

# Christoffel - Bowman anharmonic oscillator (Chem. Phys. Lett. 85, 220, 1982)

$$\frac{\omega_x^2}{2} x^2 + \frac{\omega_y^2}{2} y^2 + \frac{\omega_z^2}{2} z^2 + \delta^{1/2} (\lambda \eta x^3 + \mu \zeta y^3 + \lambda x y^2 + \mu y z^2)$$

omx,            omy,            omz,            lambda,            mu,            eta,            ksi =  
 0.70000        1.30000        1.00000        -0.10000        -0.10000        0.10000        0.10000

## Partial separability approximation xy-z

Oscillator quantum numbers nx ny nz = 0 0 0

k	coefficients	Quadratic (delta=1)	(delta=2^2)		(delta=3^2)		(delta=5^2)		
0	0.15000000E+01	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00
1	-0.55336965E-02	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00
2	-0.10739052E-03	1.4943545309	0.000000D+00	1.4758137020	0.000000D+00	1.4356947013	0.000000D+00	1.3574278471	0.138278D+00
3	-0.42473002E-05	1.4943544434	0.000000D+00	1.4758057124	0.000000D+00	1.4354637655	0.000000D+00	1.3601124727	0.135780D+00
4	-0.23619440E-06	1.4943544134	0.000000D+00	1.4757933423	0.000000D+00	1.4342578459	0.000000D+00	1.3614211772	-0.990377D-01
5	-0.16352579E-07	1.4943544118	0.000000D+00	1.4757899511	0.000000D+00	1.4323114493	0.000000D+00	1.2956518052	0.383579D+00
6	-0.13320419E-08	1.4943544117	0.000000D+00	1.4757890347	0.000000D+00	1.4261400037	0.000000D+00	1.3341097038	-0.121322D+00
7	-0.12377600E-09	1.4943544117	0.000000D+00	1.4757888529	0.000000D+00	1.4343960232	0.000000D+00	1.3264253844	0.115138D+00
8	-0.12876208E-10	1.4943544117	0.000000D+00	1.4757887888	0.000000D+00	1.4328072678	0.223981D-02	1.3197036705	0.118491D+00
9	-0.14811408E-11	1.4943544117	0.000000D+00	1.4768914341	0.000000D+00	1.4339553423	-0.253415D-02	1.3242750676	-0.123024D+00
10	-0.18674053E-12	1.4943544117	0.000000D+00	1.4757886885	0.000000D+00	1.4340378507	0.222652D-02	1.3256638148	0.121927D+00
11	-0.25632539E-13	1.4943544117	0.000000D+00	1.4757886610	0.000000D+00	1.4341493130	-0.240858D-02	1.3259873838	-0.123393D+00
12	-0.38095002E-14	1.4943544117	0.000000D+00	1.4757885769	0.000000D+00	1.4343826940	0.252478D-02	1.3109502194	-0.107471D+00
13	-0.61011515E-15	1.4943544117	0.000000D+00	1.4757888573	0.000000D+00	1.4342228957	0.220824D-02	1.3262794643	0.121850D+00
14	-0.10485440E-15	1.4943544117	0.000000D+00	1.4757887312	0.000000D+00	1.4343567584	0.229699D-02	1.3270402827	0.121554D+00
15	-0.19262680E-16	1.4943544117	0.000000D+00	1.4757886902	0.000000D+00	1.4344043739	-0.228087D-02	1.3269327479	-0.120881D+00
16	-0.37692674E-17	1.4943544117	0.000000D+00	1.4757886729	0.000000D+00	1.4343988720	0.225149D-02	1.3264868422	0.121178D+00
17	-0.78303008E-18	1.4943544117	0.000000D+00	1.4757887544	0.000000D+00	1.4343901287	0.225092D-02	1.3265478497	0.121294D+00
18	-0.17217093E-18	1.4943544117	0.000000D+00	1.4757887095	0.000000D+00	1.4343927337	0.224735D-02	1.3264520444	0.121311D+00
19	-0.39955910E-19	1.4943544117	0.000000D+00	1.4757886533	0.000000D+00	1.4343922964	-0.223823D-02	1.3270177078	-0.120631D+00
20	-0.97615157E-20	1.4943544117	0.000000D+00	1.4757888985	0.000000D+00	1.4343881675	0.224870D-02	1.3265499089	0.121326D+00
21	-0.25045654E-20	1.4944006862	0.000000D+00	1.4757886874	0.000000D+00	1.4343869490	-0.224588D-02	1.3265787206	-0.121370D+00
22	-0.67339837E-21	1.4943716653	0.000000D+00	1.4757886714	0.687616D-07	1.4343858145	0.224578D-02	1.3266128510	0.121354D+00
23	-0.18934630E-21	1.4943583609	0.000000D+00	1.4757886938	0.721757D-07	1.4343856612	0.224664D-02	1.3265897990	0.121331D+00
24	-0.55574455E-22	1.4943544117	0.000000D+00	1.4757886955	-0.617847D-07	1.4343861924	-0.224666D-02	1.3265804327	-0.121346D+00
25	-0.16997196E-22	1.4943544117	0.000000D+00	1.4757886968	-0.632107D-07	1.4343861507	-0.224674D-02	1.3265778373	-0.121343D+00
26	-0.54083986E-23	1.4943544117	0.000000D+00	1.4757887002	-0.637138D-07	1.4343863022	-0.224709D-02	1.3263958280	-0.121386D+00
27	-0.17877437E-23	1.4943544117	0.000000D+00	1.4757887609	0.712661D-07	1.4343861948	-0.224656D-02	1.3265815918	0.121346D+00
28	-0.61303891E-24	1.4943547998	0.000000D+00	1.4757887001	0.611302D-07	1.4343863826	0.224673D-02	1.3265801146	0.121352D+00
29	-0.21780059E-24	1.4943545023	0.000000D+00	1.4757887007	0.610219D-07	1.4343864564	0.224670D-02	1.3265842098	0.121354D+00
30	-0.80075060E-25	1.4943544304	0.000000D+00	1.4757887007	-0.608023D-07	1.4343864380	-0.224665D-02	1.3265842187	-0.121350D+00
31	-0.30430936E-25	1.4943544117	0.000000D+00	1.4757887007	0.607560D-07	1.4343864173	0.224666D-02	1.3265828197	0.121350D+00

Partial separability approximation xy-z, 40 coefficients

32	-0.11941428E-25	1.4943544117	0.000000D+00	1.4757887007	0.607593D-07	1.4343864174	0.224666D-02	1.3265828132	0.121350D+00
33	-0.48338261E-26	1.4943544117	0.000000D+00	1.4757887007	-0.607602D-07	1.4343864178	-0.224666D-02	1.3265828691	-0.121350D+00
34	-0.20165821E-26	1.4943544117	0.000000D+00	1.4757887007	0.607813D-07	1.4343864199	-0.224666D-02	1.3265829253	-0.121350D+00
35	-0.86626436E-27	1.4943544117	0.000000D+00	1.4757887007	0.607772D-07	1.4343864198	0.224666D-02	1.3265829189	0.121350D+00
36	-0.38285600E-27	1.4943544117	0.000000D+00	1.4757887007	-0.607682D-07	1.4343864198	-0.224666D-02	1.3265830443	-0.121350D+00
37	-0.17395278E-27	1.4943544117	0.000000D+00	1.4757887007	-0.608126D-07	1.4343864200	-0.224666D-02	1.3265829193	-0.121350D+00
38	-0.81192646E-28	1.4943544149	0.000000D+00	1.4757887004	-0.606776D-07	1.4343864195	-0.224665D-02	1.3265828884	-0.121350D+00
39	-0.38903306E-28	1.4943544117	0.000000D+00	1.4757887007	0.607769D-07	1.4343864270	0.224666D-02	1.3265833085	0.121350D+00

## Oscillator quantum numbers nx ny nz = 1 0 0

k	coefficients	Quadratic (delta=1)	(delta=2^2)	(delta=3^2)	(delta=5^2)			
0	0.22000000E+01	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00			
1	-0.13774011E-01	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00			
2	-0.43169295E-03	2.1857649107	0.000000D+00	2.1354119355	0.000000D+00			
3	-0.26760549E-04	2.1857652633	0.000000D+00	2.1354553519	0.000000D+00			
4	-0.22463149E-05	2.1857650499	0.000000D+00	2.1353285454	0.000000D+00			
5	-0.22569519E-06	2.1857650348	0.000000D+00	2.1352790941	0.000000D+00			
6	-0.25698024E-07	2.1857650339	0.000000D+00	2.1352517926	0.000000D+00			
7	-0.32237484E-08	2.1857650339	0.000000D+00	2.1352428515	0.000000D+00			
8	-0.43846718E-09	2.1857650339	0.000000D+00	2.1352397292	0.000000D+00			
9	-0.64027819E-10	2.1857650339	0.000000D+00	2.1352282587	0.000000D+00			
10	-0.99750297E-11	2.1857650339	0.000000D+00	2.1351712147	0.000000D+00			
11	-0.16509434E-11	2.1857650339	0.000000D+00	2.1361710603	0.000000D+00			
12	-0.28942287E-12	2.1857650339	0.000000D+00	2.1366930062	0.000000D+00			
13	-0.53624667E-13	2.1857650339	0.000000D+00	2.1375444618	0.000000D+00			
14	-0.10482774E-13	2.1857650339	0.000000D+00	2.1352282901	0.000000D+00			
15	-0.21588648E-14	2.1857650339	0.000000D+00	2.1352521149	-0.232636D-04			
16	-0.46775599E-15	2.1857650339	0.000000D+00	2.1352672336	0.000000D+00			
17	-0.10648241E-15	2.1857650339	0.000000D+00	2.1352623410	0.000000D+00			
18	-0.25433978E-16	2.1857650339	0.000000D+00	2.1352460470	-0.897516D-05			
19	-0.63654380E-17	2.1857650339	0.000000D+00	2.1352465677	0.167575D-04			
20	-0.16668901E-17	2.1857650339	0.000000D+00	2.1352420797	-0.976904D-05			
21	-0.45606900E-18	2.1857650339	0.000000D+00	2.1352403420	0.734676D-05			
22	-0.13019071E-18	2.1857650339	0.000000D+00	2.1352346059	0.214978D-04			
23	-0.38720827E-19	2.1857650339	0.000000D+00	2.1352373602	0.978355D-05			
24	-0.11981981E-19	2.1857650339	0.000000D+00	2.1352379603	0.101276D-04			
25	-0.38526189E-20	2.1857664239	0.000000D+00	2.1352382388	-0.100698D-04			
26	-0.12855061E-20	2.1857721436	0.000000D+00	2.1352382208	0.100220D-04			
27	-0.44458545E-21	2.1857650339	0.000000D+00	2.1352382740	-0.100874D-04			
28	-0.15918330E-21	2.1857650339	0.000000D+00	2.1352382917	0.101005D-04			
29	-0.58941998E-22	2.1857650339	0.000000D+00	2.1352382938	0.100972D-04			
30	-0.22546869E-22	2.1857650339	0.000000D+00	2.1352383040	0.101261D-04			
31	-0.89013254E-23	2.1857650339	0.000000D+00	2.1352381794	-0.984051D-05			
32	-0.36234805E-23	2.1857650339	0.000000D+00	2.1352382991	0.100888D-04			
33	-0.15195578E-23	2.1857651125	0.000000D+00	2.1352383234	-0.100949D-04			
34	-0.65594268E-24	2.1857650485	0.000000D+00	2.1352383276	0.100895D-04			
35	-0.29122459E-24	2.1857650351	0.000000D+00	2.1352383262	0.100870D-04			
36	-0.13288542E-24	2.1857650339	0.000000D+00	2.1352383253	-0.100872D-04			
37	-0.62273562E-25	2.1857650339	0.000000D+00	2.1352383254	-0.100869D-04			
38	-0.29951074E-25	2.1857650339	0.000000D+00	2.1352383251	-0.100861D-04			
39	-0.14774841E-25	2.1857650339	0.000000D+00	2.1352383251	-0.100873D-04			
					2.0069268997	-0.521288D-01	1.9179359733	-0.354751D+00

Partial separability approximation xy-z, 40 coefficients

## Oscillator quantum numbers nx ny nz = 0 0 1

k	coefficients	Quadratic (delta=1)	(delta=2^2)	(delta=3^2)	(delta=5^2)
0	0.25000000E+01	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00
1	-0.12133605E-01	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00
2	-0.32894125E-03	2.4875183095	0.000000D+00	2.4446108969	0.000000D+00
3	-0.17273551E-04	2.4875189557	0.000000D+00	2.4446810620	0.000000D+00
4	-0.12212907E-05	2.4875188509	0.000000D+00	2.4446287117	0.000000D+00
5	-0.10372456E-06	2.4875188439	0.000000D+00	2.4446101351	0.000000D+00
6	-0.10050587E-07	2.4875188435	0.000000D+00	2.4446032499	0.000000D+00
7	-0.10810142E-08	2.4875188435	0.000000D+00	2.4446015564	0.000000D+00
8	-0.12701649E-09	2.4875188435	0.000000D+00	2.4446009429	0.000000D+00
9	-0.16144119E-10	2.4980606336	0.000000D+00	2.4558937271	0.000000D+00
10	-0.22058678E-11	2.4875188435	0.000000D+00	2.4445991321	0.000000D+00
11	-0.32267326E-12	2.4875188435	0.000000D+00	2.4445985684	0.000000D+00
12	-0.50386546E-13	2.4875188435	0.000000D+00	2.4445703757	0.000000D+00
13	-0.83807431E-14	2.4875188435	0.000000D+00	2.4458567450	0.000000D+00
14	-0.14820244E-14	2.4875188435	0.000000D+00	2.4446001516	0.000000D+00
15	-0.27814029E-15	2.4875188435	0.000000D+00	2.4445994497	0.000000D+00
16	-0.55300332E-16	2.4875188435	0.000000D+00	2.4445984095	0.000000D+00
17	-0.11626099E-16	2.4875188435	0.000000D+00	2.4446002795	0.000000D+00
18	-0.25795137E-17	2.4875188435	0.000000D+00	2.445998708	0.000000D+00
19	-0.60280188E-18	2.4875188435	0.000000D+00	2.4445984969	-0.162295D-05
20	-0.14807333E-18	2.4875188435	0.000000D+00	2.4446118138	0.000000D+00
21	-0.38158447E-19	2.4878063251	0.000000D+00	2.4445995949	-0.531773D-06
22	-0.10296483E-19	2.4875802756	0.000000D+00	2.4446000690	0.100580D-05
23	-0.29038898E-20	2.4875301126	0.000000D+00	2.4446001848	0.941910D-06
24	-0.85450380E-21	2.4875220743	0.000000D+00	2.4446001853	-0.920238D-06
25	-0.26192892E-21	2.4875197473	0.000000D+00	2.4446001808	0.916632D-06
26	-0.83507351E-22	2.4875188435	0.000000D+00	2.4446001742	0.921470D-06
27	-0.27651313E-22	2.4875188435	0.000000D+00	2.4446001613	0.916872D-06
28	-0.94967336E-23	2.4875188435	0.000000D+00	2.4446001431	0.901722D-06
29	-0.33787402E-23	2.4875188435	0.000000D+00	2.4446001304	-0.892128D-06
30	-0.12437877E-23	2.4875188435	0.000000D+00	2.4446001598	0.918329D-06
31	-0.47322652E-24	2.4875188435	0.000000D+00	2.4446001564	0.914631D-06
32	-0.18589715E-24	2.4875188435	0.000000D+00	2.4446001552	-0.941787D-06
33	-0.75323999E-25	2.4875188435	0.000000D+00	2.4446001610	0.926957D-06
34	-0.31452247E-25	2.4875188565	0.000000D+00	2.4446001500	0.927910D-06
35	-0.13522308E-25	2.4875188448	0.000000D+00	2.4446001505	0.927148D-06
36	-0.59810143E-26	2.4875188435	0.000000D+00	2.4446001505	-0.926909D-06
37	-0.27194858E-26	2.4875188435	0.000000D+00	2.4446001505	-0.926896D-06
38	-0.12701864E-26	2.4875188435	0.000000D+00	2.4446001507	-0.926758D-06
39	-0.60899540E-27	2.4875188435	0.000000D+00	2.4446001490	0.927705D-06

## Oscillator quantum numbers nx ny nz = 0 1 0

k	coefficients	Quadratic (delta=1)	(delta=2^2)	(delta=3^2)	(delta=5^2)
0	0.28000000E+01	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00
1	-0.23199631E-01	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00
2	-0.80189509E-03	2.7759377308	0.000000D+00	2.6887675131	0.000000D+00
3	-0.58304495E-04	2.7759342675	0.000000D+00	2.6882792524	0.000000D+00
4	-0.61100292E-05	2.7759332143	0.000000D+00	2.6874398481	0.000000D+00
5	-0.78737010E-06	2.7759331393	0.000000D+00	2.6870502160	0.000000D+00
				2.5901273957	-0.733315D-01
				2.4644056725	0.165887D+00
				2.4860951689	0.168696D+00
				2.3126392998	-0.291052D+00
				2.6120662996	0.658216D+00

Partial separability approximation xy-z, 40 coefficients

6	-0.11459511E-06	2.7759331358	0.000000D+00	2.6869634210	0.000000D+00	2.4923248354	-0.100092D+00	2.3400880441	-0.574484D+00
7	-0.18020193E-07	2.7759331356	0.000000D+00	2.6867838130	0.000000D+00	2.5117529219	0.934561D-01	2.2647783368	0.614297D+00
8	-0.29939817E-08	2.7759331355	0.000000D+00	2.6867979986	0.000000D+00	2.5119533417	0.917673D-01	2.2756459874	0.635152D+00
9	-0.51976777E-09	2.7759331355	0.000000D+00	2.6868609206	0.000000D+00	2.5198837077	0.951905D-01	2.5014799516	-0.563111D+00
10	-0.93777038E-10	2.7759331355	0.000000D+00	2.6871739615	0.000000D+00	2.5479441730	-0.976966D-01	2.3496300363	0.609258D+00
11	-0.17540871E-10	2.7759331355	0.000000D+00	2.6871655082	0.000000D+00	2.5374332315	0.960778D-01	2.3623669798	-0.595891D+00
12	-0.33985662E-11	2.7759331355	0.000000D+00	2.6867619222	0.000000D+00	2.5036707821	-0.766392D-01	2.3344889848	-0.648925D+00
13	-0.68206191E-12	2.7759331355	0.000000D+00	2.6867367670	0.000000D+00	2.5054568396	-0.780789D-01	2.3326324617	-0.653671D+00
14	-0.14185129E-12	2.7759331355	0.000000D+00	2.6865648305	0.000000D+00	2.5420306857	-0.895057D-01	2.3299241030	0.618864D+00
15	-0.30593687E-13	2.7759331355	0.000000D+00	2.6874828193	0.000000D+00	2.4931614262	-0.689466D-01	2.3336877729	-0.642768D+00
16	-0.68482079E-14	2.7759331355	0.000000D+00	2.6865296012	0.189840D-03	2.5036172614	0.701741D-01	2.3421997567	0.641897D+00
17	-0.15923291E-14	2.7759331355	0.000000D+00	2.6865092993	0.130124D-03	2.5034783896	0.696232D-01	2.3421859124	0.641446D+00
18	-0.38488802E-15	2.7759331355	0.000000D+00	2.6866582332	0.269115D-03	2.5087029349	0.732080D-01	2.3538224358	0.646503D+00
19	-0.96773355E-16	2.7759331355	0.000000D+00	2.6867851446	-0.279675D-03	2.5453798310	-0.837661D-01	2.3392987911	0.640684D+00
20	-0.25321190E-16	2.7759331355	0.000000D+00	2.6866660195	0.160067D-03	2.5106874504	0.698495D-01	2.3448658975	0.638445D+00
21	-0.68960524E-17	2.7768822201	0.000000D+00	2.6867093597	-0.180305D-03	2.5203265781	-0.682350D-01	2.3440775041	-0.629872D+00
22	-0.19546604E-17	2.7759331355	0.000000D+00	2.6867289377	0.172749D-03	2.4903264905	0.000000D+00	2.3382286741	0.633105D+00
23	-0.57643330E-18	2.7759331355	0.000000D+00	2.6867170532	0.158674D-03	2.5145044862	0.663175D-01	2.3432611298	0.637992D+00
24	-0.17676001E-18	2.7759331355	0.000000D+00	2.6867369003	0.168066D-03	2.5011233664	-0.761329D-01	2.3165744534	0.652409D+00
25	-0.56317324E-19	2.7759331355	0.000000D+00	2.6867438933	-0.168734D-03	2.5089687987	0.723067D-01	2.3448318147	0.632971D+00
26	-0.18626275E-19	2.7761806132	0.000000D+00	2.6867339179	0.156501D-03	2.5114430539	0.661898D-01	2.3436363011	0.638642D+00
27	-0.63884869E-20	2.7759485167	0.000000D+00	2.6867442395	-0.162495D-03	2.5064971943	-0.675845D-01	2.3448299298	-0.638553D+00
28	-0.22698567E-20	2.7759459414	0.000000D+00	2.6867445958	0.162388D-03	2.5063403458	0.680496D-01	2.3449069712	0.638417D+00
29	-0.83456860E-21	2.7759375419	0.000000D+00	2.6867449687	0.160976D-03	2.5077672383	0.686183D-01	2.3442416323	0.638308D+00
30	-0.31719721E-21	2.7759373323	0.000000D+00	2.6867486306	0.154172D-03	2.5565734888	0.000000D+00	2.3452906540	0.638759D+00
31	-0.12449578E-21	2.7759331355	0.000000D+00	2.6867439110	-0.160837D-03	2.5083222986	-0.673729D-01	2.3442058630	-0.638810D+00
32	-0.50409271E-22	2.7759331355	0.000000D+00	2.6867438907	-0.160605D-03	2.5087200373	-0.671044D-01	2.3439624351	-0.639287D+00
33	-0.21037287E-22	2.7759331355	0.000000D+00	2.6867433725	-0.160316D-03	2.5100065889	-0.602345D-01	2.3462290455	-0.640458D+00
34	-0.90408005E-23	2.7759331355	0.000000D+00	2.6867449179	0.162265D-03	2.5081364600	0.678386D-01	2.3441294997	0.638720D+00
35	-0.39975787E-23	2.7759332622	0.000000D+00	2.6867433346	0.160786D-03	2.5079093689	0.666054D-01	2.3445080398	0.638688D+00
36	-0.18172523E-23	2.7759331461	0.000000D+00	2.6867430216	0.160790D-03	2.5070040351	0.669089D-01	2.3442450625	0.638171D+00
37	-0.84866308E-24	2.7759331403	0.000000D+00	2.6867430089	-0.160834D-03	2.5071621013	-0.672828D-01	2.3441635872	-0.638299D+00
38	-0.40686328E-24	2.7759331359	0.000000D+00	2.6867430568	0.160877D-03	2.5074807535	0.672992D-01	2.3442718493	0.638505D+00
39	-0.20010695E-24	2.7759331355	0.000000D+00	2.6867430584	0.160815D-03	2.5071849165	0.669616D-01	2.3442660895	0.638244D+00

Oscillator quantum numbers nx ny nz = 2 0 0

k	coefficients	Quadratic	(delta=1)	(delta=2^2)	(delta=3^2)	(delta=5^2)
0	0.29000000E+01	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00	0.0000000000
1	-0.25138024E-01	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00	0.0000000000
2	-0.10314606E-02	2.8737360479	0.000000D+00	2.7732067793	0.000000D+00	2.5936769668
3	-0.79753841E-04	2.8737421156	0.000000D+00	2.7742250835	0.000000D+00	2.5684282231
4	-0.81955660E-05	2.8737414711	0.000000D+00	2.7736855409	0.000000D+00	2.5967834241
5	-0.10049677E-05	2.8737414006	0.000000D+00	2.7733070551	0.000000D+00	2.6246466894
6	-0.14069686E-06	2.8737413935	0.000000D+00	2.7726732472	0.000000D+00	2.5576366603
7	-0.21950413E-07	2.8737413934	0.000000D+00	2.7724462229	0.000000D+00	2.5604676912
8	-0.37495721E-08	2.8737413934	0.000000D+00	2.7722431242	0.000000D+00	2.5579148129
9	-0.69100658E-09	2.8737413934	0.000000D+00	2.7875449410	0.000000D+00	2.5536404534
10	-0.13569015E-09	2.8737413934	0.000000D+00	2.7731569705	0.000000D+00	2.5559642891
11	-0.28113307E-10	2.8737413934	0.000000D+00	2.7894282447	0.000000D+00	2.5539145620
12	-0.61014071E-11	2.8737413934	0.000000D+00	2.7728191654	0.000000D+00	2.5712611011
13	-0.13801839E-11	2.8737413934	0.000000D+00	2.7727130163	0.677647D-03	2.4005361126
14	-0.32436158E-12	2.8737413934	0.000000D+00	2.7725951434	0.906923D-03	2.5378162591
15	-0.79041065E-13	2.8737413934	0.000000D+00	2.7726018155	0.781244D-03	2.4851752740



Partial separability approximation xy-z, 40 coefficients

26	-0.20159764E-19	3.1786508625	0.000000D+00	3.0938283242	0.155906D-03	2.9202186585	0.180799D+00	2.9584067255	0.460291D+00
27	-0.69857978E-20	3.1786285479	0.000000D+00	3.0938291461	-0.156550D-03	2.9236457370	-0.178881D+00	2.9845287180	-0.446765D+00
28	-0.25051464E-20	3.1786149570	0.000000D+00	3.0938296749	0.155993D-03	2.9198504922	0.179774D+00	2.9833663967	0.440605D+00
29	-0.92877105E-21	3.1786111559	0.000000D+00	3.0938294883	0.155702D-03	2.9197935456	0.180078D+00	2.9802083029	0.441284D+00
30	-0.35565181E-21	3.1786111559	0.000000D+00	3.0938294842	-0.155702D-03	2.9197965010	-0.180079D+00	2.9802383001	-0.441384D+00
31	-0.14053300E-21	3.1786111559	0.000000D+00	3.0938295591	-0.155609D-03	2.9196491114	-0.180185D+00	2.9872792656	-0.443144D+00
32	-0.57250663E-22	3.1786111559	0.000000D+00	3.0938291606	-0.156130D-03	2.9198581987	-0.180030D+00	2.9810535864	-0.441513D+00
33	-0.24024832E-22	3.1787328040	0.000000D+00	3.0938294260	-0.155654D-03	2.9198288526	-0.180127D+00	2.9803090448	-0.442776D+00
34	-0.10376800E-22	3.1786114572	0.000000D+00	3.0938294125	0.155568D-03	2.9198869970	0.180185D+00	2.9816795111	0.443752D+00
35	-0.46094807E-23	3.1786111759	0.000000D+00	3.0938293528	0.155557D-03	2.9199148133	0.180117D+00	2.9815337195	0.442321D+00
36	-0.21042838E-23	3.1786111559	0.000000D+00	3.0938293568	-0.155609D-03	2.9198715721	-0.180108D+00	2.9809788174	-0.442379D+00
37	-0.98653822E-24	3.1786111559	0.000000D+00	3.0938293285	-0.155576D-03	2.9199001038	-0.180082D+00	2.9810671854	-0.441494D+00
38	-0.47466682E-24	3.1786111559	0.000000D+00	3.0938292764	-0.155553D-03	2.9197171397	-0.180871D+00	2.9816531178	-0.443029D+00
39	-0.23423451E-24	3.1786111559	0.000000D+00	3.0938293508	-0.155638D-03	2.9198614298	-0.180103D+00	2.9808418283	-0.442377D+00

Oscillator quantum numbers nx ny nz = 0 1 1

k	coefficients	Quadratic (delta=1)	(delta=2^2)	(delta=3^2)	(delta=5^2)
0	0.38000000E+01	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00
1	-0.31165039E-01	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00
2	-0.11532266E-02	3.7675875708	0.000000D+00	3.6478548630	0.000000D+00
3	-0.11213377E-03	3.7675540106	0.000000D+00	3.6415279744	0.000000D+00
4	-0.15815722E-04	3.7675507467	0.000000D+00	3.6357358946	0.000000D+00
5	-0.27099894E-05	3.7675504257	0.000000D+00	3.6447961146	0.349157D-02
6	-0.50314631E-06	3.7675504487	0.000000D+00	3.6192001620	-0.390446D-02
7	-0.97667847E-07	3.7675504499	0.000000D+00	3.6278659546	0.000000D+00
8	-0.19508048E-07	3.7675504500	0.000000D+00	3.6290078669	0.000000D+00
9	-0.39874989E-08	3.7675504499	0.000000D+00	3.6286976356	0.000000D+00
10	-0.83263744E-09	3.7675504499	0.000000D+00	3.6788308093	0.000000D+00
11	-0.17762510E-09	3.7675504499	0.000000D+00	3.6326514426	-0.653790D-02
12	-0.38743269E-10	3.7675504499	0.000000D+00	3.6374162690	-0.441771D-02
13	-0.86497770E-11	3.7675504499	0.000000D+00	3.6326333162	-0.594934D-02
14	-0.19788811E-11	3.7675504499	0.000000D+00	3.6331504681	0.594554D-02
15	-0.46440713E-12	3.7675504499	0.000000D+00	3.6334781390	-0.666510D-02
16	-0.11190710E-12	3.7675504499	0.000000D+00	3.6357878836	0.612499D-02
17	-0.27712601E-13	3.7675504499	0.000000D+00	3.6321851436	-0.804950D-02
18	-0.70586835E-14	3.7675504499	0.000000D+00	3.6324870625	-0.751796D-02
19	-0.18508255E-14	3.7675504499	0.000000D+00	3.6323684795	0.844054D-02
20	-0.50001620E-15	3.7675504499	0.000000D+00	3.6332377747	0.201471D-02
21	-0.13930694E-15	3.7675504499	0.000000D+00	3.6331162736	-0.353775D-02
22	-0.40061149E-16	3.7675504499	0.000000D+00	3.6332549631	0.204661D-02
23	-0.11901571E-16	3.7675504499	0.000000D+00	3.6327595457	0.550090D-02
24	-0.36553859E-17	3.7675504499	0.000000D+00	3.6330356209	0.370772D-02
25	-0.11613196E-17	3.7675504499	0.000000D+00	3.6328906550	-0.311453D-02
26	-0.38177299E-18	3.7676596731	0.000000D+00	3.6322861941	0.325548D-02
27	-0.12987702E-18	3.7675504499	0.000000D+00	3.6324249881	0.403582D-02
28	-0.45715723E-19	3.7675504499	0.000000D+00	3.6317608600	0.343442D-02
29	-0.16643356E-19	3.7675504499	0.000000D+00	3.6319693088	0.349895D-02
30	-0.62634580E-20	3.7675504499	0.000000D+00	3.6319161125	0.352877D-02
31	-0.24349009E-20	3.7675504499	0.000000D+00	3.6318892854	-0.369898D-02
32	-0.97700805E-21	3.7675504499	0.000000D+00	3.6324226304	0.256777D-02
33	-0.40429509E-21	3.7675513610	0.000000D+00	3.6320497855	-0.395938D-02
34	-0.17238849E-21	3.7675524236	0.000000D+00	3.6320476062	-0.386836D-02
35	-0.75675692E-22	3.7675504499	0.000000D+00	3.6312430559	-0.424504D-02

Partial separability approximation xy-z, 40 coefficients

36	-0.34172883E-22	3.7675504499	0.000000D+00	3.6321682642	-0.385536D-02	3.4347469768	-0.945812D-01	3.1710505932	-0.897027D+00
37	-0.15861227E-22	3.7675504499	0.000000D+00	3.6321656053	-0.385204D-02	3.4346658352	-0.944771D-01	3.1686592796	-0.899464D+00
38	-0.75612051E-23	3.7675504499	0.000000D+00	3.6321489460	-0.384765D-02	3.4333999209	-0.939195D-01	3.2691291421	0.591214D+00
39	-0.36993912E-23	3.7675504499	0.000000D+00	3.6321599641	-0.385253D-02	3.4344627242	-0.944509D-01	3.1688673592	-0.902702D+00

Oscillator quantum numbers nx ny nz = 0 2 0

k	coefficients	Quadratic (delta=1)	(delta=2^2)	(delta=3^2)	(delta=5^2)
0	0.41000000E+01	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00
1	-0.52732135E-01	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00
2	-0.26093586E-02	4.0443631154	0.000000D+00	3.8103353110	0.000000D+00
3	-0.25671391E-03	4.0443651143	0.000000D+00	3.8108837832	0.000000D+00
4	-0.37135150E-04	4.0443570291	0.000000D+00	3.7875976974	0.000000D+00
5	-0.70697955E-05	4.0443555214	0.000000D+00	3.8216712626	-0.679834D-01
6	-0.16185784E-05	4.0443554023	0.000000D+00	3.6385011801	0.000000D+00
7	-0.41400434E-06	4.0443553981	0.000000D+00	3.7636012844	0.000000D+00
8	-0.11271284E-06	4.0443548242	0.000000D+00	3.8196368585	0.223956D-01
9	-0.31772814E-07	4.0443553973	0.000000D+00	3.8426488637	-0.275706D-01
10	-0.91381705E-08	4.0443553973	0.000000D+00	3.8455097295	0.234175D-01
11	-0.26609897E-08	4.0443553973	0.000000D+00	3.8552589707	-0.252795D-01
12	-0.78140940E-09	4.0443553973	0.000000D+00	3.8482389389	0.000000D+00
13	-0.23094107E-09	4.0443553973	0.000000D+00	3.8433736605	0.000000D+00
14	-0.68632696E-10	4.0443553973	0.000000D+00	3.8401748682	0.000000D+00
15	-0.20505938E-10	4.0443553973	0.000000D+00	3.7490309589	0.000000D+00
16	-0.61609824E-11	4.0443553973	0.000000D+00	3.7872911041	0.000000D+00
17	-0.18624548E-11	4.0443553973	0.000000D+00	3.8316122241	0.625070D-02
18	-0.56695110E-12	4.0443553973	0.000000D+00	3.8321959744	0.000000D+00
19	-0.17397652E-12	4.0457419404	0.000000D+00	3.8131339093	0.000000D+00
20	-0.53886335E-13	4.0443553973	0.000000D+00	3.8116173797	0.000000D+00
21	-0.16871769E-13	4.0463819754	0.000000D+00	3.8358809989	0.000000D+00
22	-0.53490491E-14	4.0455996481	0.000000D+00	3.8288865898	0.963787D-04
23	-0.17204742E-14	4.0459866379	0.000000D+00	3.8289611187	-0.782111D-03
24	-0.56255637E-15	4.0452873059	0.000000D+00	3.8291749181	-0.202137D-02
25	-0.18740034E-15	4.0444887901	0.000000D+00	3.8316877079	0.000000D+00
26	-0.63741694E-16	4.0443553973	0.000000D+00	3.8314295593	-0.526229D-02
27	-0.22185862E-16	4.0446704873	0.000000D+00	3.8324788205	-0.639796D-02
28	-0.79182280E-17	4.0445177966	0.000000D+00	3.8314984511	0.550024D-02
29	-0.29032659E-17	4.0443941044	0.000000D+00	3.8342459857	-0.639742D-02
30	-0.10952997E-17	4.0443553973	0.000000D+00	3.8324217353	0.577789D-02
31	-0.42568743E-18	4.0443701660	0.000000D+00	3.8323246424	0.591798D-02
32	-0.17057433E-18	4.0443553973	0.000000D+00	3.8324444386	-0.589633D-02
33	-0.70498911E-19	4.0443553973	0.000000D+00	3.8326717468	-0.597856D-02
34	-0.30055064E-19	4.0443553973	0.000000D+00	3.8324863458	0.598685D-02
35	-0.13213022E-19	4.0443578963	0.000000D+00	3.8312225092	0.658423D-02
36	-0.59869985E-20	4.0443553973	0.000000D+00	3.8327925035	-0.605371D-02
37	-0.27940397E-20	4.0443553973	0.000000D+00	3.8321536969	-0.651895D-02
38	-0.13418856E-20	4.0443553973	0.000000D+00	3.8381350421	0.000000D+00
39	-0.66263518E-21	4.0443553973	0.000000D+00	3.8331477728	-0.573161D-02

Oscillator quantum numbers nx ny nz = 0 0 2

k	coefficients	Quadratic (delta=1)	(delta=2^2)	(delta=3^2)	(delta=5^2)
0	0.35000000E+01	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00

Partial separability approximation xy-z, 40 coefficients

1	-0.24650674E-01	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00
2	-0.86099079E-03	3.4744223643	0.000000D+00	3.3815011461	0.000000D+00	3.1471183303	0.179032D+00	3.1471183303	0.557147D+00
3	-0.57055860E-04	3.4744260693	0.000000D+00	3.3820020942	0.000000D+00	3.1194204557	-0.172225D+00	3.1419957323	-0.597128D+00
4	-0.50156374E-05	3.4744257029	0.000000D+00	3.3817661870	0.000000D+00	3.1613282674	-0.162418D+00	3.0550213822	-0.516115D+00
5	-0.52145244E-06	3.4744256742	0.000000D+00	3.3816647339	0.000000D+00	3.1943385663	-0.137716D+00	3.6283837756	0.590202D+00
6	-0.60856889E-07	3.4744256723	0.000000D+00	3.3816128691	0.000000D+00	3.1282587135	-0.125557D+00	3.0911178582	-0.642161D+00
7	-0.77532529E-08	3.4744256722	0.000000D+00	3.3815941575	0.000000D+00	3.1500680924	0.122191D+00	3.0670188510	0.665804D+00
8	-0.10607757E-08	3.4744256722	0.000000D+00	3.3815873702	0.000000D+00	3.1525173669	0.118320D+00	3.0741139363	0.682991D+00
9	-0.15429259E-09	3.4744256722	0.000000D+00	3.3815826813	0.000000D+00	3.1508669355	-0.115148D+00	3.0896718815	-0.674092D+00
10	-0.23708247E-10	3.4744256722	0.000000D+00	3.3860967271	0.000000D+00	3.1483762608	0.116848D+00	3.0801415849	0.665786D+00
11	-0.38333973E-11	3.4744256722	0.000000D+00	3.3837171284	0.000000D+00	3.1483880894	0.117185D+00	3.0791978742	0.666363D+00
12	-0.65071922E-12	3.4744256722	0.000000D+00	3.3849195253	0.000000D+00	3.1477697750	0.116657D+00	3.0785145205	0.661250D+00
13	-0.11582327E-12	3.4744256722	0.000000D+00	3.3849867210	0.000000D+00	3.2251931604	0.130096D+00	3.0808761691	0.668729D+00
14	-0.21605629E-13	3.4744256722	0.000000D+00	3.3815674357	0.000000D+00	3.1480858469	0.117586D+00	3.0778754865	0.666600D+00
15	-0.42234469E-14	3.4744256722	0.000000D+00	3.3815178698	-0.118568D-03	3.1476279205	-0.117728D+00	3.0766474801	-0.667397D+00
16	-0.86524389E-15	3.4744256722	0.000000D+00	3.3816875929	0.000000D+00	3.1475510707	0.118099D+00	3.0775216259	0.668595D+00
17	-0.18579090E-15	3.4744256722	0.000000D+00	3.3815538044	0.355908D-04	3.1478638551	0.118054D+00	3.0780099279	0.667537D+00
18	-0.41812638E-16	3.4744256722	0.000000D+00	3.3815552257	0.367062D-04	3.1478630505	0.118056D+00	3.0780160183	0.667542D+00
19	-0.98598858E-17	3.4744256722	0.000000D+00	3.3815874031	-0.369956D-04	3.1479360136	-0.118176D+00	3.0789101440	-0.667111D+00
20	-0.24349238E-17	3.4744256722	0.000000D+00	3.3816462371	0.000000D+00	3.1477704782	-0.117895D+00	3.0778693445	-0.667604D+00
21	-0.62921989E-18	3.4744256722	0.000000D+00	3.3815671851	-0.200629D-04	3.1479459950	-0.118031D+00	3.0779200858	-0.667317D+00
22	-0.16997310E-18	3.4744256722	0.000000D+00	3.3815812668	0.209234D-04	3.1480164906	0.118018D+00	3.0777014020	0.667183D+00
23	-0.47940520E-19	3.4744606770	0.000000D+00	3.3815826926	0.170846D-04	3.1480053119	0.117961D+00	3.0777180152	0.667427D+00
24	-0.14099618E-19	3.4744256722	0.000000D+00	3.3815809699	-0.161857D-04	3.1479731890	-0.117973D+00	3.0778112074	-0.667407D+00
25	-0.43182580E-20	3.4744256722	0.000000D+00	3.3815825892	-0.160730D-04	3.1479875753	-0.117938D+00	3.0777745177	-0.667559D+00
26	-0.13753641E-20	3.4744256722	0.000000D+00	3.3815829858	-0.157886D-04	3.1479805889	-0.117876D+00	3.0776755116	-0.667102D+00
27	-0.45494258E-21	3.4744388488	0.000000D+00	3.3815827631	-0.155381D-04	3.1479588026	-0.117935D+00	3.0778880064	-0.667462D+00
28	-0.15608713E-21	3.4744300909	0.000000D+00	3.3815828459	0.155292D-04	3.1479506707	0.117925D+00	3.0779619311	0.667449D+00
29	-0.55477401E-22	3.4744256722	0.000000D+00	3.3815829116	0.154785D-04	3.1479140210	0.117914D+00	3.0780258697	0.667231D+00
30	-0.20403180E-22	3.4744256722	0.000000D+00	3.3815829604	0.154708D-04	3.1479964376	0.117958D+00	3.0778615016	0.667495D+00
31	-0.77559404E-23	3.4744256722	0.000000D+00	3.3815829617	0.154710D-04	3.1479951140	0.117958D+00	3.0778613866	0.667494D+00
32	-0.30442133E-23	3.4744256722	0.000000D+00	3.3815830053	-0.154695D-04	3.1479672989	-0.117944D+00	3.0778887840	-0.667443D+00
33	-0.12325220E-23	3.4744256722	0.000000D+00	3.3815838450	-0.154205D-04	3.1478862783	-0.117904D+00	3.0778433230	-0.667530D+00
34	-0.51427142E-24	3.4744257791	0.000000D+00	3.3815830273	-0.154393D-04	3.1480634835	-0.118088D+00	3.0778306202	-0.667478D+00
35	-0.22094788E-24	3.4744257416	0.000000D+00	3.3815830866	0.154218D-04	3.1480075919	0.117986D+00	3.0778462471	0.667475D+00
36	-0.97662855E-25	3.4744257017	0.000000D+00	3.3815829228	0.155294D-04	3.1479586183	0.117944D+00	3.0777255991	0.667914D+00
37	-0.44378522E-25	3.4744257136	0.000000D+00	3.3815829980	-0.154495D-04	3.1477642328	-0.117597D+00	3.0778281654	-0.667480D+00
38	-0.20715698E-25	3.4744256722	0.000000D+00	3.3815829866	-0.153980D-04	3.1479527163	-0.117959D+00	3.0778079553	-0.667438D+00
39	-0.99267164E-26	3.4744256722	0.000000D+00	3.3815829773	-0.153998D-04	3.1479470347	-0.117963D+00	3.0777966231	-0.667466D+00