

Supplementary information for

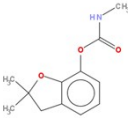
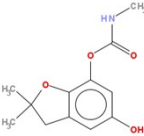
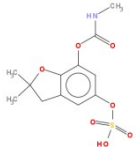
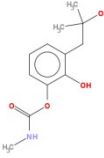
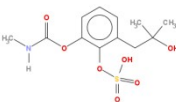
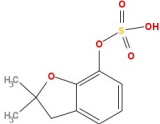
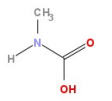
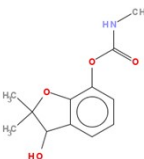
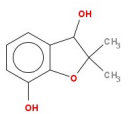
Mechanism and toxicity assessment of carbofuran degradation by
persulfate-based advanced oxidation process

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Table S1 The toxicity value of the transformation products in the degradation of CBF. The unit is $\text{mg}\cdot\text{L}^{-1}$.

Name	Compound molecular weight	Configuration	LC ₅₀			ChV		
			Fish	Water fleas	Green algae	Fish	Water fleas	Green algae
CBF	221		4.27	0.0093	2.59	0.408	0.016	0.479
P1	237		6.72	0.026	4.88	0.820	0.039	0.760
P2	317		65.8	4.71	121	28.4	3.76	7.70
P3	239		14.4	0.168	14.9	2.84	0.199	1.65
P4	319		141	30.6	370	98.1	19.1	16.7
P5	244		5340	2620	1060	439	170	201
P6	75		71100	2950	5980	4800	1200	776
P7	237		15.7	0.209	16.9	3.28	0.241	1.80
P8	180		554	297	173	50.6	24.6	39.8

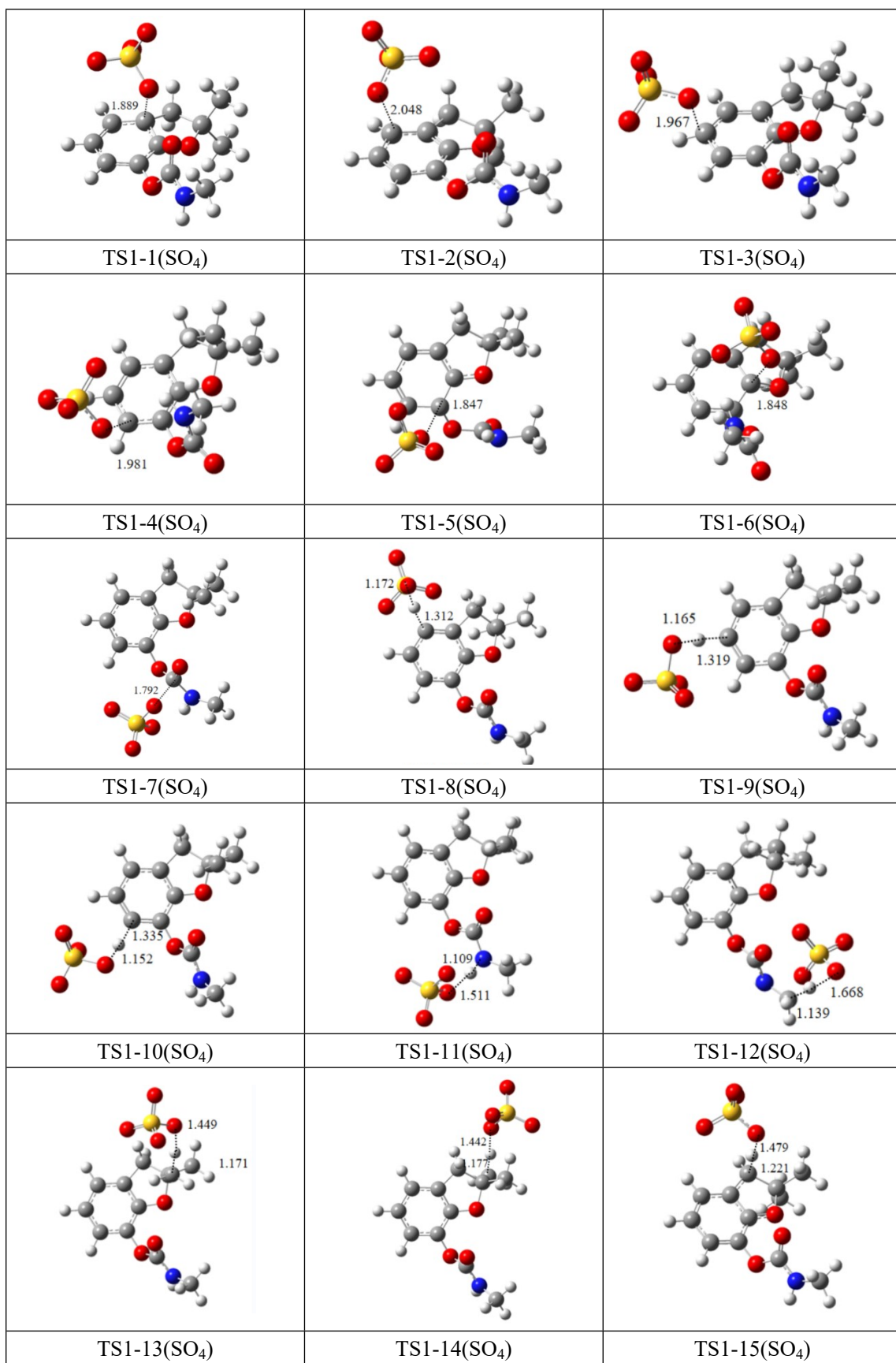


Fig. S1 Transition state configuration diagram of CBF with SO₄^{•-}

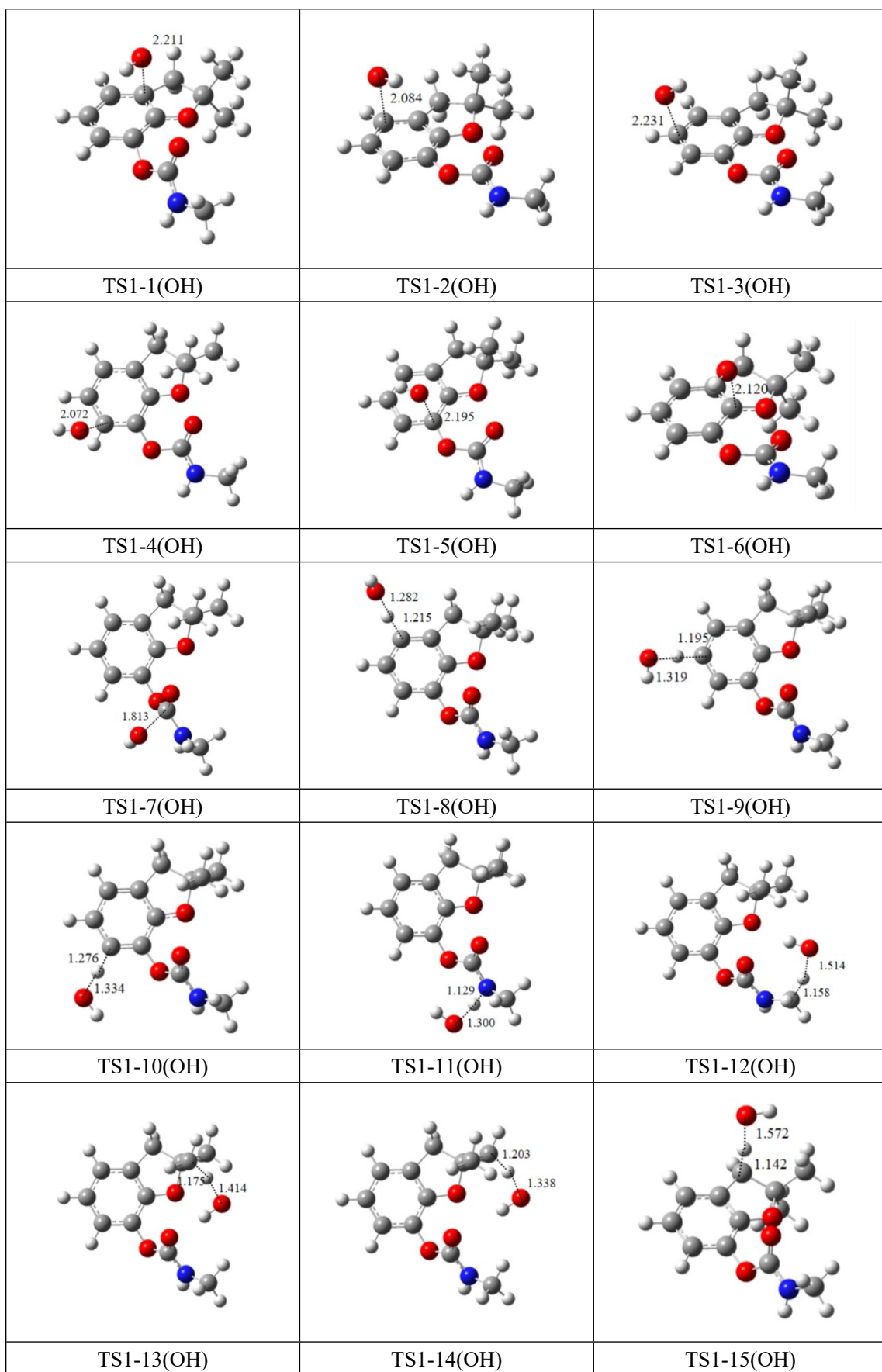


Fig. S2 Transition state configuration diagram of CBF with $\cdot\text{OH}$