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C6 trimer										C6-C5																										
isomer	neat	inf CDCl3	lambda	shift at s	13C label	inf C6D6	lambda	shift at s	assignment	ACD1	ChemDraw	isomer	neat	inf CDCl3	lambda	shift at s	assignment	ACD1	ChemDraw	neat	inf CDCl3	lambda	shift at s	assignment	ACD1	ChemDraw	increment	CB trimer	CB trimer*	CB-C6	increment					
C6-A	135.238	135.034	0.17	135.144075	1-13C	135.429	-0.028	135.355778	C ₁	133.75	133.0	C6-C5	neat	135.238	135.034	0.17	135.144075	1-13C	135.429	-0.028	135.355778	C ₁	133.75	133.0	-0.192	-0.1594	-0.1488	14.20-14.26	CB-A	neat	135.201	-0.037	0	135.201	-0.037	0
	130.248	129.961	0.24	130.11605	2-13C	130.518	-0.015	130.420088	C ₂	127.7	129																									
	43.626	43.178	0.233	43.697475	3-13C	43.66	0.041	43.697475	C ₃	43.62	43.3																									
	40.928	40.41	0.245	40.917275	4-13C	41.031	0.031	41.020745	C ₄ (CH)	43.08	40.6																									
	38.144	37.733	0.213	37.825075	5-13C	38.229	0.102	38.225455	C ₅	38.05	37.5																									
	35.518	35.089	0.226	35.290065	6-13C	35.625	0.071	35.6037025	C ₆	34.95	35.5																									
	32.607	32.258	0.202	32.426105	7-13C	32.692	0.06	32.67599	C ₇	32.75	33.7																									
	32.209	31.94	0.205	32.1091375	8-13C	32.204	0.096	32.114444	C ₈	32.17	32.1																									
	30.331	30.014	0.206	30.171815	9-13C	30.621	0.02	30.45905	C ₉ (CH)	30.67	31.1																									
	29.991	29.544	0.217	29.7214675	10-13C	30.047	0.059	30.0124725	C ₁₀	29.53	29.7																									
	29.642	29.279	0.204	29.45246	11-13C	29.929	0.079	29.7165225	C ₁₁	29.17	29.3																									
	23.318	23.013	0.19	23.162975	12-13C	23.451	0.092	23.42038	C ₁₂	23.06	23.1																									
	23.133	22.827	0.181	22.979275	13-13C	23.29	0.091	23.259125	C ₁₃	22.93	23																									
	22.411	22.109	0.189	22.257675	14-13C	22.495	0.108	22.450171	C ₁₄	22.1	22.8																									
	19.383	19.253	0.055	19.3110125	1-13C	19.513	-0.033	19.4599925	C ₁	20.44	21.4																									
	14.283	14.172	0.049	14.2219975	2-13C	14.99905			C ₂	14.4	14.1																									
	14.255	14.143	0.059	14.1995225	3-13C	4.98925			C ₃	14	14.1																									
	14.044	13.938	0.061	13.9889775	4-13C	14.127	0.016	14.101159	C ₄	13.8	14.2																									
C6-A'	135.558	135.366	0.173	135.485558	1-13C	135.791	-0.03	135.702625	C ₁	133.75	133.0	C6-A'	neat	135.558	135.366	0.173	135.485558	1-13C	135.791	-0.03	135.702625	C ₁	133.75	133.0	-0.2126	-0.1755	-0.1541	14.20-14.26	CB-A'	neat	135.524	-0.034	0	135.524	-0.034	0
	130.507	129.71	0.213	129.862408	2-13C	130.241	-0.037	130.150083	C ₂	127.7	129																									
	43.965	43.487	0.227	43.759425	3-13C	43.987	0.057	43.922975	C ₃	43.62	43.3																									
	40.781	40.257	0.241	40.495275	4-13C	40.885	0.023	40.853825	C ₄ (CH)	43.08	40.6																									
	36.103	35.857	0.22	35.99315	5-13C	36.265	0.082	36.226995	C ₅	35.65	37.5																									
	35.763	35.254	0.216	35.47779	6-13C	35.825	0.054	35.812095	C ₆	34.95	35.5																									
	32.65	32.294	0.201	32.4643275	7-13C	32.737	0.062	32.720855	C ₇	32.75	33.7																									
	32.325	31.94	0.2	32.12025	8-13C	32.324	0.09	32.344825	C ₈	32.17	32.1																									
	30.267	29.927	0.201	30.0917275	9-13C	30.423	0.02	30.37295	C ₉ (CH)	30.67	31.1																									
	29.823	29.457	0.216	29.63424	10-13C	29.965	0.06	29.92895	C ₁₀	29.53	29.7																									
	29.436	29.056	0.202	29.23495	11-13C	29.816	0.086	29.507965	C ₁₁	29.17	29.3																									
	23.377	23.039	0.177	23.197975	12-13C	23.482	0.09	23.465725	C ₁₂	23.08	23.1																									
	23.142	22.85	0.178	22.96286	13-13C	23.301	0.07	23.261275	C ₁₃	22.93	23																									
	22.454	22.149	0.186	22.280865	14-13C	22.536	0.107	22.5316425	C ₁₄	22.1	22.8																									
	20.633	20.422	0.062	20.509965	1-13C	20.737	-0.01	20.698325	C ₁	20.44	21.4																									
	14.293	14.18	0.055	14.232025	2-13C	5.00255			C ₂	14.4	14.2																									
	14.254	14.147	0.061	14.1983275	3-13C	4.9889			C ₃	14	14.1																									
	14.064	13.938	0.059	13.9955225	4-13C	14.146	0.016	14.122094	C ₄	13.8	14.1																									
C6-B	135.484	135.503	0.178	135.50845	1-13C	135.798	-0.024	135.65964	C ₁	138.4	133.0	C6-B	neat	135.484	135.503	0.178	135.50845	1-13C	135.798	-0.024	135.65964	C ₁	138.4	133.0	-0.1816	-0.1193	-0.1127	14.20-14.26	CB-B	neat	135.393	-0.091	0	135.393	-0.091	0
	130.319	129.907	0.2	129.922075	2-13C	129.56	-0.066	129.47428	C ₂	124.6	129																									
	44.485	43.983	0.217	44.230675	3-13C	44.484	0.071	44.5050225	C ₃	43.62	43.3																									
	36.563	36.276	0.206	36.42315	4-13C	36.889	0.085	36.8542375	C ₄	35.62	37.5																									
	36.062	35.586	0.219	35.8129225	5-13C	36.143	0.069	36.1408475	C ₅	34.95	35.5																									
	35.012	34.673	0.215	34.8405225	6-13C	34.896	0.07	35.1253925	C ₆ (CH)	43.08	40.6																									
	32.561	32.19	0.207	32.3669425	7-13C	32.58	0.086	32.562915	C ₇	31.95	32.1																									
	30.627	30.301	0.205	30.4617375	8-1																															

22.78	22.526	0.181	22.688775	22.874	0.084	22.86301	C ₁	22.53	23.1	13.994	13.9182	0.054	13.957015	14.06599	0.04023	14.0499458	C ₁	13.87	14.5	8.794	8.6078	8.80801	a	29.463	6.675	ff				
14.274	14.171	0.062	14.22155			4.9959	C ₂	14.3	14.1																32.333	18.059	uf			
14.239	14.12	0.056	14.17439			4.98365	C ₃	14.05	14.1																32.308	18.069	uf			
14.14	14.02	0.072	14.07838			14.205235	C ₄	13.99	14.2																32.261	18.121	uf			
C6-D	152.171	153.132	0.299	152.86373	2 ⁻¹⁰	152.891	-0.062	152.62717	C ₁	152.81	151.2			152.816	0.1604	152.439991	C ₁	152.81	148.8			0.1728	0.2442	0.2694	ac	CB-D	152.125	-0.046	e	
	109.168	108.382	0.05	108.668475	1 ⁻¹⁰	109.217	-0.081	109.179148	C ₂	107.3	111.8			109.251	-0.0244	109.243521	C ₂	107.3	111.8			-0.0957	-0.0961	-0.0351	f		109.139	-0.029	d	
	44.485	44.098	0.233	44.2884575	2 ⁻¹⁰	44.651	0.045	44.6013379	C ₃ (CH)	46.46	42.3			44.40319	0.1029	44.4032003	C ₃ (CH)	46.46	42.3			0.14918	0.2277	0.24781	ac		44.445	-0.04	e	
	42.633	42.253	0.218	42.435955	1 ⁻¹⁰	42.695	0.03	42.680125	C ₄	33.4	31.5			42.6818	0.0568	42.6202562	C ₄	33.4	40.8			0.02866	0.0556	0.1132	ac		42.563	-0.07	d	
	36.547	36.279	0.207	36.4469225		36.671	0.082	36.4462255	C ₅	36.43	40.8			39.2865	0.12966	39.3145275	C ₅	39.15	40.8			-2.73455	-2.6728	-2.6155	y		36.796	0.249	ac	
	34.063	33.613	0.206	33.817365		34.162	0.026	34.126765	C ₆	33.4	33			36.66147	0.06182	36.6924951	C ₆	31.8	35.9			-2.64693	-2.5874	-2.50947	y		34.365	0.302	ac	
	32.419	32.253	0.184	32.32596		32.507	-0.016	32.53756	C ₇	33.64	37.5			34.99665	0.0736	34.9972605	C ₇	35.16	37.3			-2.526	-2.4775	-2.39265	y		32.691	0.272	ac	
	30.514	30.212	0.207	30.3647925	2 ⁻¹⁰	30.675	0.016	30.62229	C ₈ (CH)	30.36	30			30.36492	0.08628	30.3594749	C ₈ (CH)	30.36	31.1			0.22072	0.2937	0.31008	ac		30.426	-0.088	e	
	30.444	30.1	0.196	30.26499		30.504	0.051	30.4946025	C ₉ (CH)	30.43	31.4			21.27917	0.0835	21.3307663	C ₉	20.49	21.7			9.16793	9.1518	9.16383	p		28.01	-2.434	ac	
	30.013	29.119	0.225	29.311375		30.165	0.043	30.024595	C ₁₀	29	29.9			20.87299	0.0763	20.9197203	C ₁₀	20.57	20.9			9.14401	9.1378	9.16893	p		27.684	-2.319	ac	
	29.533	29.142	0.203	29.321525		29.598	0.094	29.593135	C ₁₁	29.2	29.2			20.39684	0.0927	20.3881708	C ₁₁	19.61	20.2			9.21137	9.1859	9.20106	p		27.176	-2.347	ac	
	23.341	23.084	0.227	23.212925		23.493	0.08	23.458	C ₁₂ (a)	23	23.1			14.88959	0.05834	14.8456339	C ₁₂	14.22	14.5			8.78192	8.8242	8.80741	ac		30.013	6.672	ff	
	23.199	22.911	0.181	23.029775		23.346	0.078	23.312295	C ₁₃ (a)	22.97	23			14.53345	0.05557	14.5055342	C ₁₃	13.38	14.8			8.78143	8.8204	8.81295	ac		29.957	6.758	ff	
	23.053	22.776	0.184	22.91481		23.215	0.082	23.184455	C ₁₄ (a)	22.87	23			14.31057	0.0561	14.266453	C ₁₄	14.19	14.4			8.74749	8.7972	8.76882	ac		29.722	6.699	ff	
	20.517	20.311	0.088	20.396295	1 ⁻¹⁰	20.606	-0.02	20.5703	C ₁₅	19.61	21.4			20.47239	0.01827	20.5023904	C ₁₅	19.96	21.4			0.04461	0.0619	0.09385	e		20.522	0.005	0	
	14.287	14.175	0.057	14.2271675				5.00045	C ₁₆	14.4	14.2														32.333	18.046	uf			
	14.223	14.117	0.059	14.1675225		14.371	0.005	14.3203375	C ₁₇	14.3	14.1														32.308	18.085	uf			
	14.214	14.102	0.053	14.1532975		14.299	0.014	14.272435	C ₁₈	14.17	14.1														32.294	18.08	uf			
C6-D'	151.525	152.448	0.277	152.187968	2 ⁻¹⁰	152.228	-0.058	151.968795	C ₁	152.27	151.1			151.961	0.1305	151.779219	C ₁	152.27	148.8			0.1682	0.2732	0.287	ac	CB-D'	151.453	-0.072	e	
	109.571	108.81	0.068	109.09182	1 ⁻¹⁰	109.622	-0.068	109.589135	C ₂	107.3	111.8			109.623	-0.0094	109.625794	C ₂	107.3	111.8			-0.0966	-0.0769	0.0007	f		109.579	0.008	0	
	44.937	44.549	0.243	44.740025	2 ⁻¹⁰	45.078	0.058	45.041845	C ₃ (CH)	46.46	42.3			44.762	0.1043	44.7662823	C ₃ (CH)	46.46	42.3			0.229	0.2918	0.316	ac		44.948	0.011	e	
	41.875	41.48	0.22	41.6683	1 ⁻¹⁰	41.918	0.003	41.8919325	C ₄	33.4	31.5			41.825	0.0287	41.8437975	C ₄	33.4	40.8			0.0063	0.0291	0.0875	ac		41.8	-0.075	0	
	38.111	37.686	0.218	37.884345		38.179	0.106	38.179315	C ₅	36.43	40.8			40.8333	0.04353	0.181	40.563775	C ₅	39.15	40.8			-2.7223	-2.6663	-2.6001	y		38.378	0.267	ac
	34.91	34.517	0.209	34.702975		35.018	0.051	34.9918025	C ₆	33.4	33			37.53994	0.097	37.5767005	C ₆	31.8	35.9			-2.67012	-2.592	-2.52194	y		35.165	0.255	ac	
	31.565	31.366	0.184	31.47751		31.749	0.035	31.692625	C ₇	33.64	37.5			34.1729	0.09122	34.2250475	C ₇	35.16	37.3			-2.6079	-2.5448	-2.4722	y				ac	
	30.493	30.17	0.195	30.327425	2 ⁻¹⁰	30.515	0.149	30.5411975	C ₈ (CH)	30.36	30			30.2774	0.05288	30.2903905	C ₈ (CH)	30.36	31.1			0.32969	0.299	0.2376	a		30.478	-0.015	e	
	30.342	30.085	0.266	30.222455		30.415	-0.083	30.3705975	C ₉	30.43	31.4			21.26873	0.0205	21.2971646	C ₉	20.49	21.3			9.14503	9.1681	9.16227	p		27.979	-2.353	ac	
	30.154	29.844	0.175	29.982125		30.282	-0.039	30.2393275	C ₁₀	30	29.9			21.12332	0.06637	21.0732602	C ₁₀	20.57	20.9			9.18042	9.1702	9.17989	p		27.862	-2.292	ac	
	29.615	29.2404	0.199	29.4167625		29.673	0.065	29.6674875	C ₁₁	29.2	29.2			20.49847	0.07629	20.47762	C ₁₁	19.61	20.2			9.20897	9.1667	9.18353	p		27.305	-2.31	ac	
	23.377	23.089	0.239	23.2441725		23.45	0.08	23.44265	C ₁₂	23	23.1			14.60208	0.0481	14.6092343	C ₁₂	14.22	14.5			8.85643	8.8547	8.80972	ac				ff	
	23.167	22.871	0.181	23.015775		23.316	0.081	23.2822775	C ₁₃ (a)	22.97	23			14.50756	0.02762	14.4680846	C ₁₃	13.38	14.5			8.79018	8.8261	8.80844	ac				ff	
	23.087	22.807	0.184	22.94686		23.159	0.073	23.1504075	C ₁₄ (a)	22.87	22.8			14.39722	0.01914	14.3819254	C ₁₄	14.19	14.4			8.74592	8.813	8.78178	ac				ff	
	19.872	19.516	0.05	19.61975	1 ⁻¹⁰	19.802	-0.024	19.75104	C ₁₅	19.61	21.4			19.7163	0.03566	19.6281055	C ₁₅	19.96	21.4			0.04482	0.0611	0.0857	e		19.684	0.012	0	
	14.272	14.172	0.057	14.2199675		14.393	0.01	14.352025	C ₁₆	14.4	14.2														32.333	18.061	uf			
	14.262	14.159	0.057	14.209175		14.382	0.01	14.342275	C ₁₇	14.3	14.1														32.32	18.058	uf			
	14.244	14.143	0.057	14.193175		14.308	0.01	14.287975	C ₁₈	14.17	14.1														32.308	18.064	uf			
C6-E	148.43	149.465	0.293	149.189408	2 ⁻¹⁰	149.204	-0.024	148.92784	C ₁	148.1	152.2			148.74425	0.15325	148.66481	C ₁	148.1	152.4			0.23533	0.3259	0.32975	a	CB-E	148.39	-0.04	e	
	110.762	110.066	0.026	110.326015	2 ⁻¹⁰	110.854	-0.133	110.802043	C ₂	111.64	107.8			110.973	-0.09108	110.940323	C ₂	111.3	107.8			-0.14684	-0.1436	-0.119	f		110.766	-0.026	0	
	39.91	39.626	0.199	39.776725	2 ⁻¹⁰	40.104	0.031	40.0431525	C ₃ (CH)	39.67	41.1			39.86168	0.10035	39.8447251	C ₃ (CH)	39.67	40.8			0.16199	0.2242	0.24232	ac		39.791	-0.119	e	
	37.187	36.889	0.176	37.03334	1 ⁻¹⁰	37.348	0.015	37.2950225	C ₄	41.34	40.3			37.30211	0.06662	37.2885241	C ₄	41.34	40.3			-0.03259	-0.0006	0.04589	ac		37.153	0.034	0	
	35.583	35.338	0.219	35.4793225		35.764	0.027	35.7607925	C ₅ (CH)	36.16	37.3			38.12848	0.08824	38.1327973	C ₅	36.83	37.6			-2.50404	-2.44963	-2.36249	y		35.848	-0.265	ac	
	33.892	33.53	0.192	33.70038	2 ⁻¹⁰	34.023	0.018	33.981245	C ₆ (CH)	35.87	37.3			33.63138	0.09626	33.6968671	C ₆ (CH)	35.87	40.9			0.26062	0.3028	0.32457	ac		33.873	-0.019	e</	

ca 23	#VALUE!	#VALUE!	#VALUE!	C ₁	22.7	23	ca 14	#VALUE!	#VALUE!	C ₁₁	14.16	14.4	#VALUE!	0	0	a	Fr																			
ca 23	#VALUE!	#VALUE!	#VALUE!	C ₂	22.87	23	ca 14	#VALUE!	#VALUE!	C ₁₂	14.3	14.4	#VALUE!	0	0	a	Fr																			
ca 23	#VALUE!	#VALUE!	#VALUE!	C ₃	22.12	22.8	ca 14	#VALUE!	#VALUE!	C ₁₃	13.8	14.2	#VALUE!	0	0	a	Fr																			
15.869	15.648	0.043	15.731325	1- ¹³ C	15.93	-0.033	15.9011425	15.848	15.629	0.031	15.7127025	15.86405	0.00139	15.8587487	C ₁₀	19.14	18.9	0.021	0.019	0.00956	ca	15.879	0.01	0												
ca 14	#VALUE!	#VALUE!	#VALUE!	C ₄	14.2	14.1	ca 14	#VALUE!	#VALUE!	C ₁₄	14.1	14.1	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!											
ca 14	#VALUE!	#VALUE!	#VALUE!	C ₅	13.72	14.2	ca 14	#VALUE!	#VALUE!	C ₁₅	13.72	14.2	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!											
ca 14	#VALUE!	#VALUE!	#VALUE!	C ₆	14.1	14.1	ca 14	#VALUE!	#VALUE!	C ₁₆	14.1	14.1	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!											
C8-F	120.285	130.305	0.212	130.34623	2- ¹³ C	130.681	-0.113	130.516893	C ₁	131.36	130.6	C5-F	130.14	130.113	0.191	130.165903	130.41	0.08	130.3337	C ₁₁	132	128	0.145	0.192	0.271	a	Fr									
129.416	129.505	0.184	129.61473	1- ¹³ C	129.787	0.019	129.661473	C ₂	129.31	128.6	129.8005	0.14	129.785629	C ₁₂	129.31	128.7	129.8005	0.14	129.785629	C ₁₂	129.31	128.7	-0.251	-0.194	-0.0135	e ⁺	Fr	129.353	-0.063	0						
43.323	43.014	0.255	43.1801625	2- ¹³ C	43.5	-0.004	43.43714	C ₁₃ (CH)	39.57	43.6	43.134	42.787	0.186	42.95076	C ₁₃ (CH)	39.57	43.3	43.20042	0.07036	43.194449	C ₁₃ (CH)	39.57	43.3	0.189	0.227	0.29958	ca	43.272	-0.051	e						
34.186	33.795	0.184	34.23981	1- ¹³ C	34.52	0.046	34.22915	C ₁₄	36.13	35	36.218	36.218	0.198	36.30945	C ₁₄	36.83	37.6	36.866	0.106	36.90945	C ₁₄	36.83	37.6	-2.449	-2.453	-2.458	y	Fr	34.422	0.057	ca					
34.5	34.156	0.244	34.33191	2- ¹³ C	34.691	0.001	34.6048775	C ₁₅ (CH)	35.87	40.9	34.207	33.904	0.181	34.3087275	C ₁₅ (CH)	35.87	40.9	34.33191	0.10009	34.3308489	C ₁₅ (CH)	35.87	40.9	0.243	0.252	0.23209	ca	34.513	0.013	e						
32.241	31.87	0.164	32.03716	1- ¹³ C	32.241	0.11	32.2533	C ₁₆	27.9	32.5	34.683	34.129	0.149	34.319775	C ₁₆	27.9	32.5	34.462	0.066	34.519366	C ₁₆	27.9	32.5	-2.342	-2.269	-34.462	y	Fr								
32.213	31.85	0.193	32.0209575	2- ¹³ C	32.24	0.1	32.2533	C ₁₇	31.65	32.1	23.235	23.92	0.127	23.7091425	C ₁₇	31.65	32.1	23.235	0.127	23.7091425	C ₁₇	31.65	32.1	8.978	7.93	8.945	Fr									
29.316	28.99	0.13	29.133675	1- ¹³ C	29.455	0.101	29.4338775	C ₁₈	32.27	33.5	29.369	29.015	0.124	28.16711	C ₁₈	32.27	33.5	29.455	0.101	29.4338775	C ₁₈	32.27	33.5	-0.053	-0.025	-0.02662	e	Fr								
30.758	30.445	0.17	30.593225	2- ¹³ C	30.758	0.17	30.593225	C ₁₉	29.24	29.6	21.461	21.126	0.132	21.27328	C ₁₉	29.24	29.6	29.48802	0.07929	29.4597215	C ₁₉	29.24	29.6	9.297	9.319	0	Fr									
30.482	30.151	0.283	30.3347325	1- ¹³ C	30.482	0.283	30.3347325	C ₂₀	29.3	30	21.186	20.838	0.163	20.998825	C ₂₀	29.3	30	30.482	0.283	30.3347325	C ₂₀	29.3	30	9.306	9.313	0	Fr									
27.379	27.096	0.154	27.230085	2- ¹³ C	27.379	0.077	27.230085	C ₂₁	22.7	23	29.958	29.906	0.148	29.76287	C ₂₁	22.7	23	29.958	0.148	29.76287	C ₂₁	22.7	23	29.958	0.148	29.76287	Fr									
ca 23	#VALUE!	#VALUE!	#VALUE!	C ₂₂	22.7	23	ca 23	#VALUE!	#VALUE!	C ₂₂	22.7	23	ca 14	#VALUE!	#VALUE!	C ₂₂	22.7	23	29.974	0.1	7.4151	C ₂₂	20.42	20.9	#VALUE!	0	0	a	Fr							
ca 23	#VALUE!	#VALUE!	#VALUE!	C ₂₃	22.87	23	ca 23	#VALUE!	#VALUE!	C ₂₃	22.87	23	ca 14	#VALUE!	#VALUE!	C ₂₃	22.87	23	ca 14	#VALUE!	#VALUE!	C ₂₃	22.87	23	#VALUE!	0	0	a	Fr							
ca 23	#VALUE!	#VALUE!	#VALUE!	C ₂₄	22.12	22.8	ca 14	#VALUE!	#VALUE!	C ₂₄	22.12	22.8	ca 14	#VALUE!	#VALUE!	C ₂₄	22.12	22.8	ca 14	#VALUE!	#VALUE!	C ₂₄	22.12	22.8	#VALUE!	0	0	a	Fr							
15.728	15.56	0.047	15.6294925	1- ¹³ C	15.809	-0.052	15.768882	C ₂₅	19.14	18.6	15.805	15.48	0.049	15.5506475	C ₂₅	19.14	18.6	15.809	-0.052	15.768882	C ₂₅	19.14	18.6	15.80366	-0.03048	15.6546448	C ₂₅	19.14	18.9	0.078	0.08	0.12534	ca	15.732	0.004	0
ca 14	#VALUE!	#VALUE!	#VALUE!	C ₂₆	14.2	14.1	ca 14	#VALUE!	#VALUE!	C ₂₆	14.2	14.1	ca 14	#VALUE!	#VALUE!	C ₂₆	14.2	14.1	ca 14	#VALUE!	#VALUE!	C ₂₆	14.2	14.1	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!			
ca 14	#VALUE!	#VALUE!	#VALUE!	C ₂₇	13.72	14.2	ca 14	#VALUE!	#VALUE!	C ₂₇	13.72	14.2	ca 14	#VALUE!	#VALUE!	C ₂₇	13.72	14.2	ca 14	#VALUE!	#VALUE!	C ₂₇	13.72	14.2	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!			
ca 14	#VALUE!	#VALUE!	#VALUE!	C ₂₈	14.1	14.1	ca 14	#VALUE!	#VALUE!	C ₂₈	14.1	14.1	ca 14	#VALUE!	#VALUE!	C ₂₈	14.1	14.1	ca 14	#VALUE!	#VALUE!	C ₂₈	14.1	14.1	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!			
C6-G	131.239	131.19	0.174	131.246735	2- ¹³ C	131.592	-0.116	131.442206	C ₁	131.8	130.6	C5-G	131.301	130.991	0.197	131.074318	131.306	0.14496	131.267228	C ₁₁	131.8	128	0.138	0.199	0.286	a	Fr	131.227	-0.012	e						
130.121	130.03	0.12	130.08915	1- ¹³ C	130.402	0.014	130.306835	C ₂	128.31	128.6	130.341	130.205	0.182	130.294005	C ₁₂	130.542427	C ₁₂	128.7	128.7	130.7523	-0.28975	130.542427	C ₁₂	128.7	128.7	-0.22	-0.175	-0.3503	e ⁺	Fr	130.071	-0.05	0			
42.93	42.923	0.068	42.94092	2- ¹³ C	43.072	-0.015	43.0188875	C ₁₃ (CH)	39.57	43.6	42.738	42.733	0.18	42.5417	C ₁₃ (CH)	39.57	43.3	42.755	0.49132	42.860253	C ₁₃ (CH)	39.57	43.3	0.192	0.55	0.317	ca	42.88	-0.04	e						
33.96	33.563	0.28	33.76965	1- ¹³ C	34.074	0.043	34.0438225	C ₁₄	36.13	35	35.524	36.019	0.146	36.29986	C ₁₄	36.573	37.6	35.573	0.244	36.61136	C ₁₄	36.573	37.6	-2.564	-2.456	-2.499	y	Fr	34.204	-0.24	ca					
34.516	34.12	0.172	34.29773	2- ¹³ C	34.615	0.013	34.5833075	C ₁₅ (CH)	35.87	40.9	34.251	33.822	0.151	34.009825	C ₁₅ (CH)	35.87	40.9	34.251	0.151	34.009825	C ₁₅ (CH)	35.87	40.9	0.258	0.298	0.364	a	Fr	34.479	-0.037	e					
32.665	32.2	0.18	32.67815	1- ¹³ C	32.665	0.045	32.607815	C ₁₆	27.9	32.5	35.209	34.818	0.119	34.691625	C ₁₆	27.9	32.5	35.105	0.05	35.07375	C ₁₆	27.9	32.5	-2.644	-2.618	-2.52	y	Fr								
32.247	31.878	0.178	32.047645	2- ¹³ C	32.248	0.113	32.2733575	C ₁₇	32.26	32.1	33.257	32.797	0.151	32.846625	C ₁₇	32.26	32.1	33.205	-0.025	33.1701218	C ₁₇	32.26	32.1	9.12	9.081	9.043	Fr									
33.717	33.361	-0.109	33.494275	1- ¹³ C	33.849	-0.029	33.7960225	C ₁₈	32.27	39.5	33.564	33.151	0.148	33.32572	C ₁₈	32.27	39.5	33.859	0.31686	33.8243537	C ₁₈	32.27	39.5	0.163	0.21	-0.01	e	Fr								
30.827	30.471	0.17	30.634275	2- ¹³ C	30.988	0.005	30.892875	C ₁₉	29.24	29.6	21.414	21.069	0.128	21.21887	C ₁₉	29.24	29.6	21.174	0.1	21.28075	C ₁₉	29.24	29.6	9.413	9.402	9.854	Fr									
30.305	29.981	0.132	30.12443	1- ¹³ C	30.362	0.018	30.346145	C ₂₀	29.3	30	ca 21.1	#VALUE!	#VALUE!	C ₂₀	29.3	30	35.383	0.1	35.3921	C ₂₀	29.3	30	#VALUE!	29.981	30.362	Fr										
32.723	32.363	0.124	32.51721	2- ¹³ C	32.824	-0.011	32.7861475	C ₂₁	22.7	23	ca 14	#VALUE!	#VALUE!	C ₂₁	22.7	23	ca 14	#VALUE!	#VALUE!	C ₂₁	22.7	23	#VALUE!	0	0	a	Fr									
ca 23	#VALUE!	#VALUE!	#VALUE!	C ₂₂	22.7	23	ca 23	#VALUE!	#VALUE!	C ₂₂	22.7	23	ca 14	#VALUE!	#VALUE!	C ₂₂	22.7	23	ca 14	#VALUE!	#VALUE!	C ₂₂	22.7	23	#VALUE!	0	0	a	Fr							
ca 23	#VALUE!	#VALUE!	#VALUE!	C ₂₃	22.87	23	ca 23	#VALUE!	#VALUE!	C ₂₃	22.87	23	ca 14	#VALUE!	#VALUE!	C ₂₃	22.87	23	ca 14	#VALUE!	#VALUE!	C ₂₃	22.87	23	#VALUE!	0	0	a	Fr							
ca 23	#VALUE!	#VALUE!	#VALUE!	C ₂₄	22.12	22.8	ca 14	#VALUE!	#VALUE!	C ₂₄	22.12	22.8	ca 1																							

27.7154	27.37	27.49089	2- ¹³ C	9.70039	C ₁	27.29	27.5	27.745	27.346	0.175	130.625425	27.819	0.1	27.81585	C ₁	27.3	27.2	-0.0296	0.024	-27.819	δ	ε			
ca 23	#VALUE!	#VALUE!	#VALUE!	#VALUE!	C ₁	22.88	23	ca 14	#VALUE!	#VALUE!	C ₁	14.17	14.4	#VALUE!	0	0	α	β	γ	δ	ε				
ca 23	#VALUE!	#VALUE!	#VALUE!	#VALUE!	C ₁	22.83	22.7	ca 14	#VALUE!	#VALUE!	C ₁	14.15	14.1	#VALUE!	0	0	α	β	γ	δ	ε				
ca 14	#VALUE!	#VALUE!	#VALUE!	#VALUE!	C ₁	22.62	22.6	ca 14	#VALUE!	#VALUE!	C ₁	13.65	14.2	#VALUE!	0	0	α	β	γ	δ	ε				
ca 14	#VALUE!	#VALUE!	#VALUE!	#VALUE!	C ₁	14.13	14.1																		
ca 14	#VALUE!	#VALUE!	#VALUE!	#VALUE!	C ₁	14.05	14.1																		
ca 14	#VALUE!	#VALUE!	#VALUE!	#VALUE!	C ₁	13.9	14.2																		
C6-K	130.581	130.606	0.201	130.642978	2- ¹³ C	130.078	-0.114	130.813115	C ₁	131.35	130.5	130.736	-0.008	130.62533	C ₁	132	128	0.156	0.189	0.242	δ	C8-K	130.585	0.004	ε
128.298	128.399	0.226	128.415065	1- ¹³ C	128.692	0.006	128.555465	C ₁	130.05	128.6	128.859	0.193	128.791958	C ₁	130.05	128.7	-0.244	-0.208	-0.167	ε	128.215	-0.083	0		
38.437	38.085	0.22	38.292625	2- ¹³ C	38.573	0.036	38.53399	C ₁ (CH)	36.67	38.1	38.298	37.923	0.123	38.082235	C ₁ (CH)	36.67	37.8	0.139	0.162	0.249	δ	38.412	-0.025	ε	
31.802	31.298	0.19	31.379225	1- ¹³ C	31.722	-0.027	31.638975	C ₁	29.9	33.2	31.422	31.49729	0.099	31.419729	C ₁	35.3	33.2	-0.095	-0.09	0.3	ε	31.442	-0.06	0	
33.97	33.614	0.165	33.772625	1- ¹³ C	34.092	0.038	34.072645	C ₁	32.51	32.1	33.97968	0.07423	33.879643	C ₁	32.51	32.1	0.039	0.033	0.11214	ε ⁺	33.932	-0.038	0		
33.646	33.245	0.522	33.504105	1- ¹³ C	33.782	0.038	33.743045	C ₁	32.51	32.8	36.389	36.043	0.126	36.192765	C ₁	32.27	35.9	-2.743	-2.788	-2.922	γ	33.917	0.271	δ	
32.351	31.886	0.185	32.158375	1- ¹³ C	32.551	0.038	32.532875	C ₁	32.48	31.8	23.08	22.764	0.089	22.894475	C ₁	22.75	22.7	9.271	9.222	-23.134	β				
30.364	30.073	0.344	30.25311	1- ¹³ C	30.6274	0.038	30.6074	C ₁	31.63	32.1	21.236	20.932	0.09	21.058875	C ₁	22.7	23.3	9.128	9.141	0	β				
30.164	29.79	0.164	29.95821	1- ¹³ C	29.855	0.153	29.997975	C ₁	29.85	29.6	32.756	32.38	0.085	32.3059375	C ₁	32.2	32.1	-2.592	-2.59	-2.795	γ				
29.456	29.097	0.164	29.25986	1- ¹³ C	29.533	0.054	29.51936	C ₁	28.67	29.2	21.235	20.927	0.074	21.051935	C ₁	29.38	29.9	8.221	8.17	29.935	β				
27.179	26.807	0.197	26.982715	2- ¹³ C	27.297	0.069	27.271975	C ₁	27.29	27.5	26.501	26.338	0.095	26.5891625	C ₁	27.2	27.2	0.278	0.279	0.10358	ε	27.153	-0.028	γ	
27.409	27.114	0.139	27.248725	1- ¹³ C	27.584	0.008	27.524875	C ₁	25.78	27.2	29.794	29.508	0.083	29.6392575	C ₁	29.5	29.6	-2.365	-2.364	-2.2995	γ	27.66	0.251	δ	
ca 23	#VALUE!	#VALUE!	#VALUE!	#VALUE!	C ₁	22.88	23	ca 14	#VALUE!	#VALUE!	C ₁	14.17	14.4	#VALUE!	0	0	α	β	γ	δ	ε				
ca 23	#VALUE!	#VALUE!	#VALUE!	#VALUE!	C ₁	22.83	22.7	ca 14	#VALUE!	#VALUE!	C ₁	14.15	14.1	#VALUE!	0	0	α	β	γ	δ	ε				
ca 23	#VALUE!	#VALUE!	#VALUE!	#VALUE!	C ₁	22.11	22.8	ca 14	13.73	13.61	0.079	13.6699725	#REF!	C ₁	13.6	14.2	#VALUE!	-13.61	0	α	β	γ	δ	ε	
ca 14	#VALUE!	#VALUE!	#VALUE!	#VALUE!	C ₁	14.13	14.1																		
ca 14	#VALUE!	#VALUE!	#VALUE!	#VALUE!	C ₁	14.05	14.1																		
ca 14	#VALUE!	#VALUE!	#VALUE!	#VALUE!	C ₁	13.7	14.2																		
C6-L	135.165	135.184	0.186	135.219665	1- ¹³ C	135.454	-0.08	135.33465	C ₁	138.4	136.3	47.37145	C ₁	138.4	136.4	-0.182	-0.05	135.454	ε ⁺			C8-L	135.165	0.004	ε
129.7	129.644	0.198	129.691645	2- ¹³ C	129.963	-0.052	129.891245	C ₁	124.6	129	129.662	129.276	0.261	129.435478	C ₁	124.6	129.8	0.138	0.188	129.963	δ				
37.475	37.098	0.23	37.282275	2- ¹³ C	37.632	0.042	37.586605	C ₁ (CH)	43.19	37.1	37.347	36.931	0.185	37.118675	C ₁ (CH)	43.19	36.8	0.128	0.167	0.165	δ	37.485	0.01	ε	
36.488	35.992	0.218	36.215195	1- ¹³ C	36.311	0.126	36.216115	C ₁	34.95	35.2	38.857	38.379	0.043	38.5568225	C ₁	34.95	35.3	-2.369	-2.387	-2.79	γ	36.645	0.157	δ	
36.186	35.69	0.217	35.912975	1- ¹³ C	36.553	0.075	36.446125	C ₁	34.95	35.5	36.205	35.784	0.154	35.966385	C ₁	34.95	35.6	-0.019	-0.094	0.343	ε	36.177	-0.009	0	
30.228	29.872	0.293	30.062975	1- ¹³ C	30.383	0.01	30.331025	C ₁	32.26	30	30.014	29.709	-0.036	29.80758	C ₁	29.51	29.7	0.214	0.163	0.415	δ				
32.403	31.931	0.299	32.122975	1- ¹³ C	32.576	0.01	32.519775	C ₁	31.86	31.9	23.227	22.91	0.132	23.05998	C ₁	29.98	29.3	9.176	9.021	32.575	β				
32.552	32.166	0.201	32.338975	1- ¹³ C	32.736	0.01	32.432875	C ₁	31.86	31.8	23.41	23.012	0.275	23.138225	C ₁	27.74	27.2	9.122	9.154	32.378	β				
29.975	29.615	0.179	29.7817225	1- ¹³ C	30.104	0.01	30.061125	C ₁	29.53	29.7	20.819	20.484	0.151	20.6356225	C ₁	29	29.8	9.166	9.131	30.104	β				
29.794	29.373	0.204	29.56676	1- ¹³ C	29.874	0.01	29.848275	C ₁	29.16	29.3	32.334	31.909	0.146	32.090665	C ₁	31.94	31.8	-2.54	-2.536	29.874	γ				
27.781	27.45	0.197	27.610675	1- ¹³ C	27.942	0.015	27.8906225	C ₁	27.47	27.7	30.54	30.154	-0.159	30.2592275	C ₁	29.43	30.2	-2.759	-2.704	27.942	γ				
27.77	27.39	0.219	27.5728225	1- ¹³ C	27.926	0.039	27.8802725	C ₁	28.32	27.5	27.862	27.5	0.261	27.627775	C ₁	28.32	27.6	-0.082	-0.11	-0.132	ε				
23.298	22.933	0.244	23.11628	1- ¹³ C	23.397	0.01	23.364625	C ₁	23.06	23.1	ca 14	#VALUE!	C ₁	14.1	14.5	na	na	22.933	23.397	α	β				
22.97	22.694	0.245	22.888375	1- ¹³ C	23.126	0.01	23.115875	C ₁	22.84	22.7	ca 14	#VALUE!	C ₁	14.1	14.1	na	na	22.694	23.126	α	β				
22.765	22.438	0.238	22.609595	1- ¹³ C	22.918	0.01	22.800425	C ₁	22.3	22.8	ca 14	#VALUE!	C ₁	13.85	14.2	na	na	22.438	22.816	α	β				
14.266	14.133	0.089	14.192475	1- ¹³ C	14.394	0.01	14.351475	C ₁	14.25	14.1	ca 14	#VALUE!	C ₁	14.15	14.1	na	na								
14.257	14.117	0.071	14.1821525	1- ¹³ C	14.351	0.01	14.320375	C ₁	14	14.1															
14.172	14.024	0.074	14.092635	1- ¹³ C	14.235	0.01	14.215225	C ₁	13.9	14.2															
C6-M	135.263	135.112	0.198	135.209895	1- ¹³ C	135.517	-0.036	135.41991	C ₁	133.75	136.3	47.41765	C ₁	133.75	136.4	-0.216	-0.184	135.517	ε ⁺			C8-M	135.232	-0.031	0
130.22	129.934	0.25	130.009975	2- ¹³ C	130.495	-0.048	130.38783	C ₁	127.7	129	130.09	129.759	0.188	129.91762	C ₁	127.7	129.8	0.13	0.175	130.495	δ				
43.28	42.768	0.262	43.008605	2- ¹³ C	43.426	0.027	43.3810425	C ₁ (CH)	43.19	43.1	43.14	42.574	0.251	42.8292025	C ₁ (CH)	43.19	42.8	0.14	0.194	0.397	δ	43.272	-0.008	ε	
36.024	35.583	0.292	35.80378	1- ¹³ C	36.162	-0.072	36.09732	C ₁	34.95	35.5	38.397	37.885	0.215	38.113125	C ₁	34.95	35	-2.373	-2.302	36.162	γ	36.043	0.019	0	
35.754	35.285	0.239	35.5029225	1- ¹³ C	35.651	0.067	35.5329225	C ₁	34.95	35.2	36.06	35.619	0.159	35.8270225	C ₁	34.95	35.5	-0.356	-0.334	-0.209	ε				
32.673	32.291	0.292	32.49113	1- ¹³ C	32.78	0.01	3																		

32.350	31.910	0.250	32.15098
32.375	31.963	0.250	32.1673575
29.960	29.534	0.250	29.75219
29.847	29.362	0.201	29.5979525
27.724	27.271	0.250	27.497345
23.192	22.833	0.245	23.0195875
23.09	22.694	0.245	22.8883375
22.501	22.138	0.235	22.3230625
14.271	14.143	0.07	14.203725
14.264	14.121	0.074	14.187885
14.081	13.952	0.071	14.0133025

C ₁	32.17	32.1
C ₂	31.85	31.9
C ₃	29.53	29.7
C ₄	29.16	29.3
C ₅	28.32	27.5
C ₆	23.08	23.1
C ₇	22.84	22.7
C ₈	22.1	22.8
C ₉	14.25	14.1
C ₁₀	14	14.1
C ₁₁	13.8	14.2

0.025
0
-0.019
0.071
0.068
0
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