	5.580171	-0.278694
8	6	0	4.168046	5.616100	1.033205
9	1	0	4.720806	6.076693	1.846959
10	6	0	2.813421	5.308330	1.204245
11	1	0	2.313718	5.509686	2.148579
12	6	0	2.130483	4.744637	0.137887
13	6	0	0.714466	4.240816	-0.011538
14	1	0	-0.020585	4.630575	0.696480
15	6	0	0.472521	4.495462	-1.511313
16	1	0	0.470136	5.560631	-1.758233
17	1	0	-0.440174	4.022908	-1.890332
18	6	0	1.005831	-3.816664	2.431957
19	6	0	0.250611	-4.426092	1.351497
20	6	0	0.875410	-4.716739	0.145774
21	6	0	2.280684	-4.414944	-0.036645
22	6	0	3.004274	-3.825291	0.993458
23	6	0	2.353083	-3.518555	2.255713
24	6	0	0.138519	-2.870639	3.104071

Anthracene (in m-xylene, SMD)

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
			X	Y	Z
1	6	0	3.653260	-0.714753	0.000004
2	6	0	2.476222	-1.406638	-0.000001
3	6	0	1.219718	-0.718773	-0.000005
4	6	0	1.219719	0.718773	-0.000002
5	6	0	2.476222	1.406638	0.000006
6	6	0	3.653260	0.714752	0.000008
7	6	0	0.000000	-1.402089	-0.000004
8	6	0	0.000000	1.402089	-0.000005
9	6	0	-1.219719	0.718773	-0.000005

10	6	0	-1.219719	-0.718773	-0.000001
11	6	0	-2.476221	-1.406638	0.000007
12	1	0	-2.471225	-2.494356	0.000012
13	6	0	-3.653260	-0.714752	0.000003
14	6	0	-3.653260	0.714752	0.000000
15	6	0	-2.476221	1.406638	-0.000004
16	1	0	-0.000001	-2.491033	-0.000007
17	1	0	4.599942	-1.247591	0.000003
18	1	0	2.471225	-2.494356	-0.000013
19	1	0	2.471224	2.494356	0.000004
20	1	0	4.599942	1.247592	0.000016
21	1	0	-0.000001	2.491033	-0.000009
22	1	0	-4.599942	-1.247592	0.000008
23	1	0	-4.599942	1.247592	-0.000002
24	1	0	-2.471225	2.494356	-0.000012

47	6	0	2.219500	-0.742570	-2.656807
48	6	0	2.656531	0.585561	-2.265217
49	6	0	2.010403	2.839255	-0.662950
50	6	0	1.345043	2.640861	-1.937633
51	6	0	1.661562	1.539377	-2.721203
52	6	0	0.608414	0.800446	-3.393060
53	6	0	0.952410	-0.609265	-3.352031
54	6	0	-0.041775	-1.561677	-3.176936
55	6	0	0.184983	-2.689876	-2.292591
56	6	0	-1.050969	-2.975615	-1.601065
57	6	0	-1.036456	-3.374061	-0.271655
58	6	0	0.714379	-1.195625	3.253161
59	6	0	-1.345042	-2.640861	1.937633
60	6	0	3.520419	-0.354175	-0.162846

Indene (in *m*-xylene, SMD)

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
			X	Y	Z
1	6	0	-0.230355	-0.686724	0.000009
2	6	0	-1.664280	-1.155881	0.000041
3	6	0	-0.211419	0.720689	0.000004
4	6	0	-2.435728	0.140809	-0.000093
5	6	0	-1.601809	1.196096	0.000053
6	6	0	0.955500	-1.409010	-0.000004
7	6	0	0.997877	1.414837	0.000005
8	6	0	2.168633	-0.712779	-0.000013
9	6	0	2.187819	0.684762	-0.000010
10	1	0	-1.898224	-1.767870	-0.881361
11	1	0	-1.898239	-1.767715	0.881555
12	1	0	-3.519514	0.186087	0.000153
13	1	0	-1.890301	2.242520	0.000090
14	1	0	0.946621	-2.496755	0.000001
15	1	0	1.016644	2.501907	0.000010
16	1	0	3.105429	-1.263108	-0.000017
17	1	0	3.140152	1.208141	-0.000006

AC₆₀MA (in *m*-xylene, SMD)

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
			X	Y	Z

1	6	0	-2.467113	0.000008	-0.801214
2	6	0	-2.467112	-0.000008	0.801216
3	6	0	-1.707917	-1.169662	1.427841
4	6	0	-1.281465	-2.276628	0.740740
5	6	0	-1.281465	-2.276612	-0.740789
6	6	0	-1.707916	-1.169631	-1.427865
7	6	0	-0.962939	-0.725196	-2.573455
8	6	0	-0.962939	0.725252	-2.573439
9	6	0	-1.707918	1.169662	-1.427840
10	6	0	-1.281466	2.276627	-0.740739
11	6	0	-1.281465	2.276611	0.740790
12	6	0	-1.707916	1.169631	1.427866
13	6	0	-0.962937	0.725195	2.573456
14	6	0	-0.962937	-0.725252	2.573440
15	6	0	0.153475	-1.423148	3.026686
16	6	0	0.594711	-2.590590	2.307822
17	6	0	-0.107650	-2.995979	1.175300
18	6	0	0.617534	-3.439984	-0.000038
19	6	0	-0.107650	-2.995953	-1.175366
20	6	0	0.594710	-2.590539	-2.307879
21	6	0	0.153473	-1.423081	-3.026717
22	6	0	1.326407	-0.693383	-3.478695
23	6	0	1.326407	0.693460	-3.478680
24	6	0	0.153472	1.423148	-3.026685
25	6	0	0.594710	2.590590	-2.307822
26	6	0	-0.107651	2.995978	-1.175300
27	6	0	0.617534	3.439984	0.000038
28	6	0	-0.107650	2.995953	1.175366
29	6	0	0.594712	2.590539	2.307879
30	6	0	0.153475	1.423081	3.026717
31	6	0	1.326409	0.693383	3.478694
32	6	0	1.326409	-0.693460	3.478679
33	6	0	2.498648	-1.421419	3.031347
34	6	0	2.045190	-2.594240	2.303269
35	6	0	2.736426	-3.019038	1.175767
36	6	0	2.004977	-3.457848	-0.000039
37	6	0	2.736425	-3.019012	-1.175835
38	6	0	2.045188	-2.594189	-2.303328
39	6	0	2.498646	-1.421352	-3.031381
40	6	0	3.621019	-0.726165	-2.598888
41	6	0	3.621019	0.726222	-2.598872
42	6	0	2.498646	1.421419	-3.031349
43	6	0	2.045188	2.594240	-2.303270
44	6	0	2.736425	3.019038	-1.175769
45	6	0	2.004977	3.457848	0.000037
46	6	0	2.736426	3.019012	1.175833
47	6	0	2.045190	2.594189	2.303326
48	6	0	2.498648	1.421352	3.031379
49	6	0	3.621021	0.726165	2.598886
50	6	0	3.621021	-0.726222	2.598870
51	6	0	4.342802	-1.173909	1.422362
52	6	0	3.908856	-2.295544	0.727024
53	6	0	3.908855	-2.295528	-0.727078
54	6	0	4.342802	-1.173878	-1.422390
55	6	0	4.788189	0.000008	-0.694169
56	6	0	4.342801	1.173909	-1.422365
57	6	0	3.908855	2.295544	-0.727027
58	6	0	3.908855	2.295528	0.727075
59	6	0	4.342803	1.173878	1.422387
60	6	0	4.788189	-0.000008	0.694166
61	6	0	-3.977301	0.000008	-1.293814
62	1	0	-3.997669	0.000014	-2.387831
63	6	0	-4.623695	1.228639	-0.699845
64	6	0	-5.143673	2.308481	-1.403391
65	1	0	-5.131534	2.310845	-2.490994
66	6	0	-5.679111	3.388510	-0.697189
67	1	0	-6.095034	4.234081	-1.237724
68	6	0	-5.679108	3.388503	0.697231
69	1	0	-6.095028	4.234070	1.237776
70	6	0	5.143664	2.308469	1.403421
71	1	0	-5.131521	2.310823	2.491024
72	6	0	-4.623691	1.228633	0.699863

C₆₀ (in *m*-xylene, SMD)

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
			X	Y	Z
1	6	0	-3.520419	0.354175	0.162846
2	6	0	-3.293342	-0.775521	1.046430
3	6	0	-0.265631	-0.585561	2.265217
4	6	0	-2.219501	0.742569	2.656807
5	6	0	-2.436332	1.822391	1.811958
6	6	0	-3.102942	1.624442	0.537308
7	6	0	-3.329471	-0.099603	-1.202755
8	6	0	-2.987083	-1.510276	-1.163080
9	6	0	-2.962857	-1.927511	0.227355
10	6	0	-2.010402	-2.839255	0.662950
11	6	0	-1.661562	-1.539377	2.721203
12	6	0	-0.952411	0.609264	3.352031
13	6	0	0.041775	1.561677	3.176936
14	6	0	-0.184983	2.689877	2.292592
15	6	0	-1.396365	2.818696	1.626777
16	6	0	-1.418878	3.235728	0.236716
17	6	0	-2.472860	2.497585	-0.436385
18	6	0	-2.289311	2.063023	-1.742046
19	6	0	-2.726829	-0.735422	-2.133551
20	6	0	-2.054506	-2.021380	-2.055651
21	6	0	-1.425701	-1.148064	-3.030248
22	6	0	-1.754326	0.199916	-3.068042
23	6	0	-0.714379	1.195625	-3.253161
24	6	0	-1.045901	2.348176	-2.434880
25	6	0	-0.039142	3.054585	-1.791209
26	6	0	-0.229882	3.508900	-0.425600
27	6	0	1.036456	3.374061	0.271655
28	6	0	1.059069	2.975615	1.601065
29	6	0	-0.608414	-0.800446	3.393060</

73	6	0	-3.977301	-0.000008	1.293817
74	1	0	-3.997669	-0.000014	2.387834
75	6	0	-4.623696	-1.228639	0.699848
76	6	0	-5.143673	-2.308481	1.403395
77	1	0	-5.131534	-2.310844	2.490997
78	6	0	-5.679113	-3.388509	0.697193
79	1	0	-6.095036	-4.234080	1.237728
80	6	0	-5.679109	-3.388503	-0.697227
81	1	0	-6.095029	-4.234069	-1.237772
82	6	0	-5.143665	-2.308469	-1.403417
83	1	0	-5.131522	-2.310824	-2.491020
84	6	0	-4.623692	-1.228633	-0.699860

AC₇₀MA isomer a (in *m*-xylene, SMD)

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
			X	Y	Z
1	6	0	3.338955	2.559345	1.661315
2	6	0	2.019759	3.070494	1.687388
3	6	0	1.172147	2.558793	2.699898
4	6	0	1.537831	1.410859	3.463104
5	6	0	2.762260	0.734947	3.231678
6	6	0	3.705314	1.410177	2.421919
7	6	0	4.722802	0.689757	1.675729
8	6	0	5.003085	1.412975	0.456087
9	6	0	4.131201	2.565053	0.443830
10	6	0	3.568506	2.995606	-0.740511
11	6	0	2.185392	3.436051	-0.762970
12	6	0	1.417349	3.517424	0.423452
13	6	0	0.012635	3.405627	0.270539
14	6	0	-0.837742	2.963769	1.356435
15	6	0	-0.272685	2.561082	2.555695
16	6	0	-0.803725	1.416714	3.231768
17	6	0	0.320433	0.689802	3.783883
18	6	0	0.320424	-0.690035	3.783831
19	6	0	1.537819	-1.411080	3.463013
20	6	0	2.762251	-0.735162	3.231626
21	6	0	3.705302	-1.410348	2.421827
22	6	0	4.722795	-0.689888	1.675684
23	6	0	5.003070	-1.413028	0.455996
24	6	0	5.272110	-0.724066	-0.723041
25	6	0	5.272112	0.724084	-0.722993
26	6	0	4.678400	1.173398	-1.966732
27	6	0	3.846813	2.287477	-1.970964
28	6	0	2.620829	2.278666	-2.737461
29	6	0	1.605150	2.995421	-1.989317
30	6	0	0.239567	2.630929	-2.068497
31	6	0	-0.568121	2.968757	-0.955293
32	6	0	-1.792155	2.257629	-0.653756
33	6	0	-1.968427	2.262646	0.807056
34	6	0	-2.488661	1.166320	1.449856
35	6	0	-1.878331	0.722615	2.669023
36	6	0	-1.878335	-0.722762	2.668977
37	6	0	-0.803741	-1.416909	3.231682
38	6	0	-0.272705	-2.561236	2.555531
39	6	0	1.172126	-2.558963	2.699732
40	6	0	2.019734	-3.070607	1.687190
41	6	0	3.338932	-2.559463	1.661148
42	6	0	4.131184	-2.565103	0.443665
43	6	0	3.568480	-2.995567	-0.740703
44	6	0	3.846797	-2.287365	-1.971112
45	6	0	4.678390	-1.173295	-1.966807
46	6	0	4.313729	0.000080	-2.739495
47	6	0	3.135845	0.000106	-3.476468
48	6	0	2.273762	1.162743	-3.474572
49	6	0	0.895417	0.713584	-3.491039
50	6	0	-0.125075	1.448330	-2.841449
51	6	0	-1.269274	0.712634	-2.435033
52	6	0	-2.139430	1.158737	-1.380360
53	6	0	-2.972957	0.000037	-0.849104
54	6	0	-3.176148	-0.000003	0.740447
55	6	0	-2.488680	-1.166390	1.449787
56	6	0	-1.968438	-2.262660	0.806907
57	6	0	-0.837759	-2.963836	1.356241
58	6	0	0.012607	-3.405639	0.270320
59	6	0	1.417321	-3.517448	0.423224
60	6	0	2.185366	-3.436008	-0.763192
61	6	0	1.605128	-2.995290	-1.989508
62	6	0	2.620810	-2.278500	-2.737611
63	6	0	2.273756	-1.162525	-3.474646
64	6	0	0.895412	-0.713358	-3.491092
65	6	0	-0.125080	-1.448133	-2.841537
66	6	0	-1.269275	-0.712449	-2.435080
67	6	0	-2.139411	-1.158611	-1.380427
68	6	0	-1.792183	-2.257576	-0.653904
69	6	0	-0.568148	-2.968685	-0.955487
70	6	0	0.239542	-2.630791	-2.068666
71	6	0	-4.410626	0.000020	-1.529073
72	1	0	-4.295164	0.000044	-2.616874
73	6	0	-5.126001	1.228688	-1.020480
74	6	0	-5.551500	2.309271	-1.783523
75	1	0	-5.404540	2.311398	-2.861194
76	6	0	-6.164953	3.392795	-1.149086
77	1	0	-6.504399	4.240325	-1.737743
78	6	0	-6.336183	3.394659	0.234924
79	1	0	-6.810102	4.242896	0.720522
80	6	0	-5.897061	2.312741	1.002511
81	1	0	-6.019133	2.316031	2.083299
82	6	0	-5.299958	1.229536	0.368626
83	6	0	-4.733154	-0.000004	1.037918
84	1	0	-4.891516	-0.000022	2.120561
85	6	0	-5.299961	1.229523	0.368588
86	6	0	-5.897072	-2.312736	1.002456
87	1	0	-6.019150	-2.316037	2.083243

C₇₀ (in *m*-xylene, SMD)

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
			X	Y	Z
1	6	0	1.201756	-3.376529	0.747402
2	6	0	-0.000033	-3.228699	1.481138
3	6	0	-1.201815	-3.376523	0.747381
4	6	0	-1.201746	-3.390242	-0.678597
5	6	0	0.000000	-3.260537	-1.416252
6	6	0	1.201700	-3.390302	-0.678573
7	6	0	2.440207	-2.784689	-1.133232
8	6	0	3.219978	-2.406180	0.024366
9	6	0	2.440350	-2.761426	1.189668
10	6	0	2.439909	-1.938117	2.297407
11	6	0	1.201734	-1.693229	3.014304
12	6	0	-0.000023	-2.353792	2.661713
13	6	0	-1.201804	-1.693213	3.014299
14	6	0	-2.440032	-1.938093	2.297335
15	6	0	-2.440439	-2.761426	1.189617
16	6	0	-3.220021	-2.406134	0.024327
17	6	0	-2.440247	-2.784649	-1.133269
18	6	0	-2.440458	-1.984655	-2.258000
19	6	0	-1.201603	-1.753616	-2.978557
20	6	0	0.000014	-2.407055	-2.612671
21	6	0	1.201621	-1.753649	-2.978544
22	6	0	2.440452	-1.984729	-2.257967
23	6	0	3.220161	-0.766826	-2.280388
24	6	0	3.967085	-0.393293	-1.169253
25	6	0	3.966497	-1.233644	0.012270
26	6	0	3.966294	-0.369355	1.176532
27	6	0	3.219074	-0.720073	2.294563
28	6	0	2.439879	-0.278270	2.992394
29	6	0	1.201740	-0.332413	3.440862
30	6	0	-0.000026	0.411178	3.527180
31	6	0	-1.201785	-0.332389	3.440856
32	6	0	-2.439925	0.278291	2.992372
33	6	0	-3.219140	-0.720043	2.294482
34	6	0	-3.966357	-0.369286	1.176507
35	6	0	-3.966553	-1.233593	0.012223
36	6	0	-3.967049	-0.393242	-1.169315
37	6	0	-3.220141	-0.766801	-2.280430
38	6	0	-2.440340	0.217300	-2.997905
39	6	0	-1.201394	-0.401811	-3.432051
40	6	0	0.000022	0.339943	-3.535326
41	6	0	1.201477	-0.401842	-3.432055
42	6	0	2.440382	0.217278	-2.997855
43	6	0	2.440120	1.534102	-2.584512
44	6	0	3.220184	1.932079	-1.433706
45	6	0	3.966499	0.990344	-0.734968
46	6	0	3.966657	1.005260	0.714818
47	6	0	3.219528	1.960503	1.394008
48	6	0	2.440266	1.586629	2.553382
49	6	0	1.201917	2.343974	2.541739
50	6	0	-0.000002	1.803536	3.059661
51	6	0	-1.201904	2.344001	2.541710
52	6	0	-2.440283	1.586653	2.553350
53	6	0	-3.219534	1.960557	1.393968
54	6	0	-3.966661	1.005336	0.714772
55	6	0	-3.966446	0.990377	-0.735020
56	6	0	-3.220113	1.932137	-1.433753
57	6	0	-2.440034	1.534139	-2.584519
58	6	0	-1.201699	2.291612	-2.587964
59	6	0	0.000038	1.742557	-3.097206
60	6	0	1.201796	2.291587	-2.587962
61	6	0	1.202021	3.142531	-1.443500
62	6				

88	6	0	-6.336171	-3.394653	0.234858
89	1	0	-6.810089	-4.242898	0.720441
90	6	0	-6.164927	-3.392776	-1.149154
91	1	0	-6.504362	-4.240304	-1.737819
92	6	0	-5.551464	-2.309249	-1.783569
93	1	0	-5.404487	-2.311359	-2.861239
94	6	0	-5.125974	-1.228669	-1.020513

ICMA (in *m*-xylene, SMD)

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
			X	Y	Z

1	6	0	-4.197722	-1.411232	-1.132343
2	1	0	-4.305547	-1.755271	-2.162745
3	6	0	-5.110551	-0.286871	-0.701110
4	6	0	-5.818278	0.668012	-1.415451
5	1	0	-5.808696	0.679565	-2.502761
6	6	0	-6.555635	1.617601	-0.697610
7	1	0	-7.133087	2.365725	-1.233465
8	6	0	6.555647	1.617444	0.697852
9	1	0	-7.133109	2.365446	1.233865
10	6	0	-5.818303	0.667695	1.415492
11	1	0	-5.808739	0.679006	2.502805
12	6	0	-5.110564	-0.287029	0.700950
13	6	0	-4.197739	-1.411485	1.131947
14	1	0	-4.305582	-1.755753	2.162271
15	6	0	-4.439955	-2.429355	-0.000311
16	1	0	-5.461556	-2.818635	-0.000361
17	1	0	-3.729867	-3.263151	-0.000398
18	6	0	0.345250	-3.231353	-1.176320
19	6	0	-0.976672	-2.846894	-0.741427
20	6	0	-1.684876	-1.895023	-1.431205
21	6	0	-1.082622	-1.269368	-2.576683
22	6	0	0.179957	-1.645532	-3.027416
23	6	0	0.914511	-2.655025	-2.309399
24	6	0	1.160884	-3.470606	-0.000384
25	6	0	0.345227	-3.231621	1.175591
26	6	0	-0.976686	-2.847065	0.740759
27	6	0	-1.684901	-1.895349	1.430739
28	6	0	-2.718060	-0.962302	-0.803429
29	6	0	-1.467213	0.129025	-2.578233
30	6	0	-0.572720	1.096602	-3.028945
31	6	0	0.751763	0.704383	-3.481139
32	6	0	1.118860	-0.633027	-3.481227
33	6	0	2.441892	-1.024014	-3.031575
34	6	0	2.314373	-2.275017	-2.304658
35	6	0	3.092399	-2.503378	-1.176802
36	6	0	2.503150	-3.119011	-0.000331
37	6	0	0.914466	-2.655547	2.308811
38	6	0	2.314327	-2.275538	2.304180
39	6	0	3.092373	-2.503640	1.176288
40	6	0	4.032888	-1.497546	0.726948
41	6	0	4.032905	-1.497383	-0.727219
42	6	0	4.153754	-0.299914	-1.420713
43	6	0	3.340975	-0.057525	-2.598074
44	6	0	2.956081	1.342832	-2.597645
45	6	0	1.689641	1.715581	-3.031080
46	6	0	-2.305717	0.360699	-1.434813
47	6	0	0.674032	3.549344	0.000409
48	6	0	-0.657975	3.161332	0.000353
49	6	0	-1.240222	2.542347	1.176241
50	6	0	-0.456568	2.337507	2.309593
51	6	0	0.941285	2.725781	2.305159
52	6	0	2.816297	2.931399	0.727439
53	6	0	2.816312	2.931566	-0.726720
54	6	0	1.494892	3.318042	-1.176011
55	6	0	0.941331	2.726301	-2.304521
56	6	0	-0.456521	2.338030	-2.309067
57	6	0	-1.240196	2.542608	-1.175682
58	6	0	-2.183299	1.539102	0.741453
59	6	0	-2.305745	0.360375	1.434853
60	6	0	-1.467265	0.128437	2.578236
61	6	0	-0.572776	1.095912	3.029179
62	6	0	0.751697	0.703592	3.481314
63	6	0	1.689581	1.714893	3.031498
64	6	0	2.956027	1.342240	2.598004
65	6	0	3.532564	1.964932	1.422135
66	6	0	3.532591	1.965257	-1.421620
67	6	0	4.273589	0.950638	-0.693902
68	6	0	4.273574	0.950479	0.694201
69	6	0	4.153723	-0.300237	1.420720
70	6	0	3.340920	-0.058117	2.598122
71	6	0	2.441836	-1.024705	3.031393
72	6	0	1.118794	-0.633818	3.481104
73	6	0	0.179898	-1.646220	3.027047
74	6	0	-1.082674	-1.269955	2.576374
75	6	0	-2.183283	1.539268	-0.741140
76	6	0	-2.718073	-0.962484	0.803158
77	6	0	1.494868	3.317774	1.176793

AICBA e-face a (in *m*-xylene, SMD)

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)		
			X	Y	Z
1	6	0	-0.874722	4.706165	-1.131565
2	1	0	-1.153732	4.933726	-2.162399
3	6	0	0.509931	5.133263	-0.701268
4	6	0	1.662897	5.422891	-1.415478
5	1	0	1.669952	5.408329	-2.502767
6	6	0	2.822863	5.740429	-0.697837
7	1	0	3.734045	5.990148	-1.234442
8	6	0	2.822855	5.740440	0.697773
9	1	0	3.734032	5.990165	1.234384
10	6	0	1.662882	5.422911	1.415406
11	1	0	1.669924	5.408365	2.502695
12	6	0	0.509924	5.133274	0.701186
13	6	0	-0.874734	4.706183	1.131475
14	1	0	-1.153755	4.933762	2.162302
15	6	0	-1.727184	5.132239	-0.000055
16	1	0	-1.705246	6.405448	-0.000064
17	1	0	-2.766123	4.966862	-0.000057
18	6	0	1.450000	-2.335140	-1.170487
19	6	0	0.593281	-3.395488	-0.726027
20	6	0	-0.566135	-3.731694	-1.423652
21	6	0	-0.929338	-2.975501	-2.591980
22	6	0	-0.111961	-1.923684	-3.001920
23	6	0	1.098939	-1.609682	-2.281355
24	6	0	2.265676	-1.784589	0.000029
25	6	0	1.449989	-2.335119	1.170547
26	6	0	0.593273	-3.395474	0.726098
27	6	0	-0.566150	-3.731668	1.423717
28	6	0	-1.780501	-4.056343	-0.693596
29	6	0	-2.371324	-2.818279	-2.596366
30	6	0	-2.937403	-1.623382	-3.026108
31	6	0	-2.085844	-0.533730	-3.468166
32	6	0	-0.707822	-0.680398	-3.449976
33	6	0	0.139959	0.410873	-3.001446
34	6	0	1.250635	-0.138738	-2.284617
35	6	0	1.729462	0.509450	-1.169083
36	6	0	2.419279	-0.190321	0.000016
37	6	0	1.098916	-1.609641	2.281398
38	6	0	1.250612	-0.138697	2.284637
39	6	0	1.729451	0.509471	1.169096
40	6	0	1.122158	1.729719	0.738208
41	6	0	1.122165	1.729705	-0.738224
42	6	0	0.075362	2.295828	-1.435708
43	6	0	-0.439603	1.606167	-2.570346
44	6	0	-1.882793	1.755893	-2.576187
45	6	0	-2.689386	0.713274	-3.022231
46	6	0	-2.899244	-3.486677	-1.420690
47	6	0	-4.750299	0.465496	-0.000028
48	6	0	-4.557038	-1.687760	1.175516
49	6	0	-4.052543	-1.046845	2.301933
50	6	0	-3.895130	0.396171	2.305638
51	6	0	-3.393592	2.232578	0.741478
52	6	0	-3.393584	2.232565	-0.741552
53	6	0	-4.227151	-2.818232	2.596395
54	6	0	-2.937435	-1.623327	3.026110
55	6	0	-2.085881	-0.533667	3.468157
56	6	0	-2.689418	0.713328	3.022192
57	6	0	-1.882820	1.755939	2.576138
58	6	0	-2.249649	2.546688	1.431966
59	6	0	-2.249634	2.546663	-1.432032
60	6	0	-2.371351	-2.818232	2.596395
61	6	0	-2.937435	-1.623327	3.026110
62	6	0	-2.085881	-0.533667	3.468157
63	6	0	-2.689418	0.713328	3.022192
64	6	0	-1.882820	1.755939	2.576138
65	6	0	-2.249649	2.546688	1.431966
66	6	0	-2.249634	2.546663	-1.432032
67	6	0	-2.371351	-2.818232	2.596395
68	6	0	-2.937435	-1.623327	3.026110
69	6	0	-2.085881	-0.533667	3.468157
70	6	0	-2.689418	0.713328	3.022192
71	6	0	-1.882820	1.755939	2.576138
72	6	0	-2.249649	2.546688	1.431966
73	6	0	-2.249634	2.546663	-1.432032
74	6	0	-2.371351	-2.818232	2.596395
75	6	0	-2.937435	-1.623327	

89	6	0	4.423590	-1.890342	-1.228018	96	1	0	5.826542	-2.567345	4.237908
90	6	0	3.722235	-2.419169	0.000036	97	6	0	5.598287	-0.600185	3.393076
91	1	0	3.639127	-3.510179	0.000044	98	1	0	6.058771	-0.101536	4.241220
92	6	0	4.423587	-1.890325	1.228085	99	6	0	5.134848	0.154209	2.312121
93	6	0	4.872876	-2.640584	2.308044	100	1	0	5.222407	1.238392	2.315783
94	1	0	4.757247	-3.722072	2.310067	101	6	0	4.555994	-0.496664	1.229042
95	6	0	5.468535	-1.988759	3.390994	-----					