

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 yz-x

Oscillator quantum numbers nx ny nz = 0 0 0

k	coefficients	Quadratic (delta=1)	(delta=2^2)	(delta=3^2)	(delta=5^2)
0	0.150000000000000000000000000000D+01	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00
1	-0.547606178711276970100624407916D-02	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00
2	-0.880767844144932726132424435206D-04	1.4944329089	0.000000D+00	1.4764695043	0.000000D+00
3	-0.263891250643578462692899929593D-05	1.4944331195	0.000000D+00	1.4764871869	0.000000D+00
4	-0.103517423256517395801083569605D-06	1.4944331142	0.000000D+00	1.4764853022	0.000000D+00
5	-0.475890265495876996326845219384D-08	1.4944331140	0.000000D+00	1.4764850090	0.000000D+00
6	-0.244128738734657038784730880970D-09	1.4944331140	0.000000D+00	1.4764849680	0.000000D+00
7	-0.136334969215257801875421823145D-10	1.4944331140	0.000000D+00	1.4764849647	0.000000D+00
8	-0.818441000413137783925622458464D-12	1.4944331140	0.000000D+00	1.4764849643	0.000000D+00
9	-0.525291219266168591106198900559D-13	1.4944331140	0.000000D+00	1.4764849642	0.000000D+00
10	-0.360241447422703349043278526897D-14	1.4944331140	0.000000D+00	1.4764849642	0.000000D+00
11	-0.264720576871106124846220244747D-15	1.4944331140	0.000000D+00	1.4764849642	0.000000D+00
12	-0.209449669608181002093218939327D-16	1.4944331140	0.000000D+00	1.4764849642	0.000000D+00
13	-0.179368091830264876903421522879D-17	1.4944331140	0.000000D+00	1.4764849642	0.000000D+00
14	-0.166907906373320254837962449048D-18	1.4944331140	0.000000D+00	1.4764849642	0.000000D+00
15	-0.168960363790165746278114884318D-19	1.4944331140	0.000000D+00	1.4764849642	0.000000D+00
16	-0.185696510584254738274026665846D-20	1.4944331140	0.000000D+00	1.4767547964	0.000000D+00
17	-0.220575685507298419244647291989D-21	1.4944331140	0.000000D+00	1.4764849642	0.000000D+00
18	-0.281501801052789751459419050956D-22	1.4944331140	0.000000D+00	1.4764849642	0.000000D+00
19	-0.383638015310013565270723728118D-23	1.4944331140	0.000000D+00	1.4764849642	0.000000D+00
20	-0.555211804247921407466021132905D-24	1.4944331140	0.000000D+00	1.4764849642	0.000000D+00
21	-0.849240053781576408748296666743D-25	1.4944331140	0.000000D+00	1.4764849642	0.000000D+00
22	-0.136751581465880551017557671364D-25	1.4944572042	0.000000D+00	1.4764849642	0.000000D+00
23	-0.231078592899337250444751519343D-26	1.4944331140	0.000000D+00	1.4764851818	0.000000D+00
24	-0.408639077249750589646066335045D-27	1.4944331140	0.000000D+00	1.4764850334	0.000000D+00
25	-0.754525332286866342987468913552D-28	1.4944331140	0.000000D+00	1.4764849714	0.000000D+00
26	-0.145175105117120687151926677043D-28	1.4944331140	0.000000D+00	1.4764849642	0.000000D+00
27	-0.290552322653281290242606479724D-29	1.4944359040	0.000000D+00	1.4764849686	0.000000D+00
28	-0.603917340737182754965634642826D-30	1.4944336033	0.000000D+00	1.4764849653	0.000000D+00
29	-0.130173180783459126466350650802D-30	1.4944331140	0.000000D+00	1.4764849644	0.000000D+00
30	-0.290588693489272745959800721572D-31	1.4944331140	0.000000D+00	1.4764849644	0.000000D+00
31	-0.670990043441339475687745976078D-32	1.4944331140	0.000000D+00	1.4764849643	0.000000D+00
32	-0.160080850610098832801341534388D-32	1.4944331140	0.000000D+00	1.4764849643	0.000000D+00

artial separability approximation yz-x, 41 coefficients

33	-0.394174506255723923113546416885D-33	1.4944332588	0.000000D+00	1.4764849642	0.000000D+00	1.4404094584	-0.147004D-04	1.3005898139	-0.115518D+00
34	-0.100076877364147492326326693553D-33	1.4944331564	0.000000D+00	1.4764849642	0.000000D+00	1.4404094254	0.147161D-04	1.3005661185	0.115543D+00
35	-0.2617413945293125981112828035112D-34	1.4944331277	0.000000D+00	1.4764849642	0.000000D+00	1.4404094262	0.147439D-04	1.3005908770	0.115572D+00
36	-0.704573665350006576623141908873D-35	1.4944331140	0.000000D+00	1.4764849642	0.000000D+00	1.4404094488	-0.147340D-04	1.3005977185	-0.115540D+00
37	-0.195047234510138074450423715902D-35	1.4944331140	0.000000D+00	1.4764849642	0.000000D+00	1.4404094488	0.147335D-04	1.3005971264	0.115540D+00
38	-0.554851607453852089742548817943D-36	1.4944331140	0.000000D+00	1.4764849642	0.000000D+00	1.4404094592	-0.147417D-04	1.3006381766	-0.115509D+00
39	-0.162076586824577651754518830854D-36	1.4944331140	0.000000D+00	1.4764849642	0.000000D+00	1.4404090212	0.144062D-04	1.3005891938	0.115547D+00
40	-0.485813679534733678688520349332D-37	1.4944331145	0.000000D+00	1.4764849642	0.272014D-12	1.4404094605	0.147316D-04	1.3005910553	0.115527D+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	0.220000000000000000000000000000D+01	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00
1	-0.119637432019078871200303686426D-01	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00
2	-0.263522269258928677773640615350D-03	2.1877604440	0.000000D+00	2.1469668338	0.000000D+00
3	-0.106654137567617576284396325833D-04	2.1877614979	0.000000D+00	2.1470667942	0.000000D+00
4	-0.560003729917351673327215802836D-06	2.1877614736	0.000000D+00	2.1470568181	0.000000D+00
5	-0.341156749754372807266248942172D-07	2.1877614726	0.000000D+00	2.1470548477	0.000000D+00
6	-0.229072974984538851679470727260D-08	2.1877614725	0.000000D+00	2.1470545296	0.000000D+00
7	-0.164859302243427075687936340149D-09	2.1877614725	0.000000D+00	2.1470544993	0.000000D+00
8	-0.125047660995929314238639296734D-10	2.1877614725	0.000000D+00	2.1470544975	0.000000D+00
9	-0.989004728704609597425709900854D-12	2.1877614725	0.000000D+00	2.1470544973	0.000000D+00
10	-0.809859876704598841383161193728D-13	2.1877614725	0.000000D+00	2.1470544972	0.000000D+00
11	-0.683427276085456343261781134836D-14	2.1877614725	0.000000D+00	2.1470544972	0.000000D+00
12	-0.592655730051230202348145204501D-15	2.1877614725	0.000000D+00	2.1470544972	0.000000D+00
13	-0.527399370982123701637470394494D-16	2.1877614725	0.000000D+00	2.1470544972	0.000000D+00
14	-0.481627266218609659391722563380D-17	2.1877614725	0.000000D+00	2.1470544972	0.000000D+00
15	-0.452036403584813701529115107592D-18	2.1877614725	0.000000D+00	2.1470544972	0.000000D+00
16	-0.437453090807320633891707291759D-19	2.1877614725	0.000000D+00	2.1470544972	0.000000D+00
17	-0.438798949132910185822472115703D-20	2.1877614725	0.000000D+00	2.1470544972	0.000000D+00
18	-0.459639461897906297349148049276D-21	2.1877614725	0.000000D+00	2.1470544972	0.000000D+00
19	-0.507578840187947285989158552930D-22	2.1877614725	0.000000D+00	2.1470544972	0.000000D+00
20	-0.597154520881631754026996951634D-23	2.1877614725	0.000000D+00	2.1470544971	0.000000D+00
21	-0.755646620023040106846761641474D-24	2.1877614725	0.000000D+00	2.1471882442	0.000000D+00
22	-0.103483179142034172674457587808D-24	2.1877614725	0.000000D+00	2.1470544972	0.000000D+00
23	-0.153526414816309780071900227329D-25	2.1877614725	0.000000D+00	2.1470544972	0.000000D+00
24	-0.245770676423161371811524065698D-26	2.1877614725	0.000000D+00	2.1470544972	0.000000D+00
25	-0.421499203825285305860104790692D-27	2.1877614725	0.000000D+00	2.1470544972	0.000000D+00
26	-0.768192656309835793916747827110D-28	2.1877614725	0.000000D+00	2.1470544972	0.000000D+00
27	-0.147687857955227550895644874137D-28	2.1877614725	0.000000D+00	2.1470544972	0.000000D+00
28	-0.297729998029269215033474401643D-29	2.1877614725	0.000000D+00	2.1470549460	0.000000D+00
29	-0.626504083459064346910568910689D-30	2.1878184158	0.000000D+00	2.1470545098	0.000000D+00
30	-0.137142159301595846117418084380D-30	2.1877614725	0.000000D+00	2.1470545001	0.000000D+00
31	-0.311493842627988550972725050347D-31	2.1877614725	0.000000D+00	2.1470545120	0.000000D+00
32	-0.732644133478687978242018929821D-32	2.1877614725	0.000000D+00	2.1470545009	0.000000D+00
33	-0.178156310161592380648806943326D-32	2.1877614725	0.000000D+00	2.1470544972	0.000000D+00
34	-0.447285283503356375843991835112D-33	2.1877671450	0.000000D+00	2.1470544998	0.000000D+00
35	-0.115805990558743266695593976074D-33	2.1877617969	0.000000D+00	2.1470544975	0.000000D+00
36	-0.308875751874652608494252866919D-34	2.1877614818	0.000000D+00	2.1470544972	0.000000D+00
37	-0.847868510138490934152625824420D-35	2.1877614725	0.000000D+00	2.1470544972	0.000000D+00
38	-0.239322826501093993327479853409D-35	2.1877614725	0.000000D+00	2.1470544972	0.000000D+00
39	-0.694060562177086621267327943557D-36	2.1877614725	0.000000D+00	2.1470544972	0.000000D+00
40	-0.206651470454462093965697938542D-36	2.1877614792	0.000000D+00	2.1470544972	0.219977D-11

Oscillator quantum numbers nx ny nz = 0 0 1

artial separability approximation yz-x, 41 coefficients

11	-0.625245421359594204843543798546D-12	2.7739809691	0.000000D+00	2.6823604027	0.000000D+00	2.4325994071	-0.908908D-01	2.3126394144	0.690551D+00
12	-0.790059517378522275186763885830D-13	2.7739809691	0.000000D+00	2.6823603964	0.000000D+00	2.4300385537	-0.938824D-01	2.3291160471	-0.676940D+00
13	-0.102163514330829804209759581639D-13	2.7739809691	0.000000D+00	2.6823603919	0.000000D+00	2.4306369829	0.923020D-01	2.3290770203	0.673609D+00
14	-0.13499239441282302751549199776D-14	2.7739809691	0.000000D+00	2.6823603914	0.000000D+00	2.4305595975	0.921862D-01	2.32834226702	0.673651D+00
15	-0.182123730622258513782859434600D-15	2.7739809691	0.000000D+00	2.6823603906	0.000000D+00	2.4303297602	-0.920582D-01	2.3273222885	-0.674621D+00
16	-0.250850907118873290887735660844D-16	2.7739809691	0.000000D+00	2.6823603886	0.000000D+00	2.4341091674	0.952002D-01	2.3302105310	-0.673047D+00
17	-0.352916110258331490901901645546D-17	2.7739809691	0.000000D+00	2.6823603870	0.000000D+00	2.4348324953	0.920900D-01	2.3275461297	0.672259D+00
18	-0.507704105837079044288812638464D-18	2.7739809691	0.000000D+00	2.6823605150	0.000000D+00	2.4302728215	-0.924515D-01	2.3293564674	-0.675104D+00
19	-0.748117382163998844212328849386D-19	2.7739809691	0.000000D+00	2.6823604007	0.000000D+00	2.4301292428	0.925958D-01	2.3303956677	0.674854D+00
20	-0.113171166103274936950703188010D-19	2.7768983510	0.000000D+00	2.6823603976	0.000000D+00	2.4302049653	0.927912D-01	2.3298873903	0.673757D+00
21	-0.176245819744006261912117286917D-20	2.7739809691	0.000000D+00	2.6828949816	0.000000D+00	2.4303328206	-0.926737D-01	2.3294299773	-0.674215D+00
22	-0.283461164293969247944153310938D-21	2.7739809691	0.000000D+00	2.6827535182	0.000000D+00	2.4303310932	-0.926959D-01	2.3294047684	-0.674124D+00
23	-0.472391758274499609552006677467D-22	2.7739809691	0.000000D+00	2.6823720745	0.000000D+00	2.4305629883	-0.930512D-01	2.3307372278	-0.674518D+00
24	-0.818315316801919155904966242753D-23	2.7739809691	0.000000D+00	2.6823603976	0.000000D+00	2.4300652854	-0.922217D-01	2.3297651343	0.674297D+00
25	-0.147742051627225392404429903369D-23	2.7739809691	0.000000D+00	2.6824150263	0.000000D+00	2.4304743720	0.926727D-01	2.3292046708	0.674661D+00
26	-0.278515180474954081884953085112D-24	2.7739809691	0.000000D+00	2.6823603895	0.000000D+00	2.4300373814	-0.931383D-01	2.3302741206	0.674844D+00
27	-0.548663130508910336625485755112D-25	2.7739809691	0.000000D+00	2.6823676633	0.000000D+00	2.4305998166	0.926096D-01	2.3296451593	0.674875D+00
28	-0.112920394608587471369941012034D-25	2.7739809691	0.000000D+00	2.6823604011	0.000000D+00	2.4303342210	-0.927091D-01	2.3291039759	-0.674572D+00
29	-0.242527743163572797915320666821D-26	2.7739809691	0.000000D+00	2.6823792985	0.000000D+00	2.4304975373	0.926261D-01	2.3294365074	0.674685D+00
30	-0.542648155104395855157503498697D-27	2.7739809691	0.000000D+00	2.6823618981	0.000000D+00	2.4305371288	-0.924753D-01	2.3297934779	-0.673870D+00
31	-0.126226330748923025414637151918D-27	2.7739809691	0.000000D+00	2.6823608098	0.000000D+00	2.4304610306	0.924211D-01	2.3291864029	0.674086D+00
32	-0.304602546858501412241196882864D-28	2.7741033664	0.000000D+00	2.6823606750	0.000000D+00	2.4304410077	0.925255D-01	2.3292842424	0.674480D+00
33	-0.761010910820820196232966507188D-29	2.7740233451	0.000000D+00	2.6823605594	0.000000D+00	2.4304027208	0.924807D-01	2.3291161619	0.674493D+00
34	-0.196484280201607565099512983075D-29	2.7739938487	0.000000D+00	2.6823604618	0.000000D+00	2.4302587763	-0.924284D-01	2.32929836290	-0.675775D+00
35	-0.523415606220419329657780596032D-30	2.7739809691	0.000000D+00	2.6823604134	0.805922D-08	2.4304179475	0.925359D-01	2.3297457393	0.674526D+00
36	-0.143662183789888312197632343734D-30	2.7739809691	0.000000D+00	2.6823604061	0.000000D+00	2.4303615313	-0.925431D-01	2.3293293659	-0.674628D+00
37	-0.405780333304489268831806178895D-31	2.7739809691	0.000000D+00	2.6823603953	0.166164D-08	2.4302383596	0.926318D-01	2.3298303530	0.674764D+00
38	-0.117824263445258517047358587835D-31	2.7739809691	0.000000D+00	2.6823604046	0.000000D+00	2.4304785359	0.925194D-01	2.3292553210	-0.674506D+00
39	-0.351373975981967339790172414676D-32	2.7739810588	0.000000D+00	2.6823603911	0.376375D-08	2.4303868501	0.929142D-01	2.3294176705	0.674074D+00
40	-0.107531038815753993430182310784D-32	2.7739812071	0.000000D+00	2.6823603912	0.422852D-08	2.4303734291	0.927256D-01	2.3294317425	0.674313D+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	0.2900000000000000000000000000D+01	0.0000000000	0.0000000000	0.0000000000	0.0000000000
1	-0.215751230756784314445105531811D-01	0.0000000000	0.0000000000	0.0000000000	0.0000000000
2	-0.614695560875048812977583310358D-03	2.8777724423	0.000000D+00	2.5213687186	0.606684D-01
3	-0.318331910848702103895767549177D-04	2.8777761303	0.000000D+00	2.5811194068	0.000000D+00
4	-0.212930317581586261766600563610D-05	2.8777760438	0.000000D+00	2.5627541330	0.000000D+00
5	-0.164856543791444139965981817670D-06	2.8777760388	0.000000D+00	2.5373077656	-0.439439D-01
6	-0.140425913946712650567981688573D-07	2.8777760386	0.000000D+00	2.5069407088	0.787070D-01
7	-0.127975105339017873036383920278D-08	2.8777760386	0.000000D+00	2.5825126879	0.327890D-01
8	-0.122665673633573485481498068213D-09	2.8777760386	0.000000D+00	2.5817221060	0.391740D-01
9	-0.122285760417868330425808402655D-10	2.8777760386	0.000000D+00	2.5821510629	-0.404283D-01
10	-0.125814375691519257186838047220D-11	2.8777760386	0.000000D+00	2.5825659785	0.407411D-01
11	-0.132857634773837686339004971712D-12	2.8777760386	0.000000D+00	2.5828582199	0.407126D-01
12	-0.143410324080363455465988653583D-13	2.8777760386	0.000000D+00	2.5829077883	-0.405153D-01
13	-0.157757773040838522655713909058D-14	2.8777760386	0.000000D+00	2.5827502989	0.404269D-01
14	-0.176448878620922548787672646361D-15	2.8777760386	0.000000D+00	2.5827033979	0.404396D-01
15	-0.20031431297938777418617051211D-16	2.8777760386	0.000000D+00	2.5828590697	0.402849D-01
16	-0.230523299210422421789506316305D-17	2.8777760386	0.000000D+00	2.5829072604	0.411582D-01
17	-0.268684236743659775489572926146D-18	2.8777760386	0.000000D+00	2.5825601882	0.405343D-01
18	-0.317006078532566881921566123064D-19	2.8777760386	0.000000D+00	2.5825654207	-0.403607D-01
19	-0.378554115938396775478783596492D-20	2.8777760386	0.000000D+00	2.5824698537	0.403484D-01
20	-0.457663241207818631837129221249D-21	2.8777760386	0.000000D+00	2.5824772896	-0.403396D-01
21	-0.560628116551822676571903073059D-22	2.8777760386	0.000000D+00	2.5824769386	0.402953D-01
22	-0.696903101742157651482592664624D-23	2.8777760386	0.000000D+00	2.5824495919	0.404334D-01

artial separability approximation yz-x, 41 coefficients

23	-0.881281703677312020010113248631D-24	2.8777760386	0.000000D+00	2.8010210986	0.000000D+00	2.5824402100	0.403220D-01	2.4360913439	0.618948D+00
24	-0.113803678411844475461920939601D-24	2.8777760386	0.000000D+00	2.8010210986	0.000000D+00	2.5824336553	-0.403170D-01	2.4360856254	-0.618947D+00
25	-0.150914185323898309172489314063D-25	2.8777760386	0.000000D+00	2.8010210984	0.000000D+00	2.5824166503	0.403183D-01	2.4360798949	0.618957D+00
26	-0.207130727577532095516973474040D-26	2.8777760386	0.000000D+00	2.8015971218	0.000000D+00	2.5824459260	0.403260D-01	2.4360925117	0.618948D+00
27	-0.297273607435106023548840955051D-27	2.8777760386	0.000000D+00	2.8017512463	0.000000D+00	2.5824451754	0.403262D-01	2.4360925464	0.618949D+00
28	-0.451548427153474236713702328956D-28	2.8777760386	0.000000D+00	2.8010210986	0.000000D+00	2.5823995399	-0.403644D-01	2.4359820142	-0.618875D+00
29	-0.734666854652890420286618843001D-29	2.8777760386	0.000000D+00	2.8010239822	0.000000D+00	2.5825358607	-0.402515D-01	2.4360865416	-0.618944D+00
30	-0.129173978994261944773799390323D-29	2.8777760386	0.000000D+00	2.8010210986	0.000000D+00	2.5824525973	-0.403500D-01	2.4360973308	-0.618941D+00
31	-0.246194511052257583463678647290D-30	2.8780676068	0.000000D+00	2.8010210986	0.000000D+00	2.5824535336	0.403871D-01	2.4360947931	0.618932D+00
32	-0.506859052885320409399794848733D-31	2.8777760386	0.000000D+00	2.8010210986	0.000000D+00	2.5824730495	0.403867D-01	2.4360900904	0.618935D+00
33	-0.111807445519880061527175761350D-31	2.8777760386	0.000000D+00	2.8010210986	0.000000D+00	2.5824732780	-0.403856D-01	2.4360902068	-0.618935D+00
34	-0.261687447902798631545074629449D-32	2.8777760386	0.000000D+00	2.8010210986	0.000000D+00	2.5824850882	-0.404069D-01	2.4360575142	-0.618934D+00
35	-0.644007707043914715196208598232D-33	2.8777760386	0.000000D+00	2.8010210986	0.000000D+00	2.5824563672	0.403585D-01	2.4360918985	0.618935D+00
36	-0.165441593616192357483379738538D-33	2.8778976776	0.000000D+00	2.8010210987	0.000000D+00	2.5824829952	-0.403838D-01	2.4360900836	-0.618938D+00
37	-0.441282694583426329548160002619D-34	2.8777835479	0.000000D+00	2.8010210986	0.000000D+00	2.5825030543	0.403864D-01	2.4360918029	0.618940D+00
38	-0.121745123173042600223632860134D-34	2.8777760386	0.000000D+00	2.8010210994	0.000000D+00	2.5824996019	0.403744D-01	2.4360924681	0.618938D+00
39	-0.346476870957716397994888676539D-35	2.8777760386	0.000000D+00	2.8010211010	0.000000D+00	2.5824954292	-0.403744D-01	2.4360920775	-0.618937D+00
40	-0.101515791271210199454347264631D-35	2.8777760386	0.000000D+00	2.8010210986	0.000000D+00	2.5825197544	-0.403593D-01	2.4361014436	-0.618931D+00

Oscillator quantum numbers nx ny nz = 1 0 1

k	coefficients	Quadratic (delta=1)	(delta=2^2)	(delta=3^2)	(delta=5^2)			
0	0.320000000000000000000000000000D+01	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00			
1	-0.197291533341819247195117551063D-01	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00			
2	-0.583301200834568990231722524373D-03	3.1796502733	0.000000D+00	3.1085509956	0.000000D+00			
3	-0.320248945264940549056500051803D-04	3.1796531417	0.000000D+00	3.1088790779	0.000000D+00			
4	-0.228256181398476394145017135395D-05	3.1796530368	0.000000D+00	3.1088252671	0.000000D+00			
5	-0.188667805854272170374344619110D-06	3.1796530306	0.000000D+00	3.1088099646	0.000000D+00			
6	-0.171819576338677767238703322413D-07	3.1796530303	0.000000D+00	3.1088060599	0.000000D+00			
7	-0.167694139932173527583811056340D-08	3.1796530303	0.000000D+00	3.1088054483	0.000000D+00			
8	-0.172509635075267531251765648377D-09	3.1796530303	0.000000D+00	3.1088053932	0.000000D+00			
9	-0.18506708273888349247534756510D-10	3.1796530303	0.000000D+00	3.1088053821	0.000000D+00			
10	-0.205577027401409394999275592815D-11	3.1796530303	0.000000D+00	3.1088053789	0.000000D+00			
11	-0.235315189327659402647345248801D-12	3.1796530303	0.000000D+00	3.1088053706	0.000000D+00			
12	-0.276657799317783555745638724241D-13	3.1796530303	0.000000D+00	3.1088053723	0.000000D+00			
13	-0.333391171956970555455369095734D-14	3.1796530303	0.000000D+00	3.1088053721	0.000000D+00			
14	-0.411336880770316062627664129850D-15	3.1796530303	0.000000D+00	3.1088053718	0.000000D+00			
15	-0.519454217325183511741884928416D-16	3.1796530303	0.000000D+00	3.1088053713	0.000000D+00			
16	-0.671754438006593510957543785851D-17	3.1796530303	0.000000D+00	3.1088053708	0.000000D+00			
17	-0.890674471761684493228033782207D-18	3.1796530303	0.000000D+00	3.1088053702	0.000000D+00			
18	-0.121317113336550299655804488163D-18	3.1796530303	0.000000D+00	3.1101374089	0.000000D+00			
19	-0.170204374715371165085272680723D-19	3.1796530303	0.000000D+00	3.1107107803	0.000000D+00			
20	-0.246759937234116002813069271266D-20	3.1796530303	0.000000D+00	3.1099280109	0.000000D+00			
21	-0.371036461176244908071765558681D-21	3.1796530303	0.000000D+00	3.1092027100	0.000000D+00			
22	-0.580784197507308489616598653659D-22	3.1796530303	0.000000D+00	3.1090282532	0.000000D+00			
23	-0.949603056178568339953876473843D-23	3.1796530303	0.000000D+00	3.1088762550	0.000000D+00			
24	-0.162605099260604030438015308744D-23	3.1796530303	0.000000D+00	3.1088326065	0.000000D+00			
25	-0.292037001265345390386636315871D-24	3.1796530303	0.000000D+00	3.1088053697	0.000000D+00			
26	-0.550234943331302012329671786869D-25	3.1796530303	0.000000D+00	3.1088053695	0.000000D+00			
27	-0.108655325197953074719013252491D-25	3.1796530303	0.000000D+00	3.1088059317	0.000000D+00			
28	-0.2244660401878343064717123344811D-26	3.1796530303	0.000000D+00	3.1088089439	0.000000D+00			
29	-0.483984959292368317206732723032D-27	3.1796530303	0.000000D+00	3.1088053711	0.000000D+00			
30	-0.108644878563218652083496878407D-27	3.1799555807	0.000000D+00	3.1088053704	0.000000D+00			
31	-0.253299647209766995239856328320D-28	3.1796530303	0.000000D+00	3.1088053710	0.000000D+00			
32	-0.612007481676965217703480200111D-29	3.1796530303	0.000000D+00	3.1088053715	0.000000D+00			
33	-0.152947844366568448583653391229D-29	3.1796530303	0.000000D+00	3.1088053711	0.000000D+00			
34	-0.394710108994354230231578441798D-30	3.1796530303	0.000000D+00	3.1088053680	-0.354444D-08			
					2.9076188919	-0.527258D-01	2.7981369367	-0.546292D+00

artial separability approximation yz-x, 41 coefficients

35	-0.105038061246598346648974364476D-30	3.1797035228	0.000000D+00	3.1088053720	0.000000D+00	2.9078700906	0.525999D-01	2.7981275884	0.546296D+00
36	-0.287883898284821741894816268190D-31	3.1796574293	0.000000D+00	3.1088053714	0.000000D+00	2.9078828471	-0.525733D-01	2.7981277484	-0.546303D+00
37	-0.811755380543499970989862109183D-32	3.1796532663	0.000000D+00	3.1088053706	0.446038D-09	2.9078672819	0.525574D-01	2.7981334967	0.546300D+00
38	-0.2352264788993101569694346523784D-32	3.1796530303	0.000000D+00	3.1088053717	0.000000D+00	2.9078611617	0.525754D-01	2.7981312835	0.546297D+00
39	-0.700229384548765576845754581284D-33	3.1796530303	0.000000D+00	3.1088053711	0.576269D-09	2.9078546680	0.525629D-01	2.7981344833	0.546296D+00
40	-0.213862988802151438851238146724D-33	3.1796530303	0.000000D+00	3.1088053714	-0.876563D-09	2.9077969671	-0.525255D-01	2.7981273061	-0.546306D+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	0.380000000000000000000000000000D+01	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00
1	-0.409821445747390349823299074265D-01	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00
2	-0.167708584805587527060880475650D-02	3.7571876305	0.000000D+00	3.2992694692	0.344452D+00
3	-0.132931431739928008062524602167D-03	3.7571930108	0.000000D+00	3.2779733578	-0.348906D+00
4	-0.135190892988976974838820630285D-04	3.7571925537	0.000000D+00	3.2969660553	-0.329636D+00
5	-0.159303664817193479343451432078D-05	3.7571924869	0.000000D+00	3.3427823971	-0.223666D+00
6	-0.206424084445751332067064893413D-06	3.7571924863	0.000000D+00	3.3648146386	0.173822D+00
7	-0.286237029375527869412675338434D-07	3.7571924860	0.000000D+00	3.2577525170	0.281922D+00
8	-0.417695716456288385096467541763D-08	3.7571924860	0.000000D+00	3.2503984741	0.284939D+00
9	-0.634525352440879816125412351774D-09	3.7571924860	0.000000D+00	3.2522805518	-0.289325D+00
10	-0.995997994370689605481134229185D-10	3.7571924860	0.000000D+00	3.2520039520	-0.289168D+00
11	-0.160690632112063347083168971715D-10	3.7571924860	0.000000D+00	3.2487847186	-0.289998D+00
12	-0.265442844102011918240091332993D-11	3.7571924860	0.000000D+00	3.5935614954	0.000000D+00
13	-0.447674023279634897337249225986D-12	3.7571924860	0.000000D+00	3.6252568133	0.000000D+00
14	-0.769208244000576934330065343830D-13	3.7571924860	0.000000D+00	3.6177885432	0.000000D+00
15	-0.134443795812418711333673998399D-13	3.7571924860	0.000000D+00	3.5955201800	0.000000D+00
16	-0.238764215358802883558761262389D-14	3.7571924860	0.000000D+00	3.5999985728	0.000000D+00
17	-0.430533372310886518643866926560D-15	3.7571924860	0.000000D+00	3.6011131645	0.000000D+00
18	-0.787899312029314090697036333390D-16	3.7571924860	0.000000D+00	3.6079717626	0.000000D+00
19	-0.146320483667966043887094109259D-16	3.7571924860	0.000000D+00	3.5935590500	0.000000D+00
20	-0.275787262267240082941549107213D-17	3.7571924860	0.000000D+00	3.5935426595	0.000000D+00
21	-0.527787270148751677513552687757D-18	3.7571924860	0.000000D+00	3.5935597338	-0.824781D-04
22	-0.102625650135224371183923441879D-18	3.7571924860	0.000000D+00	3.5957293647	0.000000D+00
23	-0.202944227310122038558332788428D-19	3.7571924860	0.000000D+00	3.5955086327	0.000000D+00
24	-0.408643480229753134150695138663D-20	3.7571924860	0.000000D+00	3.5935554781	0.000000D+00
25	-0.839048651607386764202141854695D-21	3.7571924860	0.000000D+00	3.5935416497	0.000000D+00
26	-0.175962993928484446048809353756D-21	3.7571924860	0.000000D+00	3.5935508937	0.000000D+00
27	-0.377597049939456773430195501546D-22	3.7571924860	0.000000D+00	3.5935578584	0.000000D+00
28	-0.830651334177533743804904184987D-23	3.7571924860	0.000000D+00	3.5935565427	0.000000D+00
29	-0.187665229829952106752119516542D-23	3.7571924860	0.000000D+00	3.5936108900	0.000000D+00
30	-0.436159124831967753954437071322D-24	3.7571924860	0.000000D+00	3.5935842465	0.000000D+00
31	-0.104424040175897069246273044221D-24	3.7571924860	0.000000D+00	3.5935569491	0.000000D+00
32	-0.25780002788849169864827314228D-25	3.7571924860	0.000000D+00	3.5935526807	-0.344517D-05
33	-0.656649617420856032256413931640D-26	3.7571924860	0.000000D+00	3.593597021	0.647525D-05
34	-0.172583832582131908713584111079D-26	3.7571924860	0.000000D+00	3.5935794988	0.000000D+00
35	-0.467900768092006822499204458211D-27	3.7578178881	0.000000D+00	3.5935569950	0.348115D-05
36	-0.130775128104085656967294306986D-27	3.7572828055	0.000000D+00	3.5935598898	-0.435447D-05
37	-0.376483683397715311399066125609D-28	3.7571924860	0.000000D+00	3.5935603243	0.365700D-05
38	-0.111530088633029150601159447530D-28	3.7571924860	0.000000D+00	3.5935599834	0.347224D-05
39	-0.339638721343059803307413886040D-29	3.7571924860	0.000000D+00	3.5935604317	0.352538D-05
40	-0.106213924720087286093214250314D-29	3.7571924860	0.000000D+00	3.5935610639	-0.331224D-05

Oscillator quantum numbers nx ny nz = 0 2 0

k	coefficients	Quadratic (delta=1)	(delta=2^2)	(delta=3^2)	(delta=5^2)
0	0.410000000000000000000000000000D+01	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00

artial separability approximation yz-x, 41 coefficients

1	-0.572448290631116137936331388574D-01	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00	0.0000000000	0.000000D+00
2	-0.253781253678333201604214675192D-02	4.0399638294	0.000000D+00	3.8024592416	0.000000D+00	3.4543710564	0.498421D+00	3.4543710564	0.119629D+01
3	-0.210895441524446062380763053762D-03	4.0399816671	0.000000D+00	3.8058952546	0.000000D+00	3.3986827120	-0.518547D+00	3.4644073756	-0.130736D+01
4	-0.220769348980898746480799388268D-04	4.0399814173	0.000000D+00	3.8056703432	0.000000D+00	3.4065881335	-0.507802D+00	3.4252314000	-0.129200D+01
5	-0.259721577374105342204340301133D-05	4.0399814108	0.000000D+00	3.8056424075	0.000000D+00	3.4071450560	-0.503544D+00	3.3998154053	-0.130141D+01
6	-0.324505856607554908945225311934D-06	4.0399813902	0.000000D+00	3.8056049754	0.000000D+00	3.3990720164	-0.497656D+00	3.4334755968	-0.133129D+01
7	-0.415122708564139741793393501008D-07	4.0399814168	0.000000D+00	3.8062548444	0.000000D+00	3.3724501327	0.461536D+00	3.4549640839	0.141553D+01
8	-0.526390572425516330928399106649D-08	4.0399814168	0.000000D+00	3.8062184112	0.000000D+00	3.3687088782	0.459658D+00	3.4671449757	0.141666D+01
9	-0.634400345780534115725339527062D-09	4.0399814168	0.000000D+00	3.8062178697	0.000000D+00	3.3685451147	-0.459653D+00	3.4677389770	-0.141625D+01
10	-0.667691063448478627803403393008D-10	4.0399814168	0.000000D+00	3.8062151946	0.000000D+00	3.3676035387	0.461132D+00	3.4625981448	0.141140D+01
11	-0.445499857264692894241752112172D-11	4.0399814168	0.000000D+00	3.8061922365	0.000000D+00	3.4512879825	0.321549D+00	3.5039706908	0.145816D+01
12	0.451093064228584424839321695134D-12	4.0399814168	0.000000D+00	3.8058344997	0.000000D+00	3.3723453608	0.465948D+00	3.4258143916	0.141683D+01
13	0.294080512780494210867713522569D-12	4.0399814168	0.000000D+00	3.8061498142	0.000000D+00	3.3738634456	0.458946D+00	3.4587383609	0.142191D+01
14	0.895952382054330547918883711041D-13	4.0399814168	0.000000D+00	3.8061500834	0.000000D+00	3.3728569443	-0.458532D+00	3.4548169220	-0.141363D+01
15	0.224556837567548769763140155552D-13	4.0399814168	0.000000D+00	3.8061472627	0.000000D+00	3.3771891508	0.460915D+00	3.4658412168	0.144337D+01
16	0.512467576881166247127411710085D-14	4.0399814168	0.000000D+00	3.8135264753	0.000000D+00	3.3716395942	0.457587D+00	3.4573704977	0.141763D+01
17	0.110350402015912932173966521833D-14	4.0399814168	0.000000D+00	3.8512250612	0.000000D+00	3.3730702341	0.458320D+00	3.4595365374	0.142259D+01
18	0.227648342688396554346530987648D-15	4.0399814168	0.000000D+00	3.8514293808	0.000000D+00	3.3730741369	-0.458318D+00	3.4595517590	-0.142257D+01
19	0.452722001480990044347611525750D-16	4.0399814168	0.000000D+00	3.8287417333	0.000000D+00	3.3724063374	-0.459149D+00	3.4547639151	-0.143739D+01
20	0.868469746144690293069881568962D-17	4.0399814168	0.000000D+00	3.8290032993	0.000000D+00	3.3724421065	0.459105D+00	3.4559143749	0.143383D+01
21	0.159985598425012097765931107758D-17	4.0399814168	0.000000D+00	3.8067238181	0.000000D+00	3.3742444784	0.456176D+00	3.4589508354	0.141926D+01
22	0.279696982558259084035929965249D-18	4.0399814168	0.000000D+00	3.8061816812	0.000000D+00	3.3736773474	-0.457096D+00	3.4584868016	-0.142128D+01
23	0.451918288439229826755499534743D-19	4.0399814168	0.000000D+00	3.8068406863	0.000000D+00	3.3739544601	0.457227D+00	3.4601785860	0.142062D+01
24	0.630693546157875607953248447905D-20	4.0399814168	0.000000D+00	3.8061658372	0.000000D+00	3.3755868436	-0.454961D+00	3.4597319509	-0.141949D+01
25	0.584754743009736292088723000803D-21	4.0399814168	0.000000D+00	3.8061733621	0.000000D+00	3.3739296685	0.458203D+00	3.4628785437	0.142096D+01
26	-0.487722463985404795739239561279D-22	4.0399814168	0.000000D+00	3.8061743434	0.000000D+00	3.3739368593	0.458154D+00	3.4625630509	0.142091D+01
27	-0.503018946726662710778192796205D-22	4.0399814168	0.000000D+00	3.8061735512	0.000000D+00	3.3740031110	0.458190D+00	3.4624789034	0.142045D+01
28	-0.200541426953621421118698185459D-22	4.0399814168	0.000000D+00	3.8061571693	0.000000D+00	3.3736673297	0.458126D+00	3.4630852821	0.142144D+01
29	-0.650992614829713310553158938079D-23	4.0399814168	0.000000D+00	3.8061765997	0.000000D+00	3.3738785206	0.458141D+00	3.4626681778	0.142104D+01
30	-0.193986863358450892084130049470D-23	4.0399814168	0.000000D+00	3.8061777724	0.000000D+00	3.3738509072	0.458172D+00	3.4628337730	0.142091D+01
31	-0.554946795114233231686680941931D-24	4.0399814168	0.000000D+00	3.8061782927	0.000000D+00	3.3738477950	-0.458205D+00	3.4628925597	-0.142052D+01
32	-0.155953225110403042932549228144D-24	4.0399814168	0.000000D+00	3.8061783621	0.000000D+00	3.3738804425	0.458192D+00	3.4626574110	0.142087D+01
33	-0.436656578732705590824046673977D-25	4.0399814168	0.000000D+00	3.8065243067	0.000000D+00	3.3740513274	-0.458292D+00	3.4618470380	-0.142072D+01
34	-0.122991395139605674779360424094D-25	4.0399814168	0.000000D+00	3.8067575814	0.000000D+00	3.3739772453	-0.458331D+00	3.4618533532	-0.141953D+01
35	-0.350893030617237047663839267075D-26	4.0399814168	0.000000D+00	3.8080633410	0.000000D+00	3.3737944452	-0.458481D+00	3.4622952767	-0.142331D+01
36	-0.101890111009573238792382901313D-26	4.0399814168	0.000000D+00	3.8066491951	0.000000D+00	3.3740359171	-0.458310D+00	3.4618143721	-0.142064D+01
37	-0.302085973202486836286904834206D-27	4.0399814168	0.000000D+00	3.8066180637	0.000000D+00	3.3741193868	0.458291D+00	3.4617802126	0.142120D+01
38	-0.916181430813091313728202176323D-28	4.0402385016	0.000000D+00	3.8062307416	0.000000D+00	3.3741100127	0.458150D+00	3.4623437341	0.142111D+01
39	-0.284482564528909830831468358965D-28	4.0399969194	0.000000D+00	3.8061846516	0.137671D-04	3.3739843836	-0.457878D+00	3.4630467881	-0.142007D+01
40	-0.904514317833856919152414368376D-29	4.0399947048	0.000000D+00	3.8061834479	0.129640D-04	3.3739637658	-0.457820D+00	3.4634412188	-0.141970D+01