

Electronic Supplementary Information

Catalytic Behaviour of a Novel Fe(III) Schiff Base Complex in the Mild Oxidation of Cyclohexane

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Table S1. Selected geometrical parameters (distances/Å and angles/°) for **1**

Fe1–O1	1.907(2)	Fe1–Cl1	2.2943(9)
Fe1–O2	2.101(2)	Fe1–Cl2	2.3558(9)
Fe1–N1	2.106(2)		
Fe1–N2	1.994(3)		
O1–Fe1–O2	89.39(10)	N1–Fe1–N2	78.34(9)
O1–Fe1–N1	88.02(9)	N1–Fe1–Cl1	167.48(7)
O1–Fe1–N2	166.17(9)	N1–Fe1–Cl2	89.79(7)
O1–Fe1–Cl1	100.83(7)	N2–Fe1–Cl2	88.28(6)
O1–Fe1–Cl2	94.00(8)	Cl1–Fe1–N2	92.31(6)
O2–Fe1–N1	82.66(10)	Cl1–Fe1–Cl2	98.32(3)
O2–Fe1–N2	86.64(9)		
O2–Fe1–Cl1	88.55(7)		
O2–Fe1–Cl2	171.61(7)		

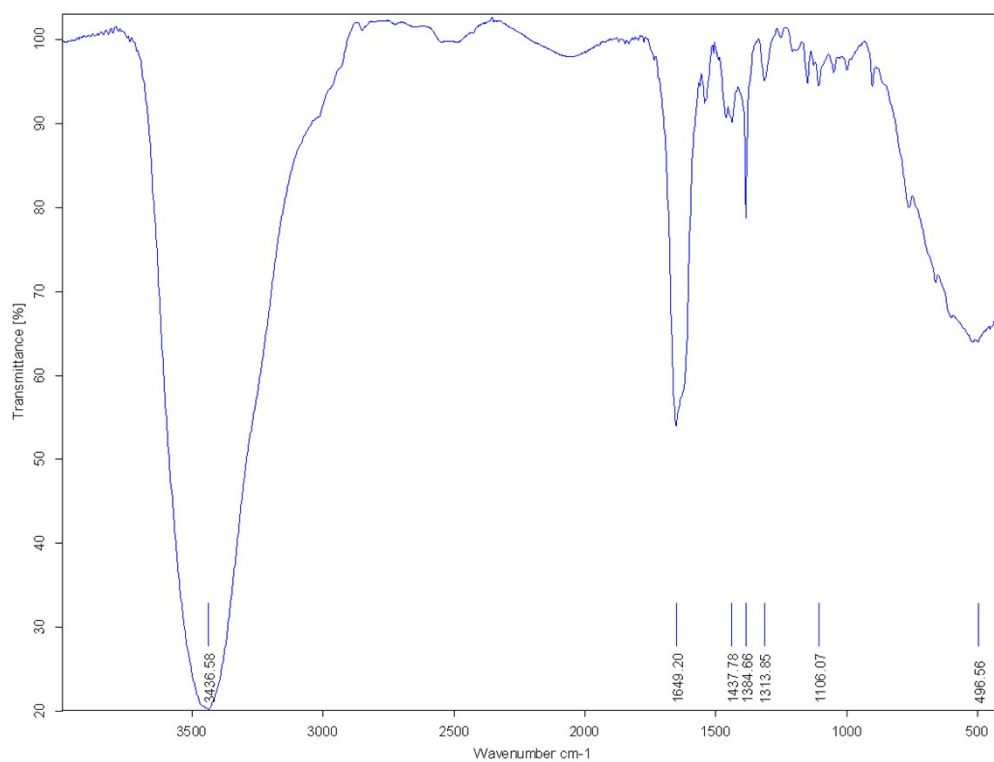


Figure S1. IR spectrum of **1** (in KBr).

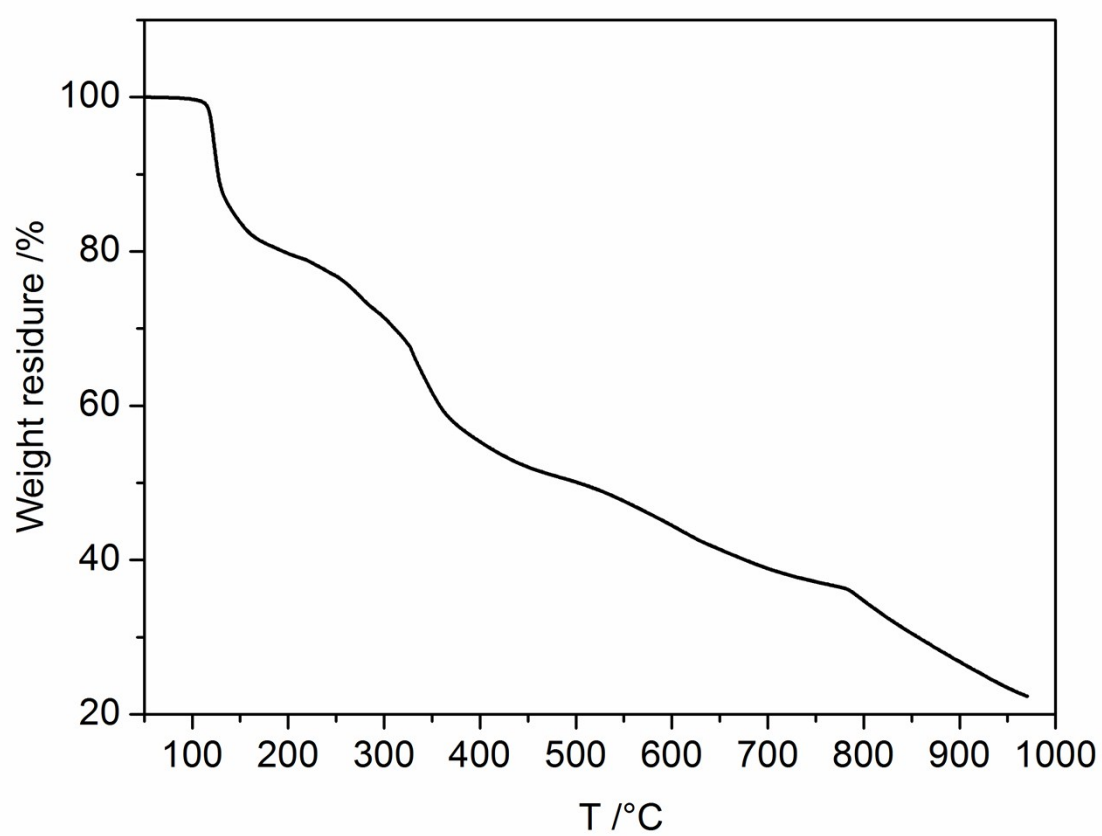


Figure S2. Thermogravimetric plot showing the weight loss with the temperature increase for complex **1** at 10° min⁻¹ heating speed under dinitrogen atmosphere.