

Electronic Supplementary Information

Influence of water on the formation of O₂-reactive divalent metal enolate complexes of
relevance to acireductone dioxygenases

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Table S1. ^1H NMR chemical shifts for **3-6** in CD_3CN at 298 K

assignment	shift (ppm) ^a	$\Delta\nu_{1/2}$ (Hz) ^b	rel area
[(6-PhTPA)Ni(PhC(O)C(OH)C(O)Ph)]ClO ₄ (3)			
α	150.0	<i>c</i>	<i>c</i>
β	41.6, 34.8	183, 172	1, 1
β'	44.5, 13.3	450, 179	2, 2
γ	<i>c</i>	<i>c</i>	<i>c</i>
γ'	10.6	91.6	<i>c</i>
CH ₂	57.7, 23.3, <i>c</i>	<i>c, c, c</i>	<i>c, c, c</i>
[(6-PhTPA)Ni(PhC(O)CHC(O)Ph)]ClO ₄ (4)			
α	148.6	<i>c</i>	<i>c</i>
β	43.8, <i>c</i>	355	<i>c, c</i>
β'	41.1, 34.8	183, 214	1, 1
γ	13.2	175	2
γ'	<i>c</i>	<i>c</i>	<i>c</i>
CH ₂	138.2, 51.0, 50.5	<i>c, c, c</i>	<i>c, c, c</i>
CH (dbm)	-13.1	256	1
[(6-PhTPA)Ni(CH ₃ CN)(CH ₃ OH)](ClO ₄) ₂ (5)			
α	150.0	<i>c</i>	<i>c</i>
β	52.8, <i>c</i>	543, <i>c</i>	<i>c, c</i>
β'	49.2, 40.8	484, 324	<i>c, 1</i>
γ	14.6	126	<i>c</i>
γ'	10.1	107	<i>c</i>
[(6-PhTPA)Ni(O ₂ CPh)]ClO ₄ (6)			
α	150.9	2922	1
β	46.3, 36.2	<i>c, 328</i>	<i>c, 1</i>
β'	49.3, 45.1	362, 244	2, <i>c</i>
γ	13.5	72	2
γ'	10.0	84	1
CH ₂	77.5, <i>c, c</i>	<i>c, c, c</i>	<i>c, c, c</i>

^aChemical shifts in ppm relative to the residual solvent peak of CHD_2CN (^1H , 1.94 (quintet) ppm). ^bLine widths are full width at a half-maximum. ^cCould not be determined.