

SUPPLEMENTARY INFORMATION:

Characterisation and inhibition of a nickel-alpha hydroxyoxime (LIX 63) salt precipitate formed under proposed commercial operating conditions

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Table S1. Selected bond lengths [Å] and angles [°] for [Ni(C₈OxH₂)₃](NO₃)₂.

Ni(1)-N(24)	1.955(13)
Ni(1)-O(15)	2.045(3)
Ni(1)-N(14)	2.053(5)
Ni(1)-O(25)	2.098(10)
N(24)-Ni(1)-O(15)	169.1(4)
N(24) ¹ -Ni(1)-O(15)	91.9(4)
O(15)-Ni(1)-O(15) ¹	98.65(19)
N(24)-Ni(1)-N(14) ¹	91.8(5)
O(15)-Ni(1)-N(14) ¹	93.35(16)
N(24)-Ni(1)-N(14)	100.1(5)
O(15)-Ni(1)-N(14)	76.63(15)
N(14) ¹ -Ni(1)-N(14)	164.8(2)
O(15)-Ni(1)-O(25) ¹	168.2(4)
N(14)-Ni(1)-O(25) ¹	97.8(4)
N(24)-Ni(1)-O(25)	77.7(2)
O(15)-Ni(1)-O(25)	92.0(4)
N(14)-Ni(1)-O(25)	94.1(4)
O(25) ¹ -Ni(1)-O(25)	77.8(7)

Symmetry transformations used to generate equivalent atoms: ¹ -x,y,3/2-z

Table S2. Hydrogen bonds for [Ni(C₈OxH₂)₃](NO₃)₂ [Å and °].

D-H...A	d(D-H)	d(H...A)	d(D...A)	<(DHA)
O(14)-H(14)...O(12)	0.84	1.89	2.680(14)	155.3
O(14)-H(14)...O(22)	0.84	2.22	2.966(15)	147.5
O(24)-H(24)...O(11)	0.84	1.93	2.748(10)	163.8
O(15)-H(15O)...O(13) ²	0.85(4)	2.06(4)	2.870(15)	159(6)
O(15)-H(15O)...O(12) ²	0.85(4)	2.38(5)	3.025(13)	133(5)
O(15)-H(15O)...O(22) ²	0.85(4)	1.96(5)	2.625(14)	134(5)
O(25)-H(25O)...O(21) ¹	0.86(4)	1.86(5)	2.653(17)	152(6)

Symmetry transformations used to generate equivalent atoms: ¹ -x,y,3/2-z ; ² x-1/2,y-1/2,z