Access to unusual fluorenone and pyridyl ketone substitution patterns via sodium alkylamidozincate intermediates

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Synthesis of $[(TMEDA)\cdot Na(\mu-OC_{13}H_8-3^{-t}Bu)(\mu-TMP)Zn(^{t}Bu)]$ (2): A solution of $^{t}Bu_2Zn$ (0.36 g, 2 mmol) in hexane (10 mL) was transferred by cannula to a suspension of NaTMP in hexane [prepared *in situ* by reaction of ⁿBuNa (0.16 g, 2 mmol) with TMP(H) (0.34 mL, 2 mmol)]. TMEDA (0.30 mL, 2 mmol) was then added. The resultant suspension was gently heated to produce a homogenous yellow solution to yield an *in situ* mixture of **1**. Fluorenone (0.36 g, 2 mmol) was added to the solution and the reaction mixture was allowed to stir at ambient temperature for 30 minutes. The resulting deep red solution was placed in a freezer (-28°C). Large yellow crystals of **2** were formed after 24 hours (0.842 g, 66 %).





¹**H NMR** (400.13 MHz, 298K, C₆D₆):- δ 7.66 (1H, bd, C₁), 7.51 (1H, bd, C₄), 7.34 (1H, bt, C₂), 7.21 (1H, bt, C₃), 7.10 (1H, bs, C₅), 6.50 (1H, bs, C₈), 5.78 (1H, bs, C₆), 3.10 (1H, bs, C₇), 1.87 (12H, s, TMEDA-CH₃), 1.80 (4H, s, TMEDA-CH₂), 1.09 (9H, s, ^{*t*}Bu)

¹³C NMR:- δ 127.0 (C₃), 124.7 (C₄), 122.3 (C₅), 119.9 (C₆), 118.8 (C₂), 117.1 (C₅), 116.7 (C₈), 57.1 (TMEDA-CH₂), 47.3 (TMEDA-CH₃), 50.7 (C₇), 27.1 (^tBu)



Synthesis of [(TMEDA)·Na{ μ -O(Ph)-2-C₅H₄N-4-^tBu)(μ -TMP)Zn(^tBu)] (**3**): A solution of ^tBu₂Zn (0.36 g, 2 mmol) in hexane (10 mL) was transferred by cannula to a suspension of NaTMP in hexane [prepared *in situ* by reaction of ⁿBuNa (0.16 g, 2 mmol) with TMP(H) (0.34 mL, 2 mmol)]. TMEDA (0.30 mL, 2 mmol) was then added. The resultant suspension was gently heated to produce a homogenous yellow solution to yield an *in situ* mixture of **1**. 2-Benzoylpyridine (0.366 g, 2 mmol) was added to the solution and the reaction mixture was allowed to stir at ambient temperature for 30 minutes. The resulting green solution was placed in a freezer (-28°C). Yellow crystals of **3** were formed after 24 hours (0.716 g, 56 %).



¹**H NMR** (400.13 MHz, 298K, C₆D₆):- δ 7.69 (1H, bs, C₂), 7.65 (1H, bs, C₄), 7.39 (1H, bs, C₆), 7.26 (1H, bs, C₃), 7.12 (2H, bs, C_{1/5}), 6.64 (1H, bs, C₉), 4.97 (1H, bs, C₈), 2.87 (1H, bs, C₇), 1.90 (16H, bs, TMEDA), 1.01 (9H, s, ^{*t*}Bu), 1.07 [12H, TMP (α-CH₃)], 1.38 [4H, TMP (β-CH₂)]

¹³**C NMR** :- δ 128.5 (2H, C₂/C₄), 149.9 (C₆), 126.9 (C₃), 126.7 (2H, C₁/C₅), 125.6 (C₉), 109.3(C₈), 49.5 (C₇), 33.3 [4H, TMP(H)(\beta-CH₂)], 31.1 [12H, TMP(H)(\alpha-CH₃)], 1.01 (9H,(^tBu))



¹**H NMR** (400.13 MHz, 298K, C₆D₆):- δ 7.67 (2H, bd, C₁), 7.61 (4H, bd, C₄), 7.41 (1H, bt, C₂), 7.24 (1H, bt, C₃), 7.12 (1H, bs, C₅), 6.53 (1H, bs, C₈), 5.87 (1H, bs, C₆), 3.14 (1H, bs, C₇), 2.07 (16H, TMEDA), 1.35 (9H, iso-butane), 1.22 [4H, TMP(H)(β-CH₂)], 1.10 (9H, s, ^{*t*}Bu), 1.05 [12H, TMP(H)(α-CH₃)]

¹³C NMR :- δ 126.7 (C₂), 124.6 (C₃), 123.3 (C₅), 118.8 (C₁), 118.7 (C₆),117.8 (C₄), 115.5 (C₈), 50.9 (C₇), 47.1 (TMEDA-CH₃), 45.8 (TMEDA-CH₂), 38.4 [TMP(H)(β-CH₂), 34.8 (isobutane), 31.7 [TMP(H)(α-CH₃), 27.9 (^tBu)



¹**H NMR** (400.13 MHz, 298K, C₆D₆):- δ 7.88 (2H, bs, C_{2/4}), 7.28 (4H, bs, C_{1/5/3,6}), 7.16 (1H, bd, C₉) 4.95 (1H, bs, C₈), 2.83 (1H, bs, C₇), 2.19 (16H, bs, TMEDA), 1.53 [2H,TMP(H)(γ -CH₂)], 1.22 [4H, TMP(H)(β -CH₂)], 1.06 [12H, TMP(H)(α -CH₃)], 0.92 (9H, ^tBu)

¹³C NMR :- δ 148.7 (C_{1/5/3,6}), 129.1 (C_{2/4}), 127.8 (C₉), 127.5 (C1?), 126.0 (?), 109.5 (C₈), 50.0 (C₇), 46.0 (TMEDA), 38.6 [TMP(H)(β-CH₂)], 31.9 [TMP(H)(α-CH₃)], 26.8 (^tBu), 18.8 [TMP(H)(γ-CH₂)]



¹**H NMR** (400.13 MHz, 298K, C₆D₆):- 7.61 (2H, d, C_{1/4}), 7.35 (1H, s, C₇), 7.03 (1H, d, C₅), 6.98 (1H, t, C₂), 6.93 (1H, d, C₆) 6.83 (1H, t, C₃), 2.30 (TMEDA-CH₂), 2.06 (TMEDA-CH₃), 1.51 [2H, TMP(H)(γ-CH₂)], 1.21 [4H, TMP(H)(β-CH₂)], 1.15 (9H, ^tBu), 1.05 [TMP(H)(α-CH₃)]



¹**H NMR** (400.13 MHz, 298K, C₆D₆):- 8.60 (1H, s, C₆), 8.38 (1H, d, C₁), 7.99 (1H, d, C₅), 7.25 (1H, m, C₃), 7.14 (2H, t, C_{2/4}), 7.06 (1H, d, C₇), 6.99 (1H, d, C₈), 2.30 (TMEDA-CH₂), 2.07 (TMEDA-CH₃), 1.50 [2H, TMP(H)(γ-CH₂)], 1.20 [4H, TMP(H)(β-CH₂)],1.30 [TMP(H)(α-CH₃)], 0.99 (^tBu)

¹³C NMR :- δ 146.1 (C₆), 133.8(C₃), 131.6 (C₁), 128.1 (C₈), 127.9 (C_{2/4}), 126.8 (C₇), 124.3 (C₅), 58.2 (TMEDA-CH₂), 45.8 (TMEDA-CH₃), 31.8 [TMP(H)(α-CH₃)], 30.6 (^tBu), 27.2 [TMP(H)(β-CH₂)], 18.7 [TMP(H)(β-CH₂)]

Selected bond distances (Å) and angles (°) for **2** : Na1–N3, 2.442(3); Na1–O2, 2.242(2); Zn1–N3, 1.952(2); Zn1–C1, 1.994(3); Zn1–O2, 2.018(2); Na1–N3–Zn1, 90.19(10); N3–Zn1–O2, 96.75(9); Zn1–O2–Na1, 94.49(9); N41–Na1–N44, 75.45(9); N41–Na1–N3, 133.52(11); N41–Na1–O2, 106.52(10); N44–Na1–N3, 141.70(10); N44–Na1–O2, 122.03(9); N3–Zn1–C1, 148.43(12); O2–Zn1–C1 114.79(11).

Full X-ray data for 2

Table 1. Crystal data and structure refinement for jksamboth.

Identification code	jkeben11	jkcben11	
Empirical formula	C36 H60 N3 Na O Zn	C36 H60 N3 Na O Zn	
Formula weight	639.23	639.23	
Temperature	123(2) K		
Wavelength	0.71073 Å		
Crystal system	Monoclinic		
Space group	P21/c		
Unit cell dimensions	a = 10.2426(6) Å	α= 90°.	
	b = 19.6573(15) Å	β=94.903(6)°.	
	c = 36.846(3) Å	$\gamma = 90^{\circ}$.	
Volume	7391.5(9) Å ³		
Z	8		
Density (calculated)	1.149 Mg/m ³		
Absorption coefficient	0.706 mm ⁻¹	0.706 mm ⁻¹	
F(000)	2768	2768	
Crystal size	0.3 x 0.1 x 0.06 mm ³	0.3 x 0.1 x 0.06 mm ³	
Theta range for data collection	3.14 to 26.00°.	3.14 to 26.00°.	
Index ranges	-11<=h<=12, -24<=k<=2	-11<=h<=12, -24<=k<=24, -45<=l<=45	
Reflections collected	49503	49503	
Independent reflections	14502 [R(int) = 0.0842]	14502 [R(int) = 0.0842]	
Completeness to theta = 26.00°	99.8 %	99.8 %	
Absorption correction	Semi-empirical from equ	Semi-empirical from equivalents	
Max. and min. transmission	1.00000 and 0.50172		
Refinement method	Full-matrix least-squares	Full-matrix least-squares on F ²	
Data / restraints / parameters	14502 / 49 / 786	14502 / 49 / 786	
Goodness-of-fit on F ²	0.762	0.762	
Final R indices [I>2sigma(I)]	R1 = 0.0491, wR2 = 0.08	R1 = 0.0491, w $R2 = 0.0801$	
R indices (all data)	R1 = 0.1366, wR2 = 0.09	R1 = 0.1366, wR2 = 0.0910	
Largest diff. peak and hole	0.502 and -0.620 e.Å-3	0.502 and -0.620 e.Å ⁻³	

Table 2. Atomic coordinates ($x \ 10^4$) and equivalent isotropic displacement parameters (Å²x 10³) for jksamboth. U(eq) is defined as one third of the trace of the orthogonalized U^{ij} tensor.

	х	у	Z	U(eq)
 Na(1)	3749(1)	4816(1)	1658(1)	31(1)
Zn(1)	1275(1)	5655(1)	1829(1)	27(1)
Na(2)	1854(1)	5326(1)	6194(1)	33(1)
Zn(2)	4272(1)	4488(1)	5994(1)	41(1)
C(1)	-597(3)	5913(2)	1855(1)	31(1)
C(11)	-1375(3)	5302(2)	1968(1)	59(1)
C(12)	-1185(3)	6157(2)	1482(1)	48(1)
C(13)	-727(3)	6487(2)	2129(1)	45(1)
O(2)	1558(2)	4739(1)	1601(1)	31(1)
C(21)	689(3)	4290(2)	1470(1)	27(1)
C(22)	-9(3)	4261(2)	1134(1)	32(1)
C(23)	-163(3)	4731(2)	833(1)	44(1)
C(24)	-940(3)	4582(2)	528(1)	48(1)
C(25)	-1603(3)	3895(2)	461(1)	47(1)
C(26)	-1573(3)	3483(2)	809(1)	41(1)
C(27)	-810(3)	3650(2)	1108(1)	30(1)
C(28)	-602(3)	3304(2)	1462(1)	25(1)
C(29)	-1112(3)	2714(2)	1599(1)	29(1)
C(210)	-743(3)	2530(2)	1957(1)	37(1)
C(211)	125(3)	2926(2)	2171(1)	38(1)
C(212)	654(3)	3508(2)	2036(1)	32(1)
C(213)	303(3)	3697(2)	1683(1)	24(1)
C(20)	-1000(4)	3498(2)	154(1)	51(1)
C(214)	490(4)	3421(2)	254(1)	82(2)
C(215)	-1215(4)	3871(2)	-208(1)	76(1)
C(216)	-1630(4)	2791(2)	110(1)	75(1)
N(3)	3123(2)	5879(1)	1940(1)	25(1)
C(31)	3581(3)	6455(2)	1719(1)	28(1)
C(311)	2762(3)	6443(2)	1355(1)	40(1)
C(312)	5033(3)	6378(2)	1641(1)	38(1)
C(32)	3398(3)	7144(2)	1901(1)	45(1)
C(33)	3960(4)	7162(2)	2293(1)	58(1)
C(34)	3344(3)	6598(2)	2504(1)	49(1)

C(35)	3514(3)	5894(2)	2338(1)	30(1)
C(351)	2619(3)	5402(2)	2519(1)	44(1)
C(352)	4930(3)	5641(2)	2436(1)	47(1)
N(41)	4491(3)	4533(2)	1061(1)	38(1)
C(411)	5587(4)	4911(2)	942(1)	71(1)
C(412)	3345(4)	4615(2)	791(1)	72(1)
C(42)	4831(3)	3813(2)	1099(1)	43(1)
C(43)	5723(3)	3651(2)	1427(1)	44(1)
N(44)	5188(2)	3792(1)	1775(1)	28(1)
C(441)	4247(3)	3262(2)	1856(1)	50(1)
C(442)	6251(3)	3798(2)	2063(1)	41(1)
C(5)	6117(6)	4259(3)	5893(2)	40(1)
C(51)	7055(4)	4582(3)	6184(2)	59(2)
C(52)	6266(15)	3477(4)	5912(5)	63(3)
C(53)	6447(5)	4519(4)	5522(2)	59(2)
O(6)	3974(2)	5469(1)	6124(1)	39(1)
C(61)	4829(3)	5975(2)	6150(1)	32(1)
C(62)	5236(3)	6384(2)	5880(1)	34(1)
C(63)	4981(4)	6393(2)	5492(1)	54(1)
C(64)	5550(4)	6843(2)	5290(1)	57(1)
C(65)	6471(4)	7403(2)	5438(1)	47(1)
C(66)	6764(3)	7339(2)	5845(1)	43(1)
C(67)	6165(3)	6883(2)	6043(1)	35(1)
C(68)	6299(3)	6753(2)	6437(1)	27(1)
C(69)	7026(3)	7067(2)	6724(1)	31(1)
C(610)	6949(3)	6814(2)	7071(1)	35(1)
C(611)	6180(3)	6254(2)	7128(1)	38(1)
C(612)	5446(3)	5941(2)	6843(1)	33(1)
C(613)	5492(3)	6197(2)	6498(1)	27(1)
C(60)	5989(4)	8119(2)	5330(1)	44(1)
C(614)	4720(3)	8265(2)	5516(1)	66(1)
C(615)	5708(4)	8169(2)	4917(1)	62(1)
C(616)	6997(3)	8658(2)	5450(1)	53(1)
N(7)	2376(9)	4202(5)	6033(2)	23(2)
C(71)	1857(5)	3940(3)	5675(2)	29(2)
C(711)	2449(5)	4368(3)	5376(1)	39(2)
C(712)	364(7)	4095(6)	5596(3)	54(2)
C(72)	2184(5)	3185(2)	5611(2)	37(1)

C(73)	1846(5)	2755(3)	5913(1)	42(2)
C(74)	2485(6)	3008(3)	6287(2)	51(2)
C(75)	2184(5)	3758(3)	6356(2)	37(2)
C(751)	814(5)	3827(3)	6477(2)	45(2)
C(752)	3051(6)	4020(4)	6678(2)	53(2)
N(7A)	2600(20)	4220(12)	5947(3)	23(2)
C(100)	1851(10)	4129(5)	5586(3)	26(4)
C(101)	366(12)	4011(11)	5619(6)	33
C(102)	139(9)	3521(5)	5918(3)	36
C(103)	852(10)	3661(8)	6298(3)	74(5)
C(104)	2328(9)	3720(5)	6238(3)	32(4)
C(105)	2286(12)	3493(6)	5392(4)	82(5)
C(106)	2145(14)	4755(6)	5365(4)	69(4)
C(107)	3272(13)	3907(8)	6576(4)	53(2)
C(108)	2763(8)	2990(2)	6142(1)	78(6)
N(81)	586(3)	6292(1)	5945(1)	47(1)
C(811)	1616(3)	6752(1)	5845(1)	83(2)
C(812)	-343(4)	6200(3)	5630(1)	99(2)
C(82)	-97(4)	6569(2)	6245(1)	68(1)
C(83)	573(4)	6511(2)	6605(1)	73(1)
N(84)	866(3)	5817(2)	6737(1)	42(1)
C(841)	-283(4)	5490(2)	6853(1)	85(2)
C(842)	1842(3)	5878(2)	7050(1)	71(1)
C(5A)	6072(12)	4153(7)	6007(3)	40(1)
C(51A)	6609(15)	4631(8)	5728(4)	82(6)
C(52A)	6853(14)	4208(8)	6373(3)	81(6)
C(53A)	6350(40)	3471(11)	5829(10)	77(10)

Na(1)-O(2)	2.242(2)
Na(1)-N(3)	2.442(3)
Na(1)-N(41)	2.453(3)
Na(1)-N(44)	2.511(3)
Na(1)-C(42)	3.125(4)
Na(1)-Zn(1)	3.1314(11)
Zn(1)-N(3)	1.952(2)
Zn(1)-C(1)	1.994(3)
Zn(1)-O(2)	2.018(2)
Na(2)-O(6)	2.227(2)
Na(2)-N(7)	2.361(11)
Na(2)-N(81)	2.436(3)
Na(2)-N(7A)	2.50(3)
Na(2)-N(84)	2.510(3)
Na(2)-Zn(2)	3.1140(12)
Na(2)-C(83)	3.128(4)
Zn(2)-N(7A)	1.786(18)
Zn(2)-C(5A)	1.955(14)
Zn(2)-C(5)	2.009(7)
Zn(2)-O(6)	2.016(2)
Zn(2)-N(7)	2.038(8)
C(1)-C(11)	1.519(4)
C(1)-C(13)	1.528(4)
C(1)-C(12)	1.531(4)
C(11)-H(11A)	0.9800
C(11)-H(11B)	0.9800
C(11)-H(11C)	0.9800
C(12)-H(12A)	0.9800
C(12)-H(12B)	0.9800
C(12)-H(12C)	0.9800
С(13)-Н(13А)	0.9800
C(13)-H(13B)	0.9800
C(13)-H(13C)	0.9800
O(2)-C(21)	1.316(3)
C(21)-C(22)	1.375(4)
C(21)-C(213)	1.478(4)

Table 3.	Bond lengths [A] and angles [°] for jksamboth.

C(22)-C(23)	1.442(4)
C(22)-C(27)	1.453(4)
C(23)-C(24)	1.353(4)
C(23)-H(63A)	0.9500
C(24)-C(25)	1.523(5)
C(24)-H(64A)	0.9500
C(25)-C(26)	1.516(5)
C(25)-C(20)	1.545(5)
C(25)-H(25A)	1.0000
C(26)-C(27)	1.335(4)
C(26)-H(66A)	0.9500
C(27)-C(28)	1.473(4)
C(28)-C(29)	1.384(4)
C(28)-C(213)	1.410(4)
C(29)-C(210)	1.386(4)
C(29)-H(69A)	0.9500
C(210)-C(211)	1.378(4)
C(210)-H(61J)	0.9500
C(211)-C(212)	1.377(4)
C(211)-H(61K)	0.9500
C(212)-C(213)	1.372(4)
C(212)-H(61L)	0.9500
C(20)-C(215)	1.521(5)
C(20)-C(216)	1.536(5)
C(20)-C(214)	1.547(5)
C(214)-H(61G)	0.9800
C(214)-H(61H)	0.9800
C(214)-H(61I)	0.9800
C(215)-H(61D)	0.9800
C(215)-H(61E)	0.9800
C(215)-H(61F)	0.9800
C(216)-H(61A)	0.9800
C(216)-H(61B)	0.9800
C(216)-H(61C)	0.9800
N(3)-C(35)	1.485(4)
N(3)-C(31)	1.496(4)
C(31)-C(311)	1.520(4)
C(31)-C(32)	1.530(4)

C(31)-C(312)	1.545(4)
С(311)-Н(71А)	0.9800
C(311)-H(71B)	0.9800
С(311)-Н(71С)	0.9800
C(312)-H(71D)	0.9800
C(312)-H(71E)	0.9800
C(312)-H(71F)	0.9800
C(32)-C(33)	1.509(5)
C(32)-H(72A)	0.9900
C(32)-H(72B)	0.9900
C(33)-C(34)	1.522(5)
C(33)-H(73A)	0.9900
C(33)-H(73B)	0.9900
C(34)-C(35)	1.529(4)
C(34)-H(74A)	0.9900
C(34)-H(74B)	0.9900
C(35)-C(351)	1.526(4)
C(35)-C(352)	1.547(4)
С(351)-Н(75А)	0.9800
C(351)-H(75B)	0.9800
С(351)-Н(75С)	0.9800
C(352)-H(75D)	0.9800
С(352)-Н(75Е)	0.9800
C(352)-H(75F)	0.9800
N(41)-C(411)	1.445(4)
N(41)-C(42)	1.462(4)
N(41)-C(412)	1.480(4)
C(411)-H(81A)	0.9800
C(411)-H(81B)	0.9800
C(411)-H(81C)	0.9800
C(412)-H(81D)	0.9800
C(412)-H(81E)	0.9800
C(412)-H(81F)	0.9800
C(42)-C(43)	1.487(4)
C(42)-H(82A)	0.9900
C(42)-H(82B)	0.9900
C(43)-N(44)	1.463(4)
C(43)-H(83A)	0.9900

C(43)-H(83B)	0.9900
N(44)-C(442)	1.454(4)
N(44)-C(441)	1.467(4)
C(441)-H(84A)	0.9800
C(441)-H(84B)	0.9800
C(441)-H(84C)	0.9800
C(442)-H(84D)	0.9800
C(442)-H(84E)	0.9800
C(442)-H(84F)	0.9800
C(5)-C(51)	1.516(6)
C(5)-C(53)	1.524(6)
C(5)-C(52)	1.546(8)
C(51)-H(51A)	0.9800
C(51)-H(51B)	0.9800
C(51)-H(51C)	0.9800
C(52)-H(52A)	0.9800
C(52)-H(52B)	0.9800
C(52)-H(52C)	0.9800
C(53)-H(53A)	0.9800
C(53)-H(53B)	0.9800
C(53)-H(53C)	0.9800
O(6)-C(61)	1.323(4)
C(61)-C(62)	1.371(5)
C(61)-C(613)	1.466(4)
C(62)-C(63)	1.431(5)
C(62)-C(67)	1.461(4)
C(63)-C(64)	1.323(5)
C(63)-H(23A)	0.9500
C(64)-C(65)	1.520(5)
C(64)-H(24A)	0.9500
C(65)-C(66)	1.508(5)
C(65)-C(60)	1.533(5)
C(65)-H(65A)	1.0000
C(66)-C(67)	1.336(4)
C(66)-H(26A)	0.9500
C(67)-C(68)	1.469(4)
C(68)-C(69)	1.384(4)
C(68)-C(613)	1.400(4)

C(69)-C(610)	1.383(4)
C(69)-H(29A)	0.9500
C(610)-C(611)	1.380(4)
С(610)-Н(21Ј)	0.9500
C(611)-C(612)	1.383(4)
C(611)-H(21K)	0.9500
C(612)-C(613)	1.369(4)
C(612)-H(21L)	0.9500
C(60)-C(616)	1.521(5)
C(60)-C(615)	1.527(4)
C(60)-C(614)	1.547(4)
C(614)-H(21A)	0.9800
C(614)-H(21B)	0.9800
C(614)-H(21C)	0.9800
C(615)-H(21D)	0.9800
C(615)-H(21E)	0.9800
C(615)-H(21F)	0.9800
C(616)-H(21G)	0.9800
С(616)-Н(21Н)	0.9800
C(616)-H(21I)	0.9800
N(7)-C(71)	1.473(6)
N(7)-C(75)	1.503(6)
C(71)-C(72)	1.543(6)
C(71)-C(711)	1.552(6)
C(71)-C(712)	1.562(6)
C(711)-H(31A)	0.9800
C(711)-H(31B)	0.9800
С(711)-Н(31С)	0.9800
C(712)-H(31D)	0.9800
C(712)-H(31E)	0.9800
C(712)-H(31F)	0.9800
C(72)-C(73)	1.463(5)
C(72)-H(32A)	0.9900
C(72)-H(32B)	0.9900
C(73)-C(74)	1.556(6)
C(73)-H(33A)	0.9900
C(73)-H(33B)	0.9900
C(74)-C(75)	1.533(6)

C(74)-H(34A)	0.9900
C(74)-H(34B)	0.9900
C(75)-C(752)	1.509(6)
C(75)-C(751)	1.513(6)
C(751)-H(35A)	0.9800
C(751)-H(35B)	0.9800
С(751)-Н(35С)	0.9800
C(752)-H(35D)	0.9800
C(752)-H(35E)	0.9800
C(752)-H(35F)	0.9800
N(7A)-C(100)	1.488(9)
N(7A)-C(104)	1.499(9)
C(100)-C(106)	1.520(9)
C(100)-C(105)	1.526(9)
C(100)-C(101)	1.553(9)
C(101)-C(102)	1.498(10)
С(101)-Н(10А)	0.9900
С(101)-Н(10В)	0.9900
C(102)-C(103)	1.548(9)
С(102)-Н(10С)	0.9900
C(102)-H(10D)	0.9900
C(103)-C(104)	1.550(9)
С(103)-Н(10Е)	0.9900
С(103)-Н(10F)	0.9900
C(104)-C(107)	1.552(9)
C(104)-C(108)	1.554(8)
C(105)-H(10G)	0.9800
С(105)-Н(10Н)	0.9800
С(105)-Н(10І)	0.9800
С(106)-Н(10Ј)	0.9800
С(106)-Н(10К)	0.9800
C(106)-H(10L)	0.9800
С(107)-Н(10М)	0.9800
C(107)-H(10N)	0.9800
С(107)-Н(10О)	0.9800
С(108)-Н(10Р)	0.9800
С(108)-Н(10Q)	0.9800
C(108)-H(10R)	0.9800

1.446(4)
1.460(2)
1.463(4)
0.9799
0.9800
0.9798
0.9800
0.9800
0.9800
1.445(5)
0.9900
0.9900
1.470(5)
0.9900
0.9900
1.438(4)
1.465(4)
0.9800
0.9800
0.9800
0.9800
0.9800
0.9800
1.510(9)
1.530(10)
1.531(9)
0.9800
0.9800
0.9800
0.9800
0.9800
0.9800
0.9800
0.9800
0.9800
78.50(8)
106.52(10)

N(3)-Na(1)-N(41)	133.52(11)
O(2)-Na(1)-N(44)	122.03(9)
N(3)-Na(1)-N(44)	141.70(10)
N(41)-Na(1)-N(44)	75.45(9)
O(2)-Na(1)-C(42)	107.67(9)
N(3)-Na(1)-C(42)	160.30(10)
N(41)-Na(1)-C(42)	27.12(9)
N(44)-Na(1)-C(42)	50.97(9)
O(2)-Na(1)-Zn(1)	39.98(6)
N(3)-Na(1)-Zn(1)	38.55(6)
N(41)-Na(1)-Zn(1)	128.13(8)
N(44)-Na(1)-Zn(1)	149.47(8)
C(42)-Na(1)-Zn(1)	143.46(8)
N(3)-Zn(1)-C(1)	148.43(12)
N(3)-Zn(1)-O(2)	96.75(9)
C(1)-Zn(1)-O(2)	114.79(11)
N(3)-Zn(1)-Na(1)	51.26(8)
C(1)-Zn(1)-Na(1)	160.31(10)
O(2)-Zn(1)-Na(1)	45.53(6)
O(6)-Na(2)-N(7)	81.1(2)
O(6)-Na(2)-N(81)	110.58(10)
N(7)-Na(2)-N(81)	139.45(19)
O(6)-Na(2)-N(7A)	74.7(4)
N(7)-Na(2)-N(7A)	9.0(4)
N(81)-Na(2)-N(7A)	135.2(3)
O(6)-Na(2)-N(84)	120.50(10)
N(7)-Na(2)-N(84)	132.54(15)
N(81)-Na(2)-N(84)	76.21(11)
N(7A)-Na(2)-N(84)	141.4(3)
O(6)-Na(2)-Zn(2)	40.20(6)
N(7)-Na(2)-Zn(2)	40.88(19)
N(81)-Na(2)-Zn(2)	137.09(9)
N(7A)-Na(2)-Zn(2)	35.0(4)
N(84)-Na(2)-Zn(2)	140.77(8)
O(6)-Na(2)-C(83)	114.56(11)
N(7)-Na(2)-C(83)	158.80(17)
N(81)-Na(2)-C(83)	50.90(11)
N(7A)-Na(2)-C(83)	167.8(3)

N(84)-Na(2)-C(83)	27.53(10)
Zn(2)-Na(2)-C(83)	152.03(9)
N(7A)-Zn(2)-C(5A)	142.9(9)
N(7A)-Zn(2)-C(5)	145.6(9)
C(5A)-Zn(2)-C(5)	13.7(4)
N(7A)-Zn(2)-O(6)	98.2(9)
C(5A)-Zn(2)-O(6)	118.6(4)
C(5)-Zn(2)-O(6)	114.95(18)
N(7A)-Zn(2)-N(7)	9.6(6)
C(5A)-Zn(2)-N(7)	143.9(5)
C(5)-Zn(2)-N(7)	150.3(4)
O(6)-Zn(2)-N(7)	94.8(3)
N(7A)-Zn(2)-Na(2)	53.4(8)
C(5A)-Zn(2)-Na(2)	160.1(4)
C(5)-Zn(2)-Na(2)	160.44(18)
O(6)-Zn(2)-Na(2)	45.49(6)
N(7)-Zn(2)-Na(2)	49.3(3)
C(11)-C(1)-C(13)	109.0(3)
C(11)-C(1)-C(12)	108.6(3)
C(13)-C(1)-C(12)	108.2(3)
C(11)-C(1)-Zn(1)	110.0(2)
C(13)-C(1)-Zn(1)	111.0(2)
C(12)-C(1)-Zn(1)	110.0(2)
C(1)-C(11)-H(11A)	109.5
C(1)-C(11)-H(11B)	109.5
H(11A)-C(11)-H(11B)	109.5
C(1)-C(11)-H(11C)	109.5
H(11A)-C(11)-H(11C)	109.5
H(11B)-C(11)-H(11C)	109.5
C(1)-C(12)-H(12A)	109.5
C(1)-C(12)-H(12B)	109.5
H(12A)-C(12)-H(12B)	109.5
C(1)-C(12)-H(12C)	109.5
H(12A)-C(12)-H(12C)	109.5
H(12B)-C(12)-H(12C)	109.5
C(1)-C(13)-H(13A)	109.5
C(1)-C(13)-H(13B)	109.5
H(13A)-C(13)-H(13B)	109.5

C(1)-C(13)-H(13C)	109.5
H(13A)-C(13)-H(13C)	109.5
H(13B)-C(13)-H(13C)	109.5
C(21)-O(2)-Zn(1)	129.41(18)
C(21)-O(2)-Na(1)	136.10(19)
Zn(1)-O(2)-Na(1)	94.49(9)
O(2)-C(21)-C(22)	129.9(3)
O(2)-C(21)-C(213)	122.5(3)
C(22)-C(21)-C(213)	107.6(3)
C(21)-C(22)-C(23)	132.8(3)
C(21)-C(22)-C(27)	110.1(3)
C(23)-C(22)-C(27)	116.9(3)
C(24)-C(23)-C(22)	121.3(3)
C(24)-C(23)-H(63A)	119.4
C(22)-C(23)-H(63A)	119.4
C(23)-C(24)-C(25)	123.4(3)
C(23)-C(24)-H(64A)	118.3
C(25)-C(24)-H(64A)	118.3
C(26)-C(25)-C(24)	111.0(3)
C(26)-C(25)-C(20)	111.7(3)
C(24)-C(25)-C(20)	111.5(3)
C(26)-C(25)-H(25A)	107.5
C(24)-C(25)-H(25A)	107.5
C(20)-C(25)-H(25A)	107.5
C(27)-C(26)-C(25)	122.3(3)
C(27)-C(26)-H(66A)	118.9
C(25)-C(26)-H(66A)	118.9
C(26)-C(27)-C(22)	123.2(3)
C(26)-C(27)-C(28)	130.3(3)
C(22)-C(27)-C(28)	106.5(3)
C(29)-C(28)-C(213)	119.9(3)
C(29)-C(28)-C(27)	132.9(3)
C(213)-C(28)-C(27)	107.2(3)
C(28)-C(29)-C(210)	119.0(3)
C(28)-C(29)-H(69A)	120.5
С(210)-С(29)-Н(69А)	120.5
C(211)-C(210)-C(29)	120.4(3)
С(211)-С(210)-Н(61Ј)	119.8

C(29)-C(210)-H(61J)	119.8
C(212)-C(211)-C(210)	121.2(3)
С(212)-С(211)-Н(61К)	119.4
С(210)-С(211)-Н(61К)	119.4
C(213)-C(212)-C(211)	119.2(3)
C(213)-C(212)-H(61L)	120.4
С(211)-С(212)-Н(61L)	120.4
C(212)-C(213)-C(28)	120.3(3)
C(212)-C(213)-C(21)	131.1(3)
C(28)-C(213)-C(21)	108.6(3)
C(215)-C(20)-C(216)	108.4(3)
C(215)-C(20)-C(25)	111.2(4)
C(216)-C(20)-C(25)	110.1(3)
C(215)-C(20)-C(214)	108.9(3)
C(216)-C(20)-C(214)	109.5(4)
C(25)-C(20)-C(214)	108.8(3)
C(20)-C(214)-H(61G)	109.5
C(20)-C(214)-H(61H)	109.5
H(61G)-C(214)-H(61H)	109.5
C(20)-C(214)-H(61I)	109.5
H(61G)-C(214)-H(61I)	109.5
H(61H)-C(214)-H(61I)	109.5
C(20)-C(215)-H(61D)	109.5
C(20)-C(215)-H(61E)	109.5
H(61D)-C(215)-H(61E)	109.5
C(20)-C(215)-H(61F)	109.5
H(61D)-C(215)-H(61F)	109.5
H(61E)-C(215)-H(61F)	109.5
C(20)-C(216)-H(61A)	109.5
C(20)-C(216)-H(61B)	109.5
H(61A)-C(216)-H(61B)	109.5
C(20)-C(216)-H(61C)	109.5
H(61A)-C(216)-H(61C)	109.5
H(61B)-C(216)-H(61C)	109.5
C(35)-N(3)-C(31)	116.8(3)
C(35)-N(3)-Zn(1)	112.81(18)
C(31)-N(3)-Zn(1)	113.54(19)
C(35)-N(3)-Na(1)	112.24(19)

C(31)-N(3)-Na(1)	108.03(18)
Zn(1)-N(3)-Na(1)	90.19(10)
N(3)-C(31)-C(311)	107.1(3)
N(3)-C(31)-C(32)	112.1(3)
C(311)-C(31)-C(32)	108.8(3)
N(3)-C(31)-C(312)	112.2(3)
C(311)-C(31)-C(312)	107.6(3)
C(32)-C(31)-C(312)	108.9(3)
C(31)-C(311)-H(71A)	109.5
C(31)-C(311)-H(71B)	109.5
H(71A)-C(311)-H(71B)	109.5
C(31)-C(311)-H(71C)	109.5
H(71A)-C(311)-H(71C)	109.5
H(71B)-C(311)-H(71C)	109.5
C(31)-C(312)-H(71D)	109.5
C(31)-C(312)-H(71E)	109.5
H(71D)-C(312)-H(71E)	109.5
C(31)-C(312)-H(71F)	109.5
H(71D)-C(312)-H(71F)	109.5
H(71E)-C(312)-H(71F)	109.5
C(33)-C(32)-C(31)	112.9(3)
C(33)-C(32)-H(72A)	109.0
C(31)-C(32)-H(72A)	109.0
C(33)-C(32)-H(72B)	109.0
C(31)-C(32)-H(72B)	109.0
H(72A)-C(32)-H(72B)	107.8
C(32)-C(33)-C(34)	109.4(3)
C(32)-C(33)-H(73A)	109.8
C(34)-C(33)-H(73A)	109.8
C(32)-C(33)-H(73B)	109.8
C(34)-C(33)-H(73B)	109.8
H(73A)-C(33)-H(73B)	108.2
C(33)-C(34)-C(35)	112.8(3)
C(33)-C(34)-H(74A)	109.0
C(35)-C(34)-H(74A)	109.0
C(33)-C(34)-H(74B)	109.0
C(35)-C(34)-H(74B)	109.0

N(3)-C(35)-C(351)	107.3(3)
N(3)-C(35)-C(34)	112.6(3)
C(351)-C(35)-C(34)	107.7(3)
N(3)-C(35)-C(352)	113.1(2)
C(351)-C(35)-C(352)	106.2(3)
C(34)-C(35)-C(352)	109.5(3)
C(35)-C(351)-H(75A)	109.5
C(35)-C(351)-H(75B)	109.5
H(75A)-C(351)-H(75B)	109.5
С(35)-С(351)-Н(75С)	109.5
H(75A)-C(351)-H(75C)	109.5
H(75B)-C(351)-H(75C)	109.5
C(35)-C(352)-H(75D)	109.5
С(35)-С(352)-Н(75Е)	109.5
H(75D)-C(352)-H(75E)	109.5
C(35)-C(352)-H(75F)	109.5
H(75D)-C(352)-H(75F)	109.5
H(75E)-C(352)-H(75F)	109.5
C(411)-N(41)-C(42)	110.0(3)
C(411)-N(41)-C(412)	109.4(3)
C(42)-N(41)-C(412)	109.7(3)
C(411)-N(41)-Na(1)	117.6(2)
C(42)-N(41)-Na(1)	103.0(2)
C(412)-N(41)-Na(1)	106.8(2)
N(41)-C(411)-H(81A)	109.5
N(41)-C(411)-H(81B)	109.5
H(81A)-C(411)-H(81B)	109.5
N(41)-C(411)-H(81C)	109.5
H(81A)-C(411)-H(81C)	109.5
H(81B)-C(411)-H(81C)	109.5
N(41)-C(412)-H(81D)	109.5
N(41)-C(412)-H(81E)	109.5
H(81D)-C(412)-H(81E)	109.5
N(41)-C(412)-H(81F)	109.5
H(81D)-C(412)-H(81F)	109.5
H(81E)-C(412)-H(81F)	109.5
N(41)-C(42)-C(43)	114.2(3)
N(41)-C(42)-Na(1)	49.90(16)

C(43)-C(42)-Na(1)	80.00(19)
N(41)-C(42)-H(82A)	108.7
C(43)-C(42)-H(82A)	108.7
Na(1)-C(42)-H(82A)	157.7
N(41)-C(42)-H(82B)	108.7
C(43)-C(42)-H(82B)	108.7
Na(1)-C(42)-H(82B)	87.9
H(82A)-C(42)-H(82B)	107.6
N(44)-C(43)-C(42)	114.9(3)
N(44)-C(43)-H(83A)	108.5
C(42)-C(43)-H(83A)	108.5
N(44)-C(43)-H(83B)	108.5
C(42)-C(43)-H(83B)	108.5
H(83A)-C(43)-H(83B)	107.5
C(442)-N(44)-C(43)	109.2(2)
C(442)-N(44)-C(441)	108.7(3)
C(43)-N(44)-C(441)	110.2(3)
C(442)-N(44)-Na(1)	120.6(2)
C(43)-N(44)-Na(1)	105.13(19)
C(441)-N(44)-Na(1)	102.56(19)
N(44)-C(441)-H(84A)	109.5
N(44)-C(441)-H(84B)	109.5
H(84A)-C(441)-H(84B)	109.5
N(44)-C(441)-H(84C)	109.5
H(84A)-C(441)-H(84C)	109.5
H(84B)-C(441)-H(84C)	109.5
N(44)-C(442)-H(84D)	109.5
N(44)-C(442)-H(84E)	109.5
H(84D)-C(442)-H(84E)	109.5
N(44)-C(442)-H(84F)	109.5
H(84D)-C(442)-H(84F)	109.5
H(84E)-C(442)-H(84F)	109.5
C(51)-C(5)-C(53)	108.6(5)
C(51)-C(5)-C(52)	109.2(8)
C(53)-C(5)-C(52)	110.3(9)
C(51)-C(5)-Zn(2)	108.9(4)
C(53)-C(5)-Zn(2)	112.1(4)
C(52)-C(5)-Zn(2)	107.7(6)

C(61)-O(6)-Zn(2)	128.63(19)
C(61)-O(6)-Na(2)	137.1(2)
Zn(2)-O(6)-Na(2)	94.31(9)
O(6)-C(61)-C(62)	128.9(3)
O(6)-C(61)-C(613)	122.8(3)
C(62)-C(61)-C(613)	108.3(3)
C(61)-C(62)-C(63)	133.7(4)
C(61)-C(62)-C(67)	108.9(3)
C(63)-C(62)-C(67)	117.3(3)
C(64)-C(63)-C(62)	121.2(4)
C(64)-C(63)-H(23A)	119.4
C(62)-C(63)-H(23A)	119.4
C(63)-C(64)-C(65)	124.9(4)
C(63)-C(64)-H(24A)	117.6
C(65)-C(64)-H(24A)	117.6
C(66)-C(65)-C(64)	111.1(3)
C(66)-C(65)-C(60)	111.6(3)
C(64)-C(65)-C(60)	113.2(3)
C(66)-C(65)-H(65A)	106.8
C(64)-C(65)-H(65A)	106.8
C(60)-C(65)-H(65A)	106.8
C(67)-C(66)-C(65)	122.5(3)
C(67)-C(66)-H(26A)	118.7
C(65)-C(66)-H(26A)	118.7
C(66)-C(67)-C(62)	122.6(4)
C(66)-C(67)-C(68)	130.5(3)
C(62)-C(67)-C(68)	106.9(3)
C(69)-C(68)-C(613)	120.8(3)
C(69)-C(68)-C(67)	132.4(3)
C(613)-C(68)-C(67)	106.8(3)
C(610)-C(69)-C(68)	118.4(3)
C(610)-C(69)-H(29A)	120.8
C(68)-C(69)-H(29A)	120.8
C(611)-C(610)-C(69)	120.5(3)
С(611)-С(610)-Н(21Ј)	119.8
C(69)-C(610)-H(21J)	119.8
C(610)-C(611)-C(612)	121.3(4)
C(610)-C(611)-H(21K)	119.4

C(612)-C(611)-H(21K)	119.4
C(613)-C(612)-C(611)	118.8(3)
C(613)-C(612)-H(21L)	120.6
C(611)-C(612)-H(21L)	120.6
C(612)-C(613)-C(68)	120.2(3)
C(612)-C(613)-C(61)	130.7(3)
C(68)-C(613)-C(61)	109.1(3)
C(616)-C(60)-C(615)	108.1(3)
C(616)-C(60)-C(65)	111.6(3)
C(615)-C(60)-C(65)	110.4(3)
C(616)-C(60)-C(614)	108.4(3)
C(615)-C(60)-C(614)	109.6(3)
C(65)-C(60)-C(614)	108.6(3)
C(60)-C(614)-H(21A)	109.5
C(60)-C(614)-H(21B)	109.5
H(21A)-C(614)-H(21B)	109.5
C(60)-C(614)-H(21C)	109.5
H(21A)-C(614)-H(21C)	109.5
H(21B)-C(614)-H(21C)	109.5
C(60)-C(615)-H(21D)	109.5
C(60)-C(615)-H(21E)	109.5
H(21D)-C(615)-H(21E)	109.5
C(60)-C(615)-H(21F)	109.5
H(21D)-C(615)-H(21F)	109.5
H(21E)-C(615)-H(21F)	109.5
C(60)-C(616)-H(21G)	109.5
С(60)-С(616)-Н(21Н)	109.5
H(21G)-C(616)-H(21H)	109.5
С(60)-С(616)-Н(21І)	109.5
H(21G)-C(616)-H(21I)	109.5
H(21H)-C(616)-H(21I)	109.5
C(71)-N(7)-C(75)	116.5(6)
C(71)-N(7)-Zn(2)	107.9(4)
C(75)-N(7)-Zn(2)	113.9(5)
C(71)-N(7)-Na(2)	118.7(6)
C(75)-N(7)-Na(2)	107.2(5)
Zn(2)-N(7)-Na(2)	89.8(3)
N(7)-C(71)-C(72)	114.1(6)

N(7)-C(71)-C(711)	108.3(4)
C(72)-C(71)-C(711)	108.0(4)
N(7)-C(71)-C(712)	111.8(8)
C(72)-C(71)-C(712)	112.4(6)
C(711)-C(71)-C(712)	101.4(5)
C(73)-C(72)-C(71)	111.7(4)
C(73)-C(72)-H(32A)	109.3
C(71)-C(72)-H(32A)	109.3
C(73)-C(72)-H(32B)	109.3
C(71)-C(72)-H(32B)	109.3
H(32A)-C(72)-H(32B)	107.9
C(72)-C(73)-C(74)	112.4(5)
C(72)-C(73)-H(33A)	109.1
C(74)-C(73)-H(33A)	109.1
C(72)-C(73)-H(33B)	109.1
C(74)-C(73)-H(33B)	109.1
H(33A)-C(73)-H(33B)	107.9
C(75)-C(74)-C(73)	112.3(5)
C(75)-C(74)-H(34A)	109.1
C(73)-C(74)-H(34A)	109.1
C(75)-C(74)-H(34B)	109.1
C(73)-C(74)-H(34B)	109.1
H(34A)-C(74)-H(34B)	107.9
N(7)-C(75)-C(752)	108.4(5)
N(7)-C(75)-C(751)	111.6(5)
C(752)-C(75)-C(751)	103.7(5)
N(7)-C(75)-C(74)	112.6(6)
C(752)-C(75)-C(74)	110.2(5)
C(751)-C(75)-C(74)	109.9(5)
C(100)-N(7A)-C(104)	116.6(12)
C(100)-N(7A)-Zn(2)	122.6(10)
C(104)-N(7A)-Zn(2)	111.0(11)
C(100)-N(7A)-Na(2)	106.2(13)
C(104)-N(7A)-Na(2)	103.2(11)
Zn(2)-N(7A)-Na(2)	91.7(8)
N(7A)-C(100)-C(106)	105.8(10)
N(7A)-C(100)-C(105)	111.7(13)
C(106)-C(100)-C(105)	109.3(9)

N(7A)-C(100)-C(101)	112.5(13)
C(106)-C(100)-C(101)	113.7(10)
C(105)-C(100)-C(101)	104.0(12)
C(102)-C(101)-C(100)	111.5(10)
С(102)-С(101)-Н(10А)	109.3
С(100)-С(101)-Н(10А)	109.3
С(102)-С(101)-Н(10В)	109.3
С(100)-С(101)-Н(10В)	109.3
H(10A)-C(101)-H(10B)	108.0
C(101)-C(102)-C(103)	117.4(13)
С(101)-С(102)-Н(10С)	107.9
С(103)-С(102)-Н(10С)	107.9
С(101)-С(102)-Н(10D)	107.9
С(103)-С(102)-Н(10D)	107.9
H(10C)-C(102)-H(10D)	107.2
C(102)-C(103)-C(104)	105.9(9)
С(102)-С(103)-Н(10Е)	110.5
С(104)-С(103)-Н(10Е)	110.5
C(102)-C(103)-H(10F)	110.5
C(104)-C(103)-H(10F)	110.5
H(10E)-C(103)-H(10F)	108.7
N(7A)-C(104)-C(103)	113.2(12)
N(7A)-C(104)-C(107)	106.1(10)
C(103)-C(104)-C(107)	116.9(10)
N(7A)-C(104)-C(108)	111.6(13)
C(103)-C(104)-C(108)	105.4(9)
C(107)-C(104)-C(108)	103.4(8)
С(100)-С(105)-Н(10G)	109.5
С(100)-С(105)-Н(10Н)	109.5
H(10G)-C(105)-H(10H)	109.5
C(100)-C(105)-H(10I)	109.5
H(10G)-C(105)-H(10I)	109.5
H(10H)-C(105)-H(10I)	109.5
С(100)-С(106)-Н(10Ј)	109.5
С(100)-С(106)-Н(10К)	109.5
H(10J)-C(106)-H(10K)	109.5
С(100)-С(106)-Н(10L)	109.5
H(10J)-C(106)-H(10L)	109.5

H(10K)-C(106)-H(10L)	109.5
С(104)-С(107)-Н(10М)	109.5
C(104)-C(107)-H(10N)	109.5
H(10M)-C(107)-H(10N)	109.5
С(104)-С(107)-Н(10О)	109.5
H(10M)-C(107)-H(10O)	109.5
H(10N)-C(107)-H(10O)	109.5
С(104)-С(108)-Н(10Р)	109.5
C(104)-C(108)-H(10Q)	109.5
H(10P)-C(108)-H(10Q)	109.5
C(104)-C(108)-H(10R)	109.5
H(10P)-C(108)-H(10R)	109.5
H(10Q)-C(108)-H(10R)	109.5
C(812)-N(81)-C(811)	108.4(3)
C(812)-N(81)-C(82)	109.2(3)
C(811)-N(81)-C(82)	111.2(2)
C(812)-N(81)-Na(2)	119.8(2)
C(811)-N(81)-Na(2)	101.79(8)
C(82)-N(81)-Na(2)	106.2(2)
N(81)-C(811)-H(41A)	109.5
N(81)-C(811)-H(41B)	109.5
H(41A)-C(811)-H(41B)	109.5
N(81)-C(811)-H(41C)	109.5
H(41A)-C(811)-H(41C)	109.5
H(41B)-C(811)-H(41C)	109.4
N(81)-C(812)-H(41D)	109.5
N(81)-C(812)-H(41E)	109.5
H(41D)-C(812)-H(41E)	109.5
N(81)-C(812)-H(41F)	109.5
H(41D)-C(812)-H(41F)	109.5
H(41E)-C(812)-H(41F)	109.5
C(83)-C(82)-N(81)	116.4(3)
C(83)-C(82)-H(42A)	108.2
N(81)-C(82)-H(42A)	108.2
C(83)-C(82)-H(42B)	108.2
N(81)-C(82)-H(42B)	108.2
H(42A)-C(82)-H(42B)	107.3
C(82)-C(83)-N(84)	116.3(4)

C(82)-C(83)-Na(2)	78.5(2)
N(84)-C(83)-Na(2)	52.13(18)
C(82)-C(83)-H(43A)	108.2
N(84)-C(83)-H(43A)	108.2
Na(2)-C(83)-H(43A)	158.5
C(82)-C(83)-H(43B)	108.2
N(84)-C(83)-H(43B)	108.2
Na(2)-C(83)-H(43B)	89.0
H(43A)-C(83)-H(43B)	107.4
C(841)-N(84)-C(842)	108.8(3)
C(841)-N(84)-C(83)	111.4(3)
C(842)-N(84)-C(83)	106.9(3)
C(841)-N(84)-Na(2)	117.4(2)
C(842)-N(84)-Na(2)	111.3(2)
C(83)-N(84)-Na(2)	100.3(2)
N(84)-C(841)-H(44A)	109.5
N(84)-C(841)-H(44B)	109.5
H(44A)-C(841)-H(44B)	109.5
N(84)-C(841)-H(44C)	109.5
H(44A)-C(841)-H(44C)	109.5
H(44B)-C(841)-H(44C)	109.5
N(84)-C(842)-H(44D)	109.5
N(84)-C(842)-H(44E)	109.5
H(44D)-C(842)-H(44E)	109.5
N(84)-C(842)-H(44F)	109.5
H(44D)-C(842)-H(44F)	109.5
H(44E)-C(842)-H(44F)	109.5
C(52A)-C(5A)-C(53A)	110.1(19)
C(52A)-C(5A)-C(51A)	111.1(11)
C(53A)-C(5A)-C(51A)	99.2(17)
C(52A)-C(5A)-Zn(2)	115.1(10)
C(53A)-C(5A)-Zn(2)	119.5(17)
C(51A)-C(5A)-Zn(2)	99.7(9)
C(5A)-C(51A)-H(51D)	109.5
C(5A)-C(51A)-H(51E)	109.5
H(51D)-C(51A)-H(51E)	109.5
C(5A)-C(51A)-H(51F)	109.5
H(51D)-C(51A)-H(51F)	109.5

H(51E)-C(51A)-H(51F)	109.5
C(5A)-C(52A)-H(52D)	109.5
C(5A)-C(52A)-H(52E)	109.5
H(52D)-C(52A)-H(52E)	109.5
C(5A)-C(52A)-H(52F)	109.5
H(52D)-C(52A)-H(52F)	109.5
H(52E)-C(52A)-H(52F)	109.5
C(5A)-C(53A)-H(53D)	109.5
C(5A)-C(53A)-H(53E)	109.5
H(53D)-C(53A)-H(53E)	109.5
C(5A)-C(53A)-H(53F)	109.5
H(53D)-C(53A)-H(53F)	109.5
H(53E)-C(53A)-H(53F)	109.5

Symmetry transformations used to generate equivalent atoms:

Table 4. Anisotropic displacement parameters (Å²x 10³)for jksamboth. The anisotropic displacement factor exponent takes the form: $-2\pi^2$ [h²a^{*2}U¹¹ + ... + 2 h k a* b* U¹²]

	U ¹¹	U ²²	U ³³	U ²³	U ¹³	U ¹²
 Na(1)	29(1)	30(1)	34(1)	-6(1)	3(1)	8(1)
Zn(1)	21(1)	25(1)	35(1)	1(1)	4(1)	1(1)
Na(2)	30(1)	29(1)	40(1)	-1(1)	2(1)	1(1)
Zn(2)	25(1)	35(1)	62(1)	-12(1)	-8(1)	2(1)
C(1)	26(2)	27(2)	39(3)	-1(2)	3(2)	3(2)
C(11)	27(2)	47(3)	106(4)	3(3)	32(2)	4(2)
C(12)	28(2)	53(3)	60(3)	-5(2)	-2(2)	12(2)
C(13)	34(2)	42(3)	59(3)	-9(2)	10(2)	5(2)
O(2)	28(1)	25(1)	41(2)	-8(1)	8(1)	-8(1)
C(21)	27(2)	26(2)	30(2)	-5(2)	8(2)	-2(2)
C(22)	41(2)	23(2)	33(2)	7(2)	6(2)	-7(2)
C(23)	50(2)	34(2)	48(3)	3(2)	3(2)	-12(2)
C(24)	49(2)	48(3)	48(3)	17(2)	6(2)	-2(2)
C(25)	37(2)	51(3)	52(3)	9(3)	2(2)	-7(2)
C(26)	37(2)	39(3)	45(3)	6(2)	5(2)	-6(2)
C(27)	31(2)	29(2)	31(3)	0(2)	4(2)	-4(2)
C(28)	24(2)	22(2)	29(2)	2(2)	9(2)	4(2)
C(29)	25(2)	30(2)	33(3)	-2(2)	10(2)	2(2)
C(210)	34(2)	33(2)	45(3)	8(2)	13(2)	0(2)
C(211)	36(2)	52(3)	25(2)	9(2)	4(2)	7(2)
C(212)	24(2)	36(2)	38(3)	0(2)	9(2)	2(2)
C(213)	23(2)	27(2)	25(2)	-2(2)	9(2)	6(2)
C(20)	66(3)	49(3)	39(3)	0(2)	10(2)	-9(2)
C(214)	66(3)	99(4)	82(4)	-6(3)	19(3)	4(3)
C(215)	102(3)	87(4)	36(3)	13(3)	-7(2)	-40(3)
C(216)	116(4)	72(4)	37(3)	-9(3)	16(2)	-25(3)
N(3)	23(1)	26(2)	29(2)	0(2)	7(1)	1(1)
C(31)	21(2)	28(2)	36(3)	3(2)	9(2)	-2(2)
C(311)	27(2)	44(3)	47(3)	18(2)	6(2)	3(2)
C(312)	35(2)	37(2)	44(3)	-1(2)	10(2)	-5(2)
C(32)	43(2)	27(2)	69(3)	3(2)	21(2)	1(2)
C(33)	66(3)	33(3)	77(4)	-24(3)	28(3)	-7(2)
C(34)	50(2)	53(3)	45(3)	-18(2)	14(2)	-5(2)

C(35)	29(2)	32(2)	29(2)	-10(2)	6(2)	-4(2)
C(351)	45(2)	52(3)	34(3)	9(2)	4(2)	-1(2)
C(352)	38(2)	63(3)	38(3)	3(2)	-4(2)	6(2)
N(41)	47(2)	32(2)	35(2)	3(2)	4(2)	14(2)
C(411)	93(3)	56(3)	72(3)	-2(3)	50(3)	1(3)
C(412)	80(3)	83(4)	49(3)	-8(3)	-7(2)	40(3)
C(42)	57(2)	40(3)	31(3)	-7(2)	10(2)	10(2)
C(43)	45(2)	43(3)	44(3)	3(2)	10(2)	20(2)
N(44)	26(2)	32(2)	28(2)	-4(2)	6(1)	1(1)
C(441)	60(3)	46(3)	45(3)	-4(2)	8(2)	-12(2)
C(442)	37(2)	44(3)	43(3)	2(2)	1(2)	6(2)
C(51)	19(3)	76(5)	78(5)	-40(4)	-17(3)	11(3)
C(52)	43(5)	46(4)	97(9)	-30(4)	-7(6)	28(3)
C(53)	26(3)	84(5)	66(4)	-20(4)	7(3)	13(3)
O(6)	29(1)	29(2)	59(2)	-3(1)	4(1)	-8(1)
C(61)	25(2)	25(2)	44(3)	-2(2)	1(2)	3(2)
C(62)	34(2)	33(2)	34(3)	-4(2)	-6(2)	-5(2)
C(63)	64(3)	47(3)	46(3)	2(3)	-10(2)	-17(2)
C(64)	81(3)	51(3)	36(3)	-2(2)	-9(2)	-8(3)
C(65)	57(3)	46(3)	37(3)	2(2)	2(2)	3(2)
C(66)	49(2)	39(3)	42(3)	-2(2)	0(2)	-12(2)
C(67)	38(2)	29(2)	37(3)	0(2)	1(2)	-8(2)
C(68)	24(2)	23(2)	33(3)	-5(2)	1(2)	2(2)
C(69)	26(2)	30(2)	38(3)	-1(2)	2(2)	-2(2)
C(610)	37(2)	38(3)	28(3)	-4(2)	-3(2)	6(2)
C(611)	40(2)	40(3)	35(3)	8(2)	10(2)	13(2)
C(612)	28(2)	29(2)	43(3)	0(2)	7(2)	-2(2)
C(613)	22(2)	26(2)	33(3)	-2(2)	7(2)	3(2)
C(60)	52(3)	49(3)	32(3)	4(2)	5(2)	0(2)
C(614)	59(3)	88(4)	51(3)	-6(3)	10(2)	8(3)
C(615)	89(3)	61(3)	38(3)	6(2)	13(2)	6(3)
C(616)	62(3)	40(3)	59(3)	1(2)	19(2)	-6(2)
N(7)	19(4)	33(2)	18(3)	-1(3)	8(3)	-1(2)
N(7A)	19(4)	33(2)	18(3)	-1(3)	8(3)	-1(2)
N(81)	48(2)	50(2)	42(2)	8(2)	4(2)	14(2)
C(811)	90(3)	59(3)	100(4)	32(3)	22(3)	12(3)
C(812)	96(4)	117(5)	75(4)	-11(3)	-36(3)	52(3)
C(82)	79(3)	46(3)	80(4)	-9(3)	8(3)	23(3)

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C(83)	75(3)	74(4)	68(4)	-24(3)	1(3)	22(3)
N(84)	36(2)	52(2)	38(2)	-5(2)	5(2)	3(2)
C(841)	56(3)	111(4)	91(4)	-19(3)	32(3)	-34(3)
C(842)	52(3)	107(4)	54(3)	-22(3)	-3(2)	7(3)

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Table 5. Hydrogen coordinates ($x \ 10^4$) and isotropic displacement parameters (Å²x 10^3)

for jksamboth.

	X	у	Z	U(eq)
H(11A)	-2292	5434	1983	88
H(11B)	-1007	5140	2207	88
H(11C)	-1328	4938	1788	88
H(12A)	-2096	6297	1499	71
H(12B)	-1157	5786	1304	71
H(12C)	-678	6544	1402	71
H(13A)	-1652	6610	2134	67
H(13B)	-231	6884	2057	67
H(13C)	-380	6336	2371	67
H(63A)	290	5153	849	53
H(64A)	-1079	4924	347	58
H(25A)	-2544	3983	378	56
H(66A)	-2116	3092	815	49
H(69A)	-1705	2440	1451	35
H(61J)	-1091	2129	2054	44
H(61K)	363	2795	2416	45
H(61L)	1254	3776	2186	39
H(61G)	866	3126	76	123
H(61H)	641	3220	497	123
H(61I)	907	3870	253	123
H(61D)	-2155	3891	-283	113
H(61E)	-764	3628	-393	113
H(61F)	-866	4334	-181	113
H(61A)	-2585	2838	77	112
H(61B)	-1387	2518	328	112
H(61C)	-1320	2565	-104	112
H(71A)	2848	5997	1240	59
H(71B)	3071	6798	1196	59
H(71C)	1841	6525	1394	59
H(71D)	5166	5930	1533	57
H(71E)	5592	6420	1869	57
H(71F)	5261	6734	1471	57
H(72A)	3826	7501	1763	54
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H(72B)	2451	7250	1890	54
H(73A)	3778	7609	2402	69
H(73B)	4921	7099	2306	69
H(74A)	2397	6693	2511	58
H(74B)	3747	6598	2758	58
H(75A)	1712	5562	2483	66
H(75B)	2887	5377	2781	66
H(75C)	2684	4949	2411	66
H(75D)	5057	5205	2315	70
H(75E)	5078	5581	2700	70
H(75F)	5552	5975	2355	70
H(81A)	5850	4715	715	107
H(81B)	6323	4888	1130	107
H(81C)	5331	5387	901	107
H(81D)	3555	4432	556	108
H(81E)	3127	5099	765	108
H(81F)	2595	4368	875	108
H(82A)	5251	3666	879	51
H(82B)	4014	3546	1108	51
H(83A)	5956	3162	1419	52
H(83B)	6541	3915	1416	52
H(84A)	4674	2816	1856	76
H(84B)	3502	3270	1670	76
H(84C)	3936	3347	2096	76
H(84D)	6697	3357	2071	62
H(84E)	5895	3884	2297	62
H(84F)	6876	4158	2015	62
H(51A)	7959	4490	6130	88
H(51B)	6905	4390	6422	88
H(51C)	6908	5074	6187	88
H(52A)	5639	3266	5730	94
H(52B)	6093	3319	6156	94
H(52C)	7159	3351	5863	94
H(53A)	6388	5016	5517	88
H(53B)	5826	4328	5332	88
H(53C)	7339	4379	5478	88
H(23A)	4392	6070	5378	64

H(24A)	5369	6815	5034	68
H(65A)	7318	7334	5327	56
H(26A)	7398	7633	5965	52
H(29A)	7566	7448	6682	37
H(21J)	7429	7026	7272	42
H(21K)	6154	6079	7368	46
H(21L)	4919	5556	6885	40
H(21A)	4090	7896	5461	99
H(21B)	4339	8696	5425	99
H(21C)	4926	8296	5780	99
H(21D)	6486	8030	4799	93
H(21E)	5485	8640	4850	93
H(21F)	4972	7871	4838	93
H(21G)	7836	8547	5355	79
H(21H)	7112	8673	5717	79
H(21I)	6695	9103	5357	79
H(31A)	2197	4846	5400	58
H(31B)	2118	4199	5135	58
H(31C)	3407	4330	5403	58
H(31D)	-145	3690	5649	81
H(31E)	180	4218	5339	81
H(31F)	121	4473	5749	81
H(32A)	1695	3028	5383	44
H(32B)	3132	3140	5581	44
H(33A)	2138	2284	5871	50
H(33B)	882	2749	5920	50
H(34A)	2159	2728	6484	61
H(34B)	3446	2946	6295	61
H(35A)	790	3638	6722	68
H(35B)	196	3579	6307	68
H(35C)	569	4309	6479	68
H(35D)	3971	3981	6627	79
H(35E)	2902	3752	6895	79
H(35F)	2843	4499	6721	79
H(10A)	-57	4451	5667	40
H(10B)	-43	3833	5385	40
H(10C)	401	3062	5839	40
H(10D)	-814	3506	5945	40

H(10E)	703	3283	6468	88
H(10F)	531	4088	6401	88
H(10G)	2177	3094	5545	123
H(10H)	3210	3538	5345	123
H(10I)	1751	3440	5160	123
H(10J)	2118	5161	5518	103
H(10K)	1489	4795	5156	103
H(10L)	3019	4710	5277	103
H(10M)	4174	3920	6506	79
H(10N)	3202	3565	6767	79
H(10O)	3036	4355	6667	79
H(10P)	2465	2889	5888	116
H(10Q)	2377	2661	6302	116
H(10R)	3720	2958	6175	116
H(41A)	1235	7198	5782	124
H(41B)	2025	6566	5636	124
H(41C)	2279	6801	6051	124
H(41D)	-726	6640	5556	148
H(41E)	-1039	5889	5692	148
H(41F)	107	6007	5430	148
H(42A)	-274	7057	6195	82
H(42B)	-954	6337	6246	82
H(43A)	32	6737	6780	87
H(43B)	1409	6765	6608	87
H(44A)	-640	5763	7044	127
H(44B)	-49	5037	6949	127
H(44C)	-942	5446	6645	127
H(44D)	1471	6139	7243	107
H(44E)	2620	6111	6975	107
H(44F)	2086	5423	7141	107
H(51D)	6963	5042	5852	123
H(51E)	5903	4758	5544	123
H(51F)	7307	4401	5610	123
H(52D)	6575	3852	6535	121
H(52E)	6703	4656	6479	121
H(52F)	7787	4155	6340	121
H(53D)	7285	3368	5867	116
H(53E)	6085	3496	5567	116

H(53F)	5846	3111	5938	116

Table 6. Torsion angles [°] for jksamboth.

N(3)-Zn(1)-C(1)-C(11)	-135.4(3)
O(2)-Zn(1)-C(1)-C(11)	41.7(3)
N(3)-Zn(1)-C(1)-C(13)	-14.8(4)
O(2)-Zn(1)-C(1)-C(13)	162.4(2)
N(3)-Zn(1)-C(1)-C(12)	104.9(3)
O(2)-Zn(1)-C(1)-C(12)	-77.9(2)
N(3)-Zn(1)-O(2)-C(21)	178.1(3)
C(1)-Zn(1)-O(2)-C(21)	-0.4(3)
N(3)-Zn(1)-O(2)-Na(1)	-2.26(11)
C(1)-Zn(1)-O(2)-Na(1)	179.26(12)
N(3)-Na(1)-O(2)-C(21)	-178.6(3)
N(41)-Na(1)-O(2)-C(21)	49.1(3)
N(44)-Na(1)-O(2)-C(21)	-33.8(3)
C(42)-Na(1)-O(2)-C(21)	20.8(3)
N(3)-Na(1)-O(2)-Zn(1)	1.83(9)
N(41)-Na(1)-O(2)-Zn(1)	-130.45(10)
N(44)-Na(1)-O(2)-Zn(1)	146.65(10)
C(42)-Na(1)-O(2)-Zn(1)	-158.83(9)
Zn(1)-O(2)-C(21)-C(22)	82.5(4)
Na(1)-O(2)-C(21)-C(22)	-97.0(4)
Zn(1)-O(2)-C(21)-C(213)	-97.7(3)
Na(1)-O(2)-C(21)-C(213)	82.8(4)
O(2)-C(21)-C(22)-C(23)	-8.7(6)
C(213)-C(21)-C(22)-C(23)	171.5(3)
O(2)-C(21)-C(22)-C(27)	177.2(3)
C(213)-C(21)-C(22)-C(27)	-2.6(4)
C(21)-C(22)-C(23)-C(24)	-178.9(3)
C(27)-C(22)-C(23)-C(24)	-5.1(5)
C(22)-C(23)-C(24)-C(25)	-6.0(6)
C(23)-C(24)-C(25)-C(26)	14.8(5)
C(23)-C(24)-C(25)-C(20)	-110.5(4)
C(24)-C(25)-C(26)-C(27)	-13.7(5)
C(20)-C(25)-C(26)-C(27)	111.4(4)
C(25)-C(26)-C(27)-C(22)	4.1(5)
C(25)-C(26)-C(27)-C(28)	-177.1(3)
C(21)-C(22)-C(27)-C(26)	-178.8(3)

C(23)-C(22)-C(27)-C(26)	6.1(5)
C(21)-C(22)-C(27)-C(28)	2.2(4)
C(23)-C(22)-C(27)-C(28)	-172.9(3)
C(26)-C(27)-C(28)-C(29)	-0.2(6)
C(22)-C(27)-C(28)-C(29)	178.7(3)
C(26)-C(27)-C(28)-C(213)	-179.8(3)
C(22)-C(27)-C(28)-C(213)	-0.9(3)
C(213)-C(28)-C(29)-C(210)	1.6(4)
C(27)-C(28)-C(29)-C(210)	-178.0(3)
C(28)-C(29)-C(210)-C(211)	-0.5(5)
C(29)-C(210)-C(211)-C(212)	-0.5(5)
C(210)-C(211)-C(212)-C(213)	0.3(5)
C(211)-C(212)-C(213)-C(28)	0.9(5)
C(211)-C(212)-C(213)-C(21)	179.0(3)
C(29)-C(28)-C(213)-C(212)	-1.8(4)
C(27)-C(28)-C(213)-C(212)	177.9(3)
C(29)-C(28)-C(213)-C(21)	179.7(3)
C(27)-C(28)-C(213)-C(21)	-0.7(3)
O(2)-C(21)-C(213)-C(212)	3.9(5)
C(22)-C(21)-C(213)-C(212)	-176.3(3)
O(2)-C(21)-C(213)-C(28)	-177.8(3)
C(22)-C(21)-C(213)-C(28)	2.0(3)
C(26)-C(25)-C(20)-C(215)	171.6(3)
C(24)-C(25)-C(20)-C(215)	-63.5(4)
C(26)-C(25)-C(20)-C(216)	51.5(4)
C(24)-C(25)-C(20)-C(216)	176.4(3)
C(26)-C(25)-C(20)-C(214)	-68.5(4)
C(24)-C(25)-C(20)-C(214)	56.3(4)
C(1)-Zn(1)-N(3)-C(35)	65.1(3)
O(2)-Zn(1)-N(3)-C(35)	-112.3(2)
C(1)-Zn(1)-N(3)-C(31)	-70.7(3)
O(2)-Zn(1)-N(3)-C(31)	111.9(2)
C(1)-Zn(1)-N(3)-Na(1)	179.4(2)
O(2)-Zn(1)-N(3)-Na(1)	2.06(10)
O(2)-Na(1)-N(3)-C(35)	112.96(19)
N(41)-Na(1)-N(3)-C(35)	-145.09(19)
N(44)-Na(1)-N(3)-C(35)	-15.0(3)
C(42)-Na(1)-N(3)-C(35)	-136.5(3)

O(2)-Na(1)-N(3)-C(31)	-116.79(19)
N(41)-Na(1)-N(3)-C(31)	-14.8(2)
N(44)-Na(1)-N(3)-C(31)	115.2(2)
C(42)-Na(1)-N(3)-C(31)	-6.3(4)
O(2)-Na(1)-N(3)-Zn(1)	-1.88(9)
N(41)-Na(1)-N(3)-Zn(1)	100.06(13)
N(44)-Na(1)-N(3)-Zn(1)	-129.88(14)
C(42)-Na(1)-N(3)-Zn(1)	108.6(3)
C(35)-N(3)-C(31)-C(311)	-164.0(2)
Zn(1)-N(3)-C(31)-C(311)	-30.0(3)
Na(1)-N(3)-C(31)-C(311)	68.4(2)
C(35)-N(3)-C(31)-C(32)	-44.8(3)
Zn(1)-N(3)-C(31)-C(32)	89.2(3)
Na(1)-N(3)-C(31)-C(32)	-172.4(2)
C(35)-N(3)-C(31)-C(312)	78.2(3)
Zn(1)-N(3)-C(31)-C(312)	-147.8(2)
Na(1)-N(3)-C(31)-C(312)	-49.5(3)
N(3)-C(31)-C(32)-C(33)	50.8(4)
C(311)-C(31)-C(32)-C(33)	169.1(3)
C(312)-C(31)-C(32)-C(33)	-74.0(4)
C(31)-C(32)-C(33)-C(34)	-56.6(4)
C(32)-C(33)-C(34)-C(35)	56.0(4)
C(31)-N(3)-C(35)-C(351)	162.8(3)
Zn(1)-N(3)-C(35)-C(351)	28.5(3)
Na(1)-N(3)-C(35)-C(351)	-71.6(3)
C(31)-N(3)-C(35)-C(34)	44.5(3)
Zn(1)-N(3)-C(35)-C(34)	-89.8(3)
Na(1)-N(3)-C(35)-C(34)	170.0(2)
C(31)-N(3)-C(35)-C(352)	-80.4(3)
Zn(1)-N(3)-C(35)-C(352)	145.3(2)
Na(1)-N(3)-C(35)-C(352)	45.2(3)
C(33)-C(34)-C(35)-N(3)	-49.9(4)
C(33)-C(34)-C(35)-C(351)	-167.9(3)
C(33)-C(34)-C(35)-C(352)	76.9(4)
O(2)-Na(1)-N(41)-C(411)	142.3(2)
N(3)-Na(1)-N(41)-C(411)	52.6(3)
N(44)-Na(1)-N(41)-C(411)	-98.1(3)
C(42)-Na(1)-N(41)-C(411)	-121.1(3)

O(2)-Na(1)-N(41)-C(42)	-96.6(2)
N(3)-Na(1)-N(41)-C(42)	173.67(18)
N(44)-Na(1)-N(41)-C(42)	23.02(19)
O(2)-Na(1)-N(41)-C(412)	18.9(3)
N(3)-Na(1)-N(41)-C(412)	-70.8(3)
N(44)-Na(1)-N(41)-C(412)	138.6(2)
C(42)-Na(1)-N(41)-C(412)	115.5(3)
C(411)-N(41)-C(42)-C(43)	74.9(4)
C(412)-N(41)-C(42)-C(43)	-164.6(3)
Na(1)-N(41)-C(42)-C(43)	-51.2(3)
C(411)-N(41)-C(42)-Na(1)	126.1(3)
C(412)-N(41)-C(42)-Na(1)	-113.4(3)
O(2)-Na(1)-C(42)-N(41)	91.9(2)
N(3)-Na(1)-C(42)-N(41)	-13.7(4)
N(44)-Na(1)-C(42)-N(41)	-150.8(2)
O(2)-Na(1)-C(42)-C(43)	-134.4(2)
N(3)-Na(1)-C(42)-C(43)	120.0(3)
N(41)-Na(1)-C(42)-C(43)	133.8(3)
N(44)-Na(1)-C(42)-C(43)	-17.08(18)
N(41)-C(42)-C(43)-N(44)	62.9(4)
Na(1)-C(42)-C(43)-N(44)	25.6(3)
C(42)-C(43)-N(44)-C(442)	-164.0(3)
C(42)-C(43)-N(44)-C(441)	76.6(4)
C(42)-C(43)-N(44)-Na(1)	-33.3(3)
O(2)-Na(1)-N(44)-C(442)	-131.2(2)
N(3)-Na(1)-N(44)-C(442)	-16.8(3)
N(41)-Na(1)-N(44)-C(442)	128.2(2)
C(42)-Na(1)-N(44)-C(442)	141.5(3)
O(2)-Na(1)-N(44)-C(43)	105.1(2)
N(3)-Na(1)-N(44)-C(43)	-140.5(2)
N(41)-Na(1)-N(44)-C(43)	4.5(2)
C(42)-Na(1)-N(44)-C(43)	17.74(19)
O(2)-Na(1)-N(44)-C(441)	-10.2(2)
N(3)-Na(1)-N(44)-C(441)	104.2(2)
N(41)-Na(1)-N(44)-C(441)	-110.8(2)
C(42)-Na(1)-N(44)-C(441)	-97.6(2)
N(7A)-Zn(2)-C(5)-C(51)	-151.5(8)
C(5A)-Zn(2)-C(5)-C(51)	-63(2)

O(6)-Zn(2)-C(5)-C(51)	45.2(5)
N(7)-Zn(2)-C(5)-C(51)	-135.5(5)
N(7A)-Zn(2)-C(5)-C(53)	88.3(9)
C(5A)-Zn(2)-C(5)-C(53)	177(2)
O(6)-Zn(2)-C(5)-C(53)	-75.0(5)
N(7)-Zn(2)-C(5)-C(53)	104.3(6)
N(7A)-Zn(2)-C(5)-C(52)	-33.2(11)
C(5A)-Zn(2)-C(5)-C(52)	55(2)
O(6)-Zn(2)-C(5)-C(52)	163.5(8)
N(7)-Zn(2)-C(5)-C(52)	-17.2(10)
N(7A)-Zn(2)-O(6)-C(61)	-170.6(5)
C(5A)-Zn(2)-O(6)-C(61)	14.8(5)
C(5)-Zn(2)-O(6)-C(61)	0.0(3)
N(7)-Zn(2)-O(6)-C(61)	-179.7(3)
N(7A)-Zn(2)-O(6)-Na(2)	9.6(4)
C(5A)-Zn(2)-O(6)-Na(2)	-165.0(4)
C(5)-Zn(2)-O(6)-Na(2)	-179.81(18)
N(7)-Zn(2)-O(6)-Na(2)	0.54(18)
N(7)-Na(2)-O(6)-C(61)	179.8(3)
N(81)-Na(2)-O(6)-C(61)	40.1(3)
N(7A)-Na(2)-O(6)-C(61)	173.2(4)
N(84)-Na(2)-O(6)-C(61)	-45.7(3)
C(83)-Na(2)-O(6)-C(61)	-15.2(3)
N(7)-Na(2)-O(6)-Zn(2)	-0.47(15)
N(81)-Na(2)-O(6)-Zn(2)	-140.16(10)
N(7A)-Na(2)-O(6)-Zn(2)	-7.0(3)
N(84)-Na(2)-O(6)-Zn(2)	134.10(11)
C(83)-Na(2)-O(6)-Zn(2)	164.52(12)
Zn(2)-O(6)-C(61)-C(62)	83.9(4)
Na(2)-O(6)-C(61)-C(62)	-96.4(4)
Zn(2)-O(6)-C(61)-C(613)	-97.4(3)
Na(2)-O(6)-C(61)-C(613)	82.2(4)
O(6)-C(61)-C(62)-C(63)	-4.5(6)
C(613)-C(61)-C(62)-C(63)	176.7(4)
O(6)-C(61)-C(62)-C(67)	178.5(3)
C(613)-C(61)-C(62)-C(67)	-0.3(4)
C(61)-C(62)-C(63)-C(64)	-177.8(4)
C(67)-C(62)-C(63)-C(64)	-1.0(5)

C(62)-C(63)-C(64)-C(65)	-2.3(6)
C(63)-C(64)-C(65)-C(66)	5.6(5)
C(63)-C(64)-C(65)-C(60)	-120.9(4)
C(64)-C(65)-C(66)-C(67)	-6.2(5)
C(60)-C(65)-C(66)-C(67)	121.2(4)
C(65)-C(66)-C(67)-C(62)	3.8(6)
C(65)-C(66)-C(67)-C(68)	-178.8(3)
C(61)-C(62)-C(67)-C(66)	177.8(3)
C(63)-C(62)-C(67)-C(66)	0.2(5)
C(61)-C(62)-C(67)-C(68)	-0.2(4)
C(63)-C(62)-C(67)-C(68)	-177.7(3)
C(66)-C(67)-C(68)-C(69)	2.9(6)
C(62)-C(67)-C(68)-C(69)	-179.3(3)
C(66)-C(67)-C(68)-C(613)	-177.1(4)
C(62)-C(67)-C(68)-C(613)	0.6(3)
C(613)-C(68)-C(69)-C(610)	0.7(5)
C(67)-C(68)-C(69)-C(610)	-179.3(3)
C(68)-C(69)-C(610)-C(611)	1.1(5)
C(69)-C(610)-C(611)-C(612)	-1.5(5)
C(610)-C(611)-C(612)-C(613)	0.0(5)
C(611)-C(612)-C(613)-C(68)	1.8(5)
C(611)-C(612)-C(613)-C(61)	-179.9(3)
C(69)-C(68)-C(613)-C(612)	-2.2(5)
C(67)-C(68)-C(613)-C(612)	177.9(3)
C(69)-C(68)-C(613)-C(61)	179.1(3)
C(67)-C(68)-C(613)-C(61)	-0.8(3)
O(6)-C(61)-C(613)-C(612)	3.4(5)
C(62)-C(61)-C(613)-C(612)	-177.7(3)
O(6)-C(61)-C(613)-C(68)	-178.2(3)
C(62)-C(61)-C(613)-C(68)	0.7(4)
C(66)-C(65)-C(60)-C(616)	59.4(4)
C(64)-C(65)-C(60)-C(616)	-174.3(3)
C(66)-C(65)-C(60)-C(615)	179.7(3)
C(64)-C(65)-C(60)-C(615)	-54.0(4)
C(66)-C(65)-C(60)-C(614)	-60.1(4)
C(64)-C(65)-C(60)-C(614)	66.2(4)
N(7A)-Zn(2)-N(7)-C(71)	9(6)
C(5A)-Zn(2)-N(7)-C(71)	-82.1(8)

C(5)-Zn(2)-N(7)-C(71)	-59.6(8)
O(6)-Zn(2)-N(7)-C(71)	119.8(6)
N(7A)-Zn(2)-N(7)-C(75)	140(7)
C(5A)-Zn(2)-N(7)-C(75)	48.8(10)
C(5)-Zn(2)-N(7)-C(75)	71.3(7)
O(6)-Zn(2)-N(7)-C(75)	-109.3(6)
N(7A)-Zn(2)-N(7)-Na(2)	-112(7)
C(5A)-Zn(2)-N(7)-Na(2)	157.6(6)
C(5)-Zn(2)-N(7)-Na(2)	-179.9(4)
O(6)-Zn(2)-N(7)-Na(2)	-0.51(17)
O(6)-Na(2)-N(7)-C(71)	-109.9(4)
N(81)-Na(2)-N(7)-C(71)	1.4(6)
N(7A)-Na(2)-N(7)-C(71)	-65(3)
N(84)-Na(2)-N(7)-C(71)	126.5(4)
C(83)-Na(2)-N(7)-C(71)	110.7(5)
O(6)-Na(2)-N(7)-C(75)	115.5(5)
N(81)-Na(2)-N(7)-C(75)	-133.2(4)
N(7A)-Na(2)-N(7)-C(75)	160(4)
N(84)-Na(2)-N(7)-C(75)	-8.1(6)
C(83)-Na(2)-N(7)-C(75)	-23.8(9)
O(6)-Na(2)-N(7)-Zn(2)	0.46(15)
N(81)-Na(2)-N(7)-Zn(2)	111.8(3)
N(7A)-Na(2)-N(7)-Zn(2)	45(4)
N(84)-Na(2)-N(7)-Zn(2)	-123.12(17)
C(83)-Na(2)-N(7)-Zn(2)	-138.9(5)
C(75)-N(7)-C(71)-C(72)	-45.5(9)
Zn(2)-N(7)-C(71)-C(72)	84.0(6)
Na(2)-N(7)-C(71)-C(72)	-176.0(4)
C(75)-N(7)-C(71)-C(711)	-165.8(6)
Zn(2)-N(7)-C(71)-C(711)	-36.3(7)
Na(2)-N(7)-C(71)-C(711)	63.7(6)
C(75)-N(7)-C(71)-C(712)	83.3(9)
Zn(2)-N(7)-C(71)-C(712)	-147.2(5)
Na(2)-N(7)-C(71)-C(712)	-47.2(6)
N(7)-C(71)-C(72)-C(73)	50.5(6)
C(711)-C(71)-C(72)-C(73)	170.9(4)
C(712)-C(71)-C(72)-C(73)	-78.1(7)
C(71)-C(72)-C(73)-C(74)	-54.1(6)

C(72)-C(73)-C(74)-C(75)	53.4(7)
C(71)-N(7)-C(75)-C(752)	166.2(7)
Zn(2)-N(7)-C(75)-C(752)	39.7(8)
Na(2)-N(7)-C(75)-C(752)	-58.0(6)
C(71)-N(7)-C(75)-C(751)	-80.2(9)
Zn(2)-N(7)-C(75)-C(751)	153.3(5)
Na(2)-N(7)-C(75)-C(751)	55.6(6)
C(71)-N(7)-C(75)-C(74)	43.9(9)
Zn(2)-N(7)-C(75)-C(74)	-82.6(6)
Na(2)-N(7)-C(75)-C(74)	179.7(4)
C(73)-C(74)-C(75)-N(7)	-46.4(7)
C(73)-C(74)-C(75)-C(752)	-167.6(5)
C(73)-C(74)-C(75)-C(751)	78.7(6)
C(5A)-Zn(2)-N(7A)-C(100)	-85.9(18)
C(5)-Zn(2)-N(7A)-C(100)	-63(2)
O(6)-Zn(2)-N(7A)-C(100)	102.0(18)
N(7)-Zn(2)-N(7A)-C(100)	172(8)
C(5A)-Zn(2)-N(7A)-C(104)	58.7(18)
C(5)-Zn(2)-N(7A)-C(104)	81.9(13)
O(6)-Zn(2)-N(7A)-C(104)	-113.3(14)
N(7)-Zn(2)-N(7A)-C(104)	-43(5)
C(5A)-Zn(2)-N(7A)-Na(2)	163.6(7)
C(5)-Zn(2)-N(7A)-Na(2)	-173.3(4)
O(6)-Zn(2)-N(7A)-Na(2)	-8.5(4)
N(7)-Zn(2)-N(7A)-Na(2)	61(6)
O(6)-Na(2)-N(7A)-C(100)	-116.8(8)
N(7)-Na(2)-N(7A)-C(100)	109(4)
N(81)-Na(2)-N(7A)-C(100)	-12.9(12)
N(84)-Na(2)-N(7A)-C(100)	123.1(6)
C(83)-Na(2)-N(7A)-C(100)	102.4(16)
O(6)-Na(2)-N(7A)-C(104)	120.0(9)
N(7)-Na(2)-N(7A)-C(104)	-14(3)
N(81)-Na(2)-N(7A)-C(104)	-136.0(6)
N(84)-Na(2)-N(7A)-C(104)	-0.1(13)
C(83)-Na(2)-N(7A)-C(104)	-21(3)
O(6)-Na(2)-N(7A)-Zn(2)	7.9(3)
N(7)-Na(2)-N(7A)-Zn(2)	-126(4)
N(81)-Na(2)-N(7A)-Zn(2)	111.9(5)

N(84)-Na(2)-N(7A)-Zn(2)	-112.1(5)
C(83)-Na(2)-N(7A)-Zn(2)	-132.8(16)
C(104)-N(7A)-C(100)-C(106)	171.3(16)
Zn(2)-N(7A)-C(100)-C(106)	-46(2)
Na(2)-N(7A)-C(100)-C(106)	57.0(11)
C(104)-N(7A)-C(100)-C(105)	-70(2)
Zn(2)-N(7A)-C(100)-C(105)	73.0(18)
Na(2)-N(7A)-C(100)-C(105)	175.9(8)
C(104)-N(7A)-C(100)-C(101)	47(2)
Zn(2)-N(7A)-C(100)-C(101)	-170.5(16)
Na(2)-N(7A)-C(100)-C(101)	-67.7(12)
N(7A)-C(100)-C(101)-C(102)	-44(2)
C(106)-C(100)-C(101)-C(102)	-164.0(14)
C(105)-C(100)-C(101)-C(102)	77.2(18)
C(100)-C(101)-C(102)-C(103)	51(2)
C(101)-C(102)-C(103)-C(104)	-54.6(15)
C(100)-N(7A)-C(104)-C(103)	-53(2)
Zn(2)-N(7A)-C(104)-C(103)	159.8(11)
Na(2)-N(7A)-C(104)-C(103)	62.9(10)
C(100)-N(7A)-C(104)-C(107)	177.4(16)
Zn(2)-N(7A)-C(104)-C(107)	30.4(17)
Na(2)-N(7A)-C(104)-C(107)	-66.6(11)
C(100)-N(7A)-C(104)-C(108)	66(2)
Zn(2)-N(7A)-C(104)-C(108)	-81.5(13)
Na(2)-N(7A)-C(104)-C(108)	-178.5(6)
C(102)-C(103)-C(104)-N(7A)	52.5(15)
C(102)-C(103)-C(104)-C(107)	176.3(11)
C(102)-C(103)-C(104)-C(108)	-69.7(11)
O(6)-Na(2)-N(81)-C(812)	113.9(3)
N(7)-Na(2)-N(81)-C(812)	13.3(4)
N(7A)-Na(2)-N(81)-C(812)	25.2(6)
N(84)-Na(2)-N(81)-C(812)	-128.3(3)
C(83)-Na(2)-N(81)-C(812)	-140.6(3)
O(6)-Na(2)-N(81)-C(811)	-5.55(16)
N(7)-Na(2)-N(81)-C(811)	-106.2(3)
N(7A)-Na(2)-N(81)-C(811)	-94.3(6)
N(84)-Na(2)-N(81)-C(811)	112.22(14)
C(83)-Na(2)-N(81)-C(811)	99.93(16)

O(6)-Na(2)-N(81)-C(82)	-122.0(2)
N(7)-Na(2)-N(81)-C(82)	137.4(3)
N(7A)-Na(2)-N(81)-C(82)	149.3(6)
N(84)-Na(2)-N(81)-C(82)	-4.2(2)
C(83)-Na(2)-N(81)-C(82)	-16.5(2)
C(812)-N(81)-C(82)-C(83)	162.7(4)
C(811)-N(81)-C(82)-C(83)	-77.8(4)
Na(2)-N(81)-C(82)-C(83)	32.2(4)
N(81)-C(82)-C(83)-N(84)	-60.9(5)
N(81)-C(82)-C(83)-Na(2)	-24.0(3)
O(6)-Na(2)-C(83)-C(82)	113.6(3)
N(7)-Na(2)-C(83)-C(82)	-111.4(6)
N(81)-Na(2)-C(83)-C(82)	16.4(2)
N(7A)-Na(2)-C(83)-C(82)	-108.5(18)
N(84)-Na(2)-C(83)-C(82)	-137.1(4)
O(6)-Na(2)-C(83)-N(84)	-109.3(2)
N(7)-Na(2)-C(83)-N(84)	25.7(7)
N(81)-Na(2)-C(83)-N(84)	153.4(3)
N(7A)-Na(2)-C(83)-N(84)	28.5(18)
C(82)-C(83)-N(84)-C(841)	-76.9(4)
Na(2)-C(83)-N(84)-C(841)	-125.0(3)
C(82)-C(83)-N(84)-C(842)	164.4(4)
Na(2)-C(83)-N(84)-C(842)	116.2(3)
C(82)-C(83)-N(84)-Na(2)	48.1(4)
O(6)-Na(2)-N(84)-C(841)	-154.1(3)
N(7)-Na(2)-N(84)-C(841)	-46.9(4)
N(81)-Na(2)-N(84)-C(841)	99.9(3)
N(7A)-Na(2)-N(84)-C(841)	-49.9(7)
C(83)-Na(2)-N(84)-C(841)	120.8(4)
O(6)-Na(2)-N(84)-C(842)	-27.8(3)
N(7)-Na(2)-N(84)-C(842)	79.4(4)
N(81)-Na(2)-N(84)-C(842)	-133.8(3)
N(7A)-Na(2)-N(84)-C(842)	76.4(7)
C(83)-Na(2)-N(84)-C(842)	-112.8(4)
O(6)-Na(2)-N(84)-C(83)	85.0(2)
N(7)-Na(2)-N(84)-C(83)	-167.7(3)
N(81)-Na(2)-N(84)-C(83)	-20.9(2)
N(7A)-Na(2)-N(84)-C(83)	-170.7(7)

N(7A)-Zn(2)-C(5A)-C(52A)	-111.6(12)
C(5)-Zn(2)-C(5A)-C(52A)	138(3)
O(6)-Zn(2)-C(5A)-C(52A)	59.5(10)
N(7)-Zn(2)-C(5A)-C(52A)	-95.5(11)
N(7A)-Zn(2)-C(5A)-C(53A)	23(2)
C(5)-Zn(2)-C(5A)-C(53A)	-88(3)
O(6)-Zn(2)-C(5A)-C(53A)	-166.0(18)
N(7)-Zn(2)-C(5A)-C(53A)	39(2)
N(7A)-Zn(2)-C(5A)-C(51A)	129.5(10)
C(5)-Zn(2)-C(5A)-C(51A)	18.7(17)
O(6)-Zn(2)-C(5A)-C(51A)	-59.5(9)
N(7)-Zn(2)-C(5A)-C(51A)	145.6(8)

Symmetry transformations used to generate equivalent atoms:

Selected bond distances (Å) and angles (°) for **3**: Na1-O3, 2.2585(13); Na1-N4, 2.4482(16); Na1-N51 2.53(2); Na1-N54, 2.54(2); Zn1-O3, 2.1041(12); Zn1-N4, 2.0121(14); Zn1-C1, 2.0438(18); Zn1-N21; 2.1938(18); Na1-N4-Zn1, 88.05(6); N4-Zn1-O3, 96.27(5); Zn1-O3-Na1, 91.08(5); N51-Na1-N54, 74.5(2); N51-Na1-N4, 136.77(18); N51-Na1-O3, 118.8(3); N54-Na1-N4, 134.3(2); N54-Na1-O3, 117.7(2); N4-Na1-O3, 81.19(5) N4-Zn1-C1, 138.57(7); N4-Zn1-O3, 96.27(5); O3-Zn1-C1, 111.79(6); N21-Zn1-O3, 78.16(5); N21-Zn1-N4, 116.39(6); N21-Zn1-C1, 99.30(6).

Full X-ray data for 3

Table 1. Crystal data and structure refinement for jksamboth.

Identification code	jksam1	
Empirical formula	C35 H61 N4 Na O Zn	
Formula weight	642.24	
Temperature	123(2) K	
Wavelength	0.71073 Å	
Crystal system	Monoclinic	
Space group	P21/n	
Unit cell dimensions	a = 12.4016(4) Å	α=90°.
	b = 17.0724(5) Å	β=92.959(3)°.
	c = 17.6812(5) Å	$\gamma = 90^{\circ}$.
Volume	3738.56(19) Å ³	
Z	4	
Density (calculated)	1.141 Mg/m ³	
Absorption coefficient	0.698 mm ⁻¹	

F(000)	1392
Crystal size	0.2 x 0.2 x 0.1 mm ³
Theta range for data collection	2.65 to 27.00°.
Index ranges	-15<=h<=15, -21<=k<=15, -22<=l<=22
Reflections collected	22100
Independent reflections	8152 [R(int) = 0.0338]
Completeness to theta = 27.00°	99.9 %
Absorption correction	Semi-empirical from equivalents
Max. and min. transmission	1.00000 and 0.95703
Refinement method	Full-matrix least-squares on F ²
Data / restraints / parameters	8152 / 128 / 419
Goodness-of-fit on F ²	0.897
Final R indices [I>2sigma(I)]	R1 = 0.0353, $wR2 = 0.0697$
R indices (all data)	R1 = 0.0614, $wR2 = 0.0733$
Largest diff. peak and hole	0.415 and -0.436 e.Å ⁻³

Table 2. Atomic coordinates ($x \ 10^4$) and equivalent isotropic displacement parameters (Å²x 10³) for jksamboth. U(eq) is defined as one third of the trace of the orthogonalized U^{ij} tensor.

	Х	у	Z	U(eq)
Na(1)	5219(1)	9648(1)	2500(1)	24(1)
Zn(1)	5544(1)	7857(1)	2259(1)	19(1)
C(1)	4936(2)	7032(1)	1517(1)	25(1)
C(11)	3806(2)	6817(1)	1759(1)	41(1)
C(12)	4837(2)	7242(1)	674(1)	36(1)
C(13)	5631(2)	6295(1)	1591(1)	31(1)
N(21)	5301(1)	7245(1)	3327(1)	19(1)
C(22)	4340(2)	7518(1)	3624(1)	20(1)
C(23)	3821(2)	7011(1)	4150(1)	25(1)
C(24)	4326(2)	6388(1)	4457(1)	25(1)
C(25)	5490(2)	6229(1)	4342(1)	20(1)
C(26)	5794(2)	6653(1)	3635(1)	20(1)
C(20)	6266(2)	6441(1)	5040(1)	24(1)
C(201)	6176(2)	7311(1)	5228(1)	40(1)
C(202)	5941(2)	5961(1)	5724(1)	36(1)
C(203)	7424(2)	6248(1)	4874(1)	32(1)
O(3)	4313(1)	8529(1)	2716(1)	22(1)
C(30)	3904(2)	8190(1)	3296(1)	21(1)
C(31)	2946(2)	8586(1)	3598(1)	23(1)
C(32)	2207(2)	8954(1)	3101(1)	32(1)
C(33)	1350(2)	9373(1)	3366(1)	48(1)
C(34)	1216(2)	9425(1)	4134(1)	51(1)
C(35)	1936(2)	9065(1)	4634(1)	45(1)
C(36)	2802(2)	8653(1)	4370(1)	33(1)
N(4)	6667(1)	8709(1)	2293(1)	20(1)
C(41)	7122(2)	8822(1)	1538(1)	24(1)
C(411)	7653(2)	8082(1)	1220(1)	31(1)
C(412)	6188(2)	9056(1)	990(1)	31(1)
C(42)	7948(2)	9496(1)	1544(1)	29(1)
C(43)	8812(2)	9429(1)	2169(1)	30(1)
C(44)	8266(2)	9396(1)	2917(1)	28(1)
C(45)	7451(2)	8719(1)	2957(1)	23(1)
C(451)	8085(2)	7944(1)	3085(1)	30(1)

C(452)	6814(2)	8865(1)	3667(1)	26(1)
N(51)	4953(9)	10812(9)	3354(9)	29(1)
N(54)	4209(9)	10653(9)	1671(8)	23(1)
C(511)	4228(9)	10503(7)	3909(5)	43(2)
C(512)	5929(12)	11128(11)	3746(6)	41(2)
C(52)	4433(4)	11428(3)	2872(3)	35(1)
C(53)	3645(4)	11062(3)	2272(3)	35(1)
C(541)	3466(10)	10187(6)	1187(5)	45(1)
C(542)	4860(20)	11196(16)	1231(10)	43(2)
N(51A)	4873(9)	10686(9)	3401(9)	29(1)
N(54A)	4397(9)	10771(9)	1748(8)	23(1)
C(53A)	4108(4)	11404(3)	2266(3)	35(1)
C(52A)	3981(4)	11156(3)	3046(2)	35(1)
C(513)	4522(9)	10422(7)	4134(5)	43(2)
C(514)	5854(12)	11165(11)	3512(6)	41(2)
C(543)	3428(10)	10356(6)	1450(4)	45(1)
C(544)	4830(20)	11150(16)	1081(10)	43(2)

Na(1)-O(3)	2.2585(13)
Na(1)-N(51A)	2.44(2)
Na(1)-N(4)	2.4482(16)
Na(1)-N(54A)	2.52(2)
Na(1)-N(51)	2.53(2)
Na(1)-N(54)	2.54(2)
Na(1)-C(452)	3.088(2)
Na(1)-Zn(1)	3.1157(7)
Na(1)-C(53)	3.118(5)
Zn(1)-N(4)	2.0121(14)
Zn(1)-C(1)	2.0438(18)
Zn(1)-O(3)	2.1041(12)
Zn(1)-N(21)	2.1938(13)
C(1)-C(13)	1.527(3)
C(1)-C(12)	1.531(2)
C(1)-C(11)	1.531(3)
C(11)-H(11A)	0.9800
C(11)-H(11B)	0.9800
С(11)-Н(11С)	0.9800
C(12)-H(12A)	0.9800
C(12)-H(12B)	0.9800
С(12)-Н(12С)	0.9800
C(13)-H(13A)	0.9800
С(13)-Н(13В)	0.9800
С(13)-Н(13С)	0.9800
N(21)-C(26)	1.286(2)
N(21)-C(22)	1.406(2)
C(22)-C(30)	1.383(2)
C(22)-C(23)	1.445(2)
C(23)-C(24)	1.334(2)
C(23)-H(23A)	0.9500
C(24)-C(25)	1.493(3)
C(24)-H(24A)	0.9500
C(25)-C(26)	1.511(2)
C(25)-C(20)	1.567(2)
C(25)-H(25A)	1.0000

Table 3. Bond lengths [Å] and angles [°] for jksamboth.

C(26)-H(26A)	0.9500
C(20)-C(203)	1.517(3)
C(20)-C(201)	1.528(2)
C(20)-C(202)	1.532(2)
C(201)-H(20A)	0.9800
C(201)-H(20B)	0.9800
С(201)-Н(20С)	0.9800
C(202)-H(20D)	0.9800
C(202)-H(20E)	0.9800
C(202)-H(20F)	0.9800
C(203)-H(20G)	0.9800
С(203)-Н(20Н)	0.9800
C(203)-H(20I)	0.9800
O(3)-C(30)	1.3042(19)
C(30)-C(31)	1.490(2)
C(31)-C(32)	1.387(3)
C(31)-C(36)	1.391(2)
C(32)-C(33)	1.383(3)
C(32)-H(32A)	0.9500
C(33)-C(34)	1.380(3)
C(33)-H(33A)	0.9500
C(34)-C(35)	1.368(3)
C(34)-H(34A)	0.9500
C(35)-C(36)	1.385(3)
C(35)-H(35A)	0.9500
C(36)-H(36A)	0.9500
N(4)-C(45)	1.485(2)
N(4)-C(41)	1.489(2)
C(41)-C(412)	1.526(3)
C(41)-C(42)	1.540(3)
C(41)-C(411)	1.544(2)
C(411)-H(41A)	0.9800
C(411)-H(41B)	0.9800
C(411)-H(41C)	0.9800
C(412)-H(41D)	0.9800
C(412)-H(41E)	0.9800
C(412)-H(41F)	0.9800
C(42)-C(43)	1.504(3)

C(42)-H(42A)	0.9900
C(42)-H(42B)	0.9900
C(43)-C(44)	1.516(2)
C(43)-H(43A)	0.9900
C(43)-H(43B)	0.9900
C(44)-C(45)	1.541(3)
C(44)-H(44A)	0.9900
C(44)-H(44B)	0.9900
C(45)-C(452)	1.537(2)
C(45)-C(451)	1.550(2)
C(451)-H(45A)	0.9800
C(451)-H(45B)	0.9800
C(451)-H(45C)	0.9800
C(452)-H(45D)	0.9800
C(452)-H(45E)	0.9800
C(452)-H(45F)	0.9800
N(51)-C(511)	1.461(8)
N(51)-C(512)	1.467(8)
N(51)-C(52)	1.481(8)
N(54)-C(541)	1.460(7)
N(54)-C(542)	1.474(8)
N(54)-C(53)	1.477(8)
C(511)-H(51A)	0.9800
C(511)-H(51B)	0.9800
C(511)-H(51C)	0.9800
C(512)-H(51D)	0.9800
C(512)-H(51E)	0.9800
C(512)-H(51F)	0.9800
C(52)-C(53)	1.537(6)
C(52)-H(52A)	0.9900
C(52)-H(52B)	0.9900
C(53)-H(53A)	0.9900
C(53)-H(53B)	0.9900
C(541)-H(54A)	0.9800
C(541)-H(54B)	0.9800
C(541)-H(54C)	0.9800
C(542)-H(54D)	0.9800
C(542)-H(54E)	0.9800

C(542)-H(54F)	0.9800
N(51A)-C(513)	1.459(8)
N(51A)-C(514)	1.470(8)
N(51A)-C(52A)	1.480(8)
N(54A)-C(543)	1.470(7)
N(54A)-C(544)	1.470(8)
N(54A)-C(53A)	1.473(8)
C(53A)-C(52A)	1.459(5)
C(53A)-H(53C)	0.9900
C(53A)-H(53D)	0.9900
C(52A)-H(52C)	0.9900
C(52A)-H(52D)	0.9900
C(513)-H(51G)	0.9800
C(513)-H(51H)	0.9800
C(513)-H(51I)	0.9800
C(514)-H(51J)	0.9800
C(514)-H(51K)	0.9800
C(514)-H(51L)	0.9800
C(543)-H(54G)	0.9800
C(543)-H(54H)	0.9800
C(543)-H(54I)	0.9800
C(544)-H(54J)	0.9800
C(544)-H(54K)	0.9800
C(544)-H(54L)	0.9800
O(3)-Na(1)-N(51A)	113.5(3)
O(3)-Na(1)-N(4)	81.19(5)
N(51A)-Na(1)-N(4)	136.8(2)
O(3)-Na(1)-N(54A)	122.8(2)
N(51A)-Na(1)-N(54A)	73.2(3)
N(4)-Na(1)-N(54A)	134.4(2)
O(3)-Na(1)-N(51)	118.8(3)
N(51A)-Na(1)-N(51)	5.4(5)
N(4)-Na(1)-N(51)	136.3(2)
N(54A)-Na(1)-N(51)	69.8(3)
O(3)-Na(1)-N(54)	115.7(2)
N(51A)-Na(1)-N(54)	77.8(3)
N(4)-Na(1)-N(54)	134.3(2)

N(54A)-Na(1)-N(54)	7.5(4)
N(51)-Na(1)-N(54)	74.8(3)
O(3)-Na(1)-C(452)	80.11(5)
N(51A)-Na(1)-C(452)	90.4(2)
N(4)-Na(1)-C(452)	50.71(5)
N(54A)-Na(1)-C(452)	155.5(2)
N(51)-Na(1)-C(452)	92.3(2)
N(54)-Na(1)-C(452)	163.0(2)
O(3)-Na(1)-Zn(1)	42.47(3)
N(51A)-Na(1)-Zn(1)	146.2(2)
N(4)-Na(1)-Zn(1)	40.20(3)
N(54A)-Na(1)-Zn(1)	136.62(18)
N(51)-Na(1)-Zn(1)	151.0(2)
N(54)-Na(1)-Zn(1)	130.28(17)
C(452)-Na(1)-Zn(1)	65.38(4)
O(3)-Na(1)-C(53)	111.27(10)
N(51A)-Na(1)-C(53)	52.5(2)
N(4)-Na(1)-C(53)	161.23(10)
N(54A)-Na(1)-C(53)	26.9(3)
N(51)-Na(1)-C(53)	50.8(2)
N(54)-Na(1)-C(53)	27.96(19)
C(452)-Na(1)-C(53)	142.84(9)
Zn(1)-Na(1)-C(53)	145.75(9)
N(4)-Zn(1)-C(1)	138.57(7)
N(4)-Zn(1)-O(3)	96.27(5)
C(1)-Zn(1)-O(3)	111.79(6)
N(4)-Zn(1)-N(21)	116.39(6)
C(1)-Zn(1)-N(21)	99.30(6)
O(3)-Zn(1)-N(21)	78.16(5)
N(4)-Zn(1)-Na(1)	51.75(4)
C(1)-Zn(1)-Na(1)	135.92(5)
O(3)-Zn(1)-Na(1)	46.45(3)
N(21)-Zn(1)-Na(1)	109.01(4)
C(13)-C(1)-C(12)	107.10(15)
C(13)-C(1)-C(11)	107.45(16)
C(12)-C(1)-C(11)	107.44(17)
C(13)-C(1)-Zn(1)	108.94(12)
C(12)-C(1)-Zn(1)	118.11(13)

C(11)-C(1)-Zn(1)	107.37(12)
C(1)-C(11)-H(11A)	109.5
C(1)-C(11)-H(11B)	109.5
H(11A)-C(11)-H(11B)	109.5
С(1)-С(11)-Н(11С)	109.5
H(11A)-C(11)-H(11C)	109.5
H(11B)-C(11)-H(11C)	109.5
C(1)-C(12)-H(12A)	109.5
C(1)-C(12)-H(12B)	109.5
H(12A)-C(12)-H(12B)	109.5
C(1)-C(12)-H(12C)	109.5
H(12A)-C(12)-H(12C)	109.5
H(12B)-C(12)-H(12C)	109.5
C(1)-C(13)-H(13A)	109.5
C(1)-C(13)-H(13B)	109.5
H(13A)-C(13)-H(13B)	109.5
C(1)-C(13)-H(13C)	109.5
H(13A)-C(13)-H(13C)	109.5
H(13B)-C(13)-H(13C)	109.5
C(26)-N(21)-C(22)	119.77(15)
C(26)-N(21)-Zn(1)	130.86(12)
C(22)-N(21)-Zn(1)	108.68(10)
C(30)-C(22)-N(21)	116.04(15)
C(30)-C(22)-C(23)	126.10(17)
N(21)-C(22)-C(23)	117.09(15)
C(24)-C(23)-C(22)	121.56(18)
C(24)-C(23)-H(23A)	119.2
C(22)-C(23)-H(23A)	119.2
C(23)-C(24)-C(25)	121.78(17)
C(23)-C(24)-H(24A)	119.1
C(25)-C(24)-H(24A)	119.1
C(24)-C(25)-C(26)	108.01(15)
C(24)-C(25)-C(20)	114.24(14)
C(26)-C(25)-C(20)	111.79(15)
C(24)-C(25)-H(25A)	107.5
C(26)-C(25)-H(25A)	107.5
C(20)-C(25)-H(25A)	107.5
N(21)-C(26)-C(25)	126.34(16)

N(21)-C(26)-H(26A)	116.8
C(25)-C(26)-H(26A)	116.8
C(203)-C(20)-C(201)	109.53(17)
C(203)-C(20)-C(202)	109.06(16)
C(201)-C(20)-C(202)	108.83(16)
C(203)-C(20)-C(25)	110.30(14)
C(201)-C(20)-C(25)	110.33(15)
C(202)-C(20)-C(25)	108.76(15)
C(20)-C(201)-H(20A)	109.5
C(20)-C(201)-H(20B)	109.5
H(20A)-C(201)-H(20B)	109.5
С(20)-С(201)-Н(20С)	109.5
H(20A)-C(201)-H(20C)	109.5
H(20B)-C(201)-H(20C)	109.5
C(20)-C(202)-H(20D)	109.5
C(20)-C(202)-H(20E)	109.5
H(20D)-C(202)-H(20E)	109.5
C(20)-C(202)-H(20F)	109.5
H(20D)-C(202)-H(20F)	109.5
H(20E)-C(202)-H(20F)	109.5
C(20)-C(203)-H(20G)	109.5
С(20)-С(203)-Н(20Н)	109.5
H(20G)-C(203)-H(20H)	109.5
C(20)-C(203)-H(20I)	109.5
H(20G)-C(203)-H(20I)	109.5
H(20H)-C(203)-H(20I)	109.5
C(30)-O(3)-Zn(1)	112.27(11)
C(30)-O(3)-Na(1)	136.54(11)
Zn(1)-O(3)-Na(1)	91.08(5)
O(3)-C(30)-C(22)	122.64(16)
O(3)-C(30)-C(31)	115.46(15)
C(22)-C(30)-C(31)	121.88(15)
C(32)-C(31)-C(36)	118.11(18)
C(32)-C(31)-C(30)	119.42(16)
C(36)-C(31)-C(30)	122.29(17)
C(33)-C(32)-C(31)	120.88(19)
C(33)-C(32)-H(32A)	119.6
C(31)-C(32)-H(32A)	119.6

C(34)-C(33)-C(32)	120.1(2)
C(34)-C(33)-H(33A)	120.0
C(32)-C(33)-H(33A)	120.0
C(35)-C(34)-C(33)	119.9(2)
C(35)-C(34)-H(34A)	120.0
C(33)-C(34)-H(34A)	120.0
C(34)-C(35)-C(36)	120.2(2)
C(34)-C(35)-H(35A)	119.9
C(36)-C(35)-H(35A)	119.9
C(35)-C(36)-C(31)	120.87(19)
C(35)-C(36)-H(36A)	119.6
C(31)-C(36)-H(36A)	119.6
C(45)-N(4)-C(41)	116.40(15)
C(45)-N(4)-Zn(1)	117.10(10)
C(41)-N(4)-Zn(1)	111.15(11)
C(45)-N(4)-Na(1)	109.25(10)
C(41)-N(4)-Na(1)	111.32(10)
Zn(1)-N(4)-Na(1)	88.05(6)
N(4)-C(41)-C(412)	107.06(15)
N(4)-C(41)-C(42)	111.95(14)
C(412)-C(41)-C(42)	106.94(15)
N(4)-C(41)-C(411)	114.12(14)
C(412)-C(41)-C(411)	107.91(15)
C(42)-C(41)-C(411)	108.53(16)
C(41)-C(411)-H(41A)	109.5
C(41)-C(411)-H(41B)	109.5
H(41A)-C(411)-H(41B)	109.5
C(41)-C(411)-H(41C)	109.5
H(41A)-C(411)-H(41C)	109.5
H(41B)-C(411)-H(41C)	109.5
C(41)-C(412)-H(41D)	109.5
C(41)-C(412)-H(41E)	109.5
H(41D)-C(412)-H(41E)	109.5
C(41)-C(412)-H(41F)	109.5
H(41D)-C(412)-H(41F)	109.5
H(41E)-C(412)-H(41F)	109.5
C(43)-C(42)-C(41)	113.31(15)
C(43)-C(42)-H(42A)	108.9

C(41)-C(42)-H(42A)	108.9
C(43)-C(42)-H(42B)	108.9
C(41)-C(42)-H(42B)	108.9
H(42A)-C(42)-H(42B)	107.7
C(42)-C(43)-C(44)	108.08(16)
C(42)-C(43)-H(43A)	110.1
C(44)-C(43)-H(43A)	110.1
C(42)-C(43)-H(43B)	110.1
C(44)-C(43)-H(43B)	110.1
H(43A)-C(43)-H(43B)	108.4
C(43)-C(44)-C(45)	113.06(15)
C(43)-C(44)-H(44A)	109.0
C(45)-C(44)-H(44A)	109.0
C(43)-C(44)-H(44B)	109.0
C(45)-C(44)-H(44B)	109.0
H(44A)-C(44)-H(44B)	107.8
N(4)-C(45)-C(452)	107.74(15)
N(4)-C(45)-C(44)	112.11(14)
C(452)-C(45)-C(44)	106.40(15)
N(4)-C(45)-C(451)	114.38(14)
C(452)-C(45)-C(451)	107.27(14)
C(44)-C(45)-C(451)	108.54(16)
C(45)-C(451)-H(45A)	109.5
C(45)-C(451)-H(45B)	109.5
H(45A)-C(451)-H(45B)	109.5
C(45)-C(451)-H(45C)	109.5
H(45A)-C(451)-H(45C)	109.5
H(45B)-C(451)-H(45C)	109.5
C(45)-C(452)-Na(1)	82.11(10)
C(45)-C(452)-H(45D)	109.5
Na(1)-C(452)-H(45D)	41.2
C(45)-C(452)-H(45E)	109.5
Na(1)-C(452)-H(45E)	149.8
H(45D)-C(452)-H(45E)	109.5
C(45)-C(452)-H(45F)	109.5
Na(1)-C(452)-H(45F)	91.4
H(45D)-C(452)-H(45F)	109.5
H(45E)-C(452)-H(45F)	109.5

C(511)-N(51)-C(512)	109.7(13)
C(511)-N(51)-C(52)	112.2(8)
C(512)-N(51)-C(52)	109.6(10)
C(511)-N(51)-Na(1)	102.8(10)
C(512)-N(51)-Na(1)	116.2(10)
C(52)-N(51)-Na(1)	106.3(9)
C(541)-N(54)-C(542)	112.2(14)
C(541)-N(54)-C(53)	111.7(6)
C(542)-N(54)-C(53)	111.9(13)
C(541)-N(54)-Na(1)	104.3(10)
C(542)-N(54)-Na(1)	117.6(15)
C(53)-N(54)-Na(1)	98.2(9)
N(51)-C(52)-C(53)	110.6(8)
N(51)-C(52)-H(52A)	109.5
C(53)-C(52)-H(52A)	109.5
N(51)-C(52)-H(52B)	109.5
C(53)-C(52)-H(52B)	109.5
H(52A)-C(52)-H(52B)	108.1
N(54)-C(53)-C(52)	112.4(6)
N(54)-C(53)-Na(1)	53.8(8)
C(52)-C(53)-Na(1)	81.6(3)
N(54)-C(53)-H(53A)	109.1
C(52)-C(53)-H(53A)	109.1
Na(1)-C(53)-H(53A)	79.8
N(54)-C(53)-H(53B)	109.1
C(52)-C(53)-H(53B)	109.1
Na(1)-C(53)-H(53B)	162.9
H(53A)-C(53)-H(53B)	107.9
C(513)-N(51A)-C(514)	109.6(13)
C(513)-N(51A)-C(52A)	107.1(8)
C(514)-N(51A)-C(52A)	110.5(10)
C(513)-N(51A)-Na(1)	115.3(10)
C(514)-N(51A)-Na(1)	108.6(10)
C(52A)-N(51A)-Na(1)	105.7(9)
C(543)-N(54A)-C(544)	104.5(15)
C(543)-N(54A)-C(53A)	110.8(7)
C(544)-N(54A)-C(53A)	106.7(13)
C(543)-N(54A)-Na(1)	97.1(10)

C(544)-N(54A)-Na(1)	127.1(15)
C(53A)-N(54A)-Na(1)	109.6(9)
C(52A)-C(53A)-N(54A)	114.6(8)
C(52A)-C(53A)-H(53C)	108.6
N(54A)-C(53A)-H(53C)	108.6
C(52A)-C(53A)-H(53D)	108.6
N(54A)-C(53A)-H(53D)	108.6
H(53C)-C(53A)-H(53D)	107.6
C(53A)-C(52A)-N(51A)	116.3(7)
C(53A)-C(52A)-H(52C)	108.2
N(51A)-C(52A)-H(52C)	108.2
C(53A)-C(52A)-H(52D)	108.2
N(51A)-C(52A)-H(52D)	108.2
H(52C)-C(52A)-H(52D)	107.4
N(51A)-C(513)-H(51G)	109.5
N(51A)-C(513)-H(51H)	109.5
H(51G)-C(513)-H(51H)	109.5
N(51A)-C(513)-H(51I)	109.5
H(51G)-C(513)-H(51I)	109.5
H(51H)-C(513)-H(51I)	109.5
N(51A)-C(514)-H(51J)	109.5
N(51A)-C(514)-H(51K)	109.5
H(51J)-C(514)-H(51K)	109.5
N(51A)-C(514)-H(51L)	109.5
H(51J)-C(514)-H(51L)	109.5
H(51K)-C(514)-H(51L)	109.5
N(54A)-C(543)-H(54G)	109.5
N(54A)-C(543)-H(54H)	109.5
H(54G)-C(543)-H(54H)	109.5
N(54A)-C(543)-H(54I)	109.5
H(54G)-C(543)-H(54I)	109.5
H(54H)-C(543)-H(54I)	109.5
N(54A)-C(544)-H(54J)	109.5
N(54A)-C(544)-H(54K)	109.5
H(54J)-C(544)-H(54K)	109.5
N(54A)-C(544)-H(54L)	109.5
H(54J)-C(544)-H(54L)	109.5
H(54K)-C(544)-H(54L)	109.5

Symmetry transformations used to generate equivalent atoms:

Table 4. Anisotropic displacement parameters (Å²x 10³)for jksamboth. The anisotropic displacement factor exponent takes the form: $-2\pi^2$ [h²a^{*2}U¹¹ + ... + 2 h k a* b* U¹²]

	U^{11}	U ²²	U ³³	U ²³	U ¹³	U ¹²
Na(1)	28(1)	21(1)	23(1)	-1(1)	4(1)	3(1)
Zn(1)	21(1)	19(1)	18(1)	0(1)	6(1)	1(1)
C(1)	25(1)	25(1)	25(1)	-3(1)	3(1)	-2(1)
C(11)	31(1)	48(1)	45(1)	-16(1)	5(1)	-12(1)
C(12)	42(1)	35(1)	29(1)	-5(1)	-4(1)	1(1)
C(13)	40(1)	24(1)	28(1)	-4(1)	4(1)	-3(1)
N(21)	20(1)	19(1)	19(1)	-1(1)	3(1)	0(1)
C(22)	19(1)	21(1)	19(1)	-1(1)	5(1)	2(1)
C(23)	20(1)	29(1)	27(1)	2(1)	8(1)	1(1)
C(24)	24(1)	25(1)	26(1)	7(1)	8(1)	-3(1)
C(25)	24(1)	14(1)	22(1)	0(1)	5(1)	0(1)
C(26)	21(1)	20(1)	21(1)	-3(1)	7(1)	-1(1)
C(20)	29(1)	23(1)	21(1)	-1(1)	4(1)	2(1)
C(201)	58(2)	29(1)	32(1)	-9(1)	-9(1)	3(1)
C(202)	36(1)	45(1)	27(1)	8(1)	2(1)	-1(1)
C(203)	29(1)	37(1)	31(1)	-1(1)	-2(1)	-3(1)
O(3)	22(1)	23(1)	20(1)	4(1)	7(1)	2(1)
C(30)	18(1)	23(1)	21(1)	1(1)	3(1)	0(1)
C(31)	19(1)	23(1)	27(1)	6(1)	7(1)	2(1)
C(32)	25(1)	42(1)	29(1)	9(1)	4(1)	4(1)
C(33)	29(1)	65(2)	50(1)	21(1)	5(1)	21(1)
C(34)	40(2)	62(2)	54(2)	18(1)	26(1)	31(1)
C(35)	49(2)	53(2)	35(1)	12(1)	24(1)	21(1)
C(36)	31(1)	40(1)	28(1)	10(1)	9(1)	13(1)
N(4)	22(1)	20(1)	19(1)	0(1)	6(1)	-1(1)
C(41)	29(1)	21(1)	22(1)	1(1)	11(1)	-2(1)
C(411)	37(1)	28(1)	30(1)	-3(1)	16(1)	-3(1)
C(412)	45(1)	28(1)	21(1)	4(1)	9(1)	0(1)
C(42)	38(1)	19(1)	31(1)	2(1)	16(1)	-3(1)
C(43)	28(1)	22(1)	43(1)	0(1)	14(1)	-7(1)
C(44)	25(1)	27(1)	33(1)	-2(1)	4(1)	-5(1)
C(45)	21(1)	22(1)	26(1)	1(1)	2(1)	-1(1)
C(451)	25(1)	28(1)	38(1)	5(1)	2(1)	0(1)

C(452)	28(1)	28(1)	22(1)	1(1)	1(1)	-4(1)
N(51)	34(2)	25(4)	27(2)	-8(2)	-3(1)	4(2)
N(54)	23(3)	27(4)	19(2)	-5(1)	-6(3)	-4(2)
C(511)	57(5)	44(3)	30(5)	-8(3)	7(3)	0(3)
C(512)	45(2)	42(2)	37(6)	-18(5)	-2(4)	1(2)
C(52)	41(3)	34(3)	32(2)	-7(2)	5(2)	11(2)
C(53)	37(3)	29(3)	37(2)	-2(2)	-2(2)	9(2)
C(541)	42(2)	45(4)	44(5)	-3(3)	-18(4)	-10(2)
C(542)	53(2)	39(2)	37(5)	6(4)	-2(5)	-4(2)
N(51A)	34(2)	25(4)	27(2)	-8(2)	-3(1)	4(2)
N(54A)	23(3)	27(4)	19(2)	-5(1)	-6(3)	-4(2)
C(53A)	37(3)	29(3)	37(2)	-2(2)	-2(2)	9(2)
C(52A)	41(3)	34(3)	32(2)	-7(2)	5(2)	11(2)
C(513)	57(5)	44(3)	30(5)	-8(3)	7(3)	0(3)
C(514)	45(2)	42(2)	37(6)	-18(5)	-2(4)	1(2)
C(543)	42(2)	45(4)	44(5)	-3(3)	-18(4)	-10(2)
C(544)	53(2)	39(2)	37(5)	6(4)	-2(5)	-4(2)

Table 5. Hydrogen coordinates ($x \ 10^4$) and isotropic displacement parameters (Å²x 10^3)

for jksamboth.

	х	у	Z	U(eq)
H(11A)	3505	6400	1430	62
H(11B)	3337	7279	1717	62
H(11C)	3851	6634	2285	62
H(12A)	4524	6799	387	53
H(12B)	5554	7361	496	53
H(12C)	4369	7702	601	53
H(13A)	5318	5884	1261	46
H(13B)	5658	6113	2118	46
H(13C)	6364	6414	1443	46
H(23A)	3104	7124	4280	30
H(24A)	3934	6037	4756	30
H(25A)	5565	5654	4247	24
H(26A)	6410	6465	3393	24
H(20A)	6651	7433	5672	60
H(20B)	5428	7435	5336	60
H(20C)	6392	7623	4796	60
H(20D)	6435	6078	6160	54
H(20E)	5978	5402	5604	54
H(20F)	5202	6097	5845	54
H(20G)	7894	6346	5326	48
H(20H)	7652	6577	4457	48
H(20I)	7475	5695	4730	48
H(32A)	2290	8917	2571	38
H(33A)	854	9625	3019	57
H(34A)	624	9710	4316	61
H(35A)	1841	9098	5162	54
H(36A)	3305	8413	4722	39
H(41A)	7168	7634	1267	47
H(41B)	8337	7979	1506	47
H(41C)	7792	8165	686	47
H(41D)	5895	9562	1144	47
H(41E)	5620	8657	995	47

H(41F)	6447	9101	477	47
H(42A)	8293	9506	1051	35
H(42B)	7562	9999	1599	35
H(43A)	9302	9886	2161	36
H(43B)	9243	8948	2101	36
H(44A)	7887	9898	2994	34
H(44B)	8825	9337	3333	34
H(45A)	8503	7833	2642	45
H(45B)	7577	7514	3160	45
H(45C)	8576	7994	3535	45
H(45D)	6405	9353	3606	39
H(45E)	7318	8905	4111	39
H(45F)	6315	8429	3736	39
H(51A)	4577	10062	4180	65
H(51B)	3557	10324	3648	65
H(51C)	4066	10916	4271	65
H(51D)	5742	11594	4035	62
H(51E)	6453	11270	3373	62
H(51F)	6245	10732	4092	62
H(52A)	4993	11729	2618	42
H(52B)	4037	11794	3191	42
H(53A)	3170	10686	2521	42
H(53B)	3183	11479	2040	42
H(54A)	3129	9784	1492	67
H(54B)	3864	9936	789	67
H(54C)	2905	10528	956	67
H(54D)	5220	10903	841	64
H(54E)	5398	11453	1570	64
H(54F)	4382	11592	990	64
H(53C)	4675	11813	2264	42
H(53D)	3423	11645	2070	42
H(52C)	3308	10846	3061	42
H(52D)	3888	11630	3359	42
H(51G)	4403	10878	4457	65
H(51H)	5079	10086	4377	65
H(51I)	3848	10126	4061	65
H(51J)	5692	11632	3807	62
H(51K)	6105	11323	3018	62

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H(51L)	6418	10858	3785	62
H(54G)	2961	10721	1157	67
H(54H)	3036	10145	1872	67
H(54I)	3641	9926	1123	67
H(54J)	4962	10753	696	64
H(54K)	5509	11415	1229	64
H(54L)	4308	11534	873	64

Table 6. Torsion angles [°] for jksamboth.

O(3)-Na(1)-Zn(1)-N(4)	-160.27(7)
N(51A)-Na(1)-Zn(1)-N(4)	-105.2(5)
N(54A)-Na(1)-Zn(1)-N(4)	109.0(4)
N(51)-Na(1)-Zn(1)-N(4)	-100.2(5)
N(54)-Na(1)-Zn(1)-N(4)	114.6(3)
C(452)-Na(1)-Zn(1)-N(4)	-57.52(6)
C(53)-Na(1)-Zn(1)-N(4)	150.27(17)
O(3)-Na(1)-Zn(1)-C(1)	75.79(9)
N(51A)-Na(1)-Zn(1)-C(1)	130.8(5)
N(4)-Na(1)-Zn(1)-C(1)	-123.94(9)
N(54A)-Na(1)-Zn(1)-C(1)	-14.9(4)
N(51)-Na(1)-Zn(1)-C(1)	135.9(5)
N(54)-Na(1)-Zn(1)-C(1)	-9.3(3)
C(452)-Na(1)-Zn(1)-C(1)	178.54(8)
C(53)-Na(1)-Zn(1)-C(1)	26.33(18)
N(51A)-Na(1)-Zn(1)-O(3)	55.0(5)
N(4)-Na(1)-Zn(1)-O(3)	160.27(7)
N(54A)-Na(1)-Zn(1)-O(3)	-90.7(4)
N(51)-Na(1)-Zn(1)-O(3)	60.1(5)
N(54)-Na(1)-Zn(1)-O(3)	-85.1(3)
C(452)-Na(1)-Zn(1)-O(3)	102.75(6)
C(53)-Na(1)-Zn(1)-O(3)	-49.46(17)
O(3)-Na(1)-Zn(1)-N(21)	-51.17(6)
N(51A)-Na(1)-Zn(1)-N(21)	3.9(5)
N(4)-Na(1)-Zn(1)-N(21)	109.10(7)
N(54A)-Na(1)-Zn(1)-N(21)	-141.9(4)
N(51)-Na(1)-Zn(1)-N(21)	8.9(5)
N(54)-Na(1)-Zn(1)-N(21)	-136.3(3)
C(452)-Na(1)-Zn(1)-N(21)	51.57(6)
C(53)-Na(1)-Zn(1)-N(21)	-100.63(17)
N(4)-Zn(1)-C(1)-C(13)	86.56(15)
O(3)-Zn(1)-C(1)-C(13)	-144.34(11)
N(21)-Zn(1)-C(1)-C(13)	-63.46(13)
Na(1)-Zn(1)-C(1)-C(13)	166.49(9)
N(4)-Zn(1)-C(1)-C(12)	-35.8(2)
O(3)-Zn(1)-C(1)-C(12)	93.27(15)
N(21)-Zn(1)-C(1)-C(12)	174.15(14)
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Na(1)-Zn(1)-C(1)-C(12)	44.10(18)
N(4)-Zn(1)-C(1)-C(11)	-157.37(12)
O(3)-Zn(1)-C(1)-C(11)	-28.27(15)
N(21)-Zn(1)-C(1)-C(11)	52.61(14)
Na(1)-Zn(1)-C(1)-C(11)	-77.43(15)
N(4)-Zn(1)-N(21)-C(26)	-85.81(16)
C(1)-Zn(1)-N(21)-C(26)	72.53(17)
O(3)-Zn(1)-N(21)-C(26)	-176.98(16)
Na(1)-Zn(1)-N(21)-C(26)	-141.75(15)
N(4)-Zn(1)-N(21)-C(22)	103.98(12)
C(1)-Zn(1)-N(21)-C(22)	-97.69(12)
O(3)-Zn(1)-N(21)-C(22)	12.80(11)
Na(1)-Zn(1)-N(21)-C(22)	48.03(11)
C(26)-N(21)-C(22)-C(30)	175.45(16)
Zn(1)-N(21)-C(22)-C(30)	-13.06(18)
C(26)-N(21)-C(22)-C(23)	-14.0(2)
Zn(1)-N(21)-C(22)-C(23)	157.48(13)
C(30)-C(22)-C(23)-C(24)	-177.63(18)
N(21)-C(22)-C(23)-C(24)	12.9(3)
C(22)-C(23)-C(24)-C(25)	6.8(3)
C(23)-C(24)-C(25)-C(26)	-22.0(2)
C(23)-C(24)-C(25)-C(20)	103.1(2)
C(22)-N(21)-C(26)-C(25)	-4.5(3)
Zn(1)-N(21)-C(26)-C(25)	-173.84(12)
C(24)-C(25)-C(26)-N(21)	21.8(2)
C(20)-C(25)-C(26)-N(21)	-104.7(2)
C(24)-C(25)-C(20)-C(203)	179.16(15)
C(26)-C(25)-C(20)-C(203)	-57.80(19)
C(24)-C(25)-C(20)-C(201)	-59.7(2)
C(26)-C(25)-C(20)-C(201)	63.3(2)
C(24)-C(25)-C(20)-C(202)	59.6(2)
C(26)-C(25)-C(20)-C(202)	-177.36(15)
N(4)-Zn(1)-O(3)-C(30)	-126.93(12)
C(1)-Zn(1)-O(3)-C(30)	84.18(13)
N(21)-Zn(1)-O(3)-C(30)	-11.21(11)
Na(1)-Zn(1)-O(3)-C(30)	-142.40(13)
N(4)-Zn(1)-O(3)-Na(1)	15.47(5)

C(1)-Zn(1)-O(3)-Na(1)	-133.43(6)
N(21)-Zn(1)-O(3)-Na(1)	131.18(5)
N(51A)-Na(1)-O(3)-C(30)	-25.4(3)
N(4)-Na(1)-O(3)-C(30)	112.08(17)
N(54A)-Na(1)-O(3)-C(30)	-110.0(3)
N(51)-Na(1)-O(3)-C(30)	-26.5(3)
N(54)-Na(1)-O(3)-C(30)	-112.7(3)
C(452)-Na(1)-O(3)-C(30)	60.65(17)
Zn(1)-Na(1)-O(3)-C(30)	124.82(18)
C(53)-Na(1)-O(3)-C(30)	-82.50(19)
N(51A)-Na(1)-O(3)-Zn(1)	-150.2(2)
N(4)-Na(1)-O(3)-Zn(1)	-12.74(4)
N(54A)-Na(1)-O(3)-Zn(1)	125.2(2)
N(51)-Na(1)-O(3)-Zn(1)	-151.3(2)
N(54)-Na(1)-O(3)-Zn(1)	122.5(2)
C(452)-Na(1)-O(3)-Zn(1)	-64.17(5)
C(53)-Na(1)-O(3)-Zn(1)	152.68(9)
Zn(1)-O(3)-C(30)-C(22)	8.0(2)
Na(1)-O(3)-C(30)-C(22)	-109.52(19)
Zn(1)-O(3)-C(30)-C(31)	-173.47(12)
Na(1)-O(3)-C(30)-C(31)	69.0(2)
N(21)-C(22)-C(30)-O(3)	4.1(3)
C(23)-C(22)-C(30)-O(3)	-165.49(17)
N(21)-C(22)-C(30)-C(31)	-174.37(16)
C(23)-C(22)-C(30)-C(31)	16.1(3)
O(3)-C(30)-C(31)-C(32)	35.5(3)
C(22)-C(30)-C(31)-C(32)	-145.97(19)
O(3)-C(30)-C(31)-C(36)	-139.63(18)
C(22)-C(30)-C(31)-C(36)	38.9(3)
C(36)-C(31)-C(32)-C(33)	-0.2(3)
C(30)-C(31)-C(32)-C(33)	-175.47(19)
C(31)-C(32)-C(33)-C(34)	-0.5(4)
C(32)-C(33)-C(34)-C(35)	0.5(4)
C(33)-C(34)-C(35)-C(36)	0.4(4)
C(34)-C(35)-C(36)-C(31)	-1.1(4)
C(32)-C(31)-C(36)-C(35)	1.0(3)
C(30)-C(31)-C(36)-C(35)	176.14(19)
C(1)-Zn(1)-N(4)-C(45)	-130.03(13)

O(3)-Zn(1)-N(4)-C(45)	96.43(12)
N(21)-Zn(1)-N(4)-C(45)	16.57(14)
Na(1)-Zn(1)-N(4)-C(45)	110.68(13)
C(1)-Zn(1)-N(4)-C(41)	7.15(17)
O(3)-Zn(1)-N(4)-C(41)	-126.39(11)
N(21)-Zn(1)-N(4)-C(41)	153.74(11)
Na(1)-Zn(1)-N(4)-C(41)	-112.14(12)
C(1)-Zn(1)-N(4)-Na(1)	119.29(9)
O(3)-Zn(1)-N(4)-Na(1)	-14.25(5)
N(21)-Zn(1)-N(4)-Na(1)	-94.11(6)
O(3)-Na(1)-N(4)-C(45)	-104.75(11)
N(51A)-Na(1)-N(4)-C(45)	10.3(4)
N(54A)-Na(1)-N(4)-C(45)	127.3(3)
N(51)-Na(1)-N(4)-C(45)	18.2(4)
N(54)-Na(1)-N(4)-C(45)	137.8(3)
C(452)-Na(1)-N(4)-C(45)	-20.37(10)
Zn(1)-Na(1)-N(4)-C(45)	-118.09(12)
C(53)-Na(1)-N(4)-C(45)	122.0(3)
O(3)-Na(1)-N(4)-C(41)	125.31(11)
N(51A)-Na(1)-N(4)-C(41)	-119.6(4)
N(54A)-Na(1)-N(4)-C(41)	-2.7(3)
N(51)-Na(1)-N(4)-C(41)	-111.8(4)
N(54)-Na(1)-N(4)-C(41)	7.9(3)
C(452)-Na(1)-N(4)-C(41)	-150.30(13)
Zn(1)-Na(1)-N(4)-C(41)	111.98(12)
C(53)-Na(1)-N(4)-C(41)	-7.9(3)
O(3)-Na(1)-N(4)-Zn(1)	13.34(5)
N(51A)-Na(1)-N(4)-Zn(1)	128.4(4)
N(54A)-Na(1)-N(4)-Zn(1)	-114.6(3)
N(51)-Na(1)-N(4)-Zn(1)	136.3(3)
N(54)-Na(1)-N(4)-Zn(1)	-104.1(3)
C(452)-Na(1)-N(4)-Zn(1)	97.72(7)
C(53)-Na(1)-N(4)-Zn(1)	-119.9(3)
C(45)-N(4)-C(41)-C(412)	-161.88(14)
Zn(1)-N(4)-C(41)-C(412)	60.62(15)
Na(1)-N(4)-C(41)-C(412)	-35.80(16)
C(45)-N(4)-C(41)-C(42)	-45.0(2)
Zn(1)-N(4)-C(41)-C(42)	177.52(12)

Na(1)-N(4)-C(41)-C(42)	81.10(16)
C(45)-N(4)-C(41)-C(411)	78.8(2)
Zn(1)-N(4)-C(41)-C(411)	-58.71(18)
Na(1)-N(4)-C(41)-C(411)	-155.13(13)
N(4)-C(41)-C(42)-C(43)	51.6(2)
C(412)-C(41)-C(42)-C(43)	168.61(15)
C(411)-C(41)-C(42)-C(43)	-75.21(19)
C(41)-C(42)-C(43)-C(44)	-57.4(2)
C(42)-C(43)-C(44)-C(45)	57.2(2)
C(41)-N(4)-C(45)-C(452)	161.75(13)
Zn(1)-N(4)-C(45)-C(452)	-63.31(16)
Na(1)-N(4)-C(45)-C(452)	34.64(15)
C(41)-N(4)-C(45)-C(44)	45.0(2)
Zn(1)-N(4)-C(45)-C(44)	179.96(11)
Na(1)-N(4)-C(45)-C(44)	-82.10(15)
C(41)-N(4)-C(45)-C(451)	-79.10(19)
Zn(1)-N(4)-C(45)-C(451)	55.85(18)
Na(1)-N(4)-C(45)-C(451)	153.79(12)
C(43)-C(44)-C(45)-N(4)	-51.3(2)
C(43)-C(44)-C(45)-C(452)	-168.89(16)
C(43)-C(44)-C(45)-C(451)	76.0(2)
N(4)-C(45)-C(452)-Na(1)	-25.44(11)
C(44)-C(45)-C(452)-Na(1)	94.97(13)
C(451)-C(45)-C(452)-Na(1)	-149.03(13)
O(3)-Na(1)-C(452)-C(45)	105.35(10)
N(51A)-Na(1)-C(452)-C(45)	-140.9(3)
N(4)-Na(1)-C(452)-C(45)	18.69(9)
N(54A)-Na(1)-C(452)-C(45)	-93.9(6)
N(51)-Na(1)-C(452)-C(45)	-135.8(3)
N(54)-Na(1)-C(452)-C(45)	-95.7(8)
Zn(1)-Na(1)-C(452)-C(45)	63.40(9)
C(53)-Na(1)-C(452)-C(45)	-142.34(18)
O(3)-Na(1)-N(51)-C(511)	2.9(6)
N(51A)-Na(1)-N(51)-C(511)	-8(4)
N(4)-Na(1)-N(51)-C(511)	-105.9(5)
N(54A)-Na(1)-N(51)-C(511)	120.1(6)
N(54)-Na(1)-N(51)-C(511)	114.2(6)
C(452)-Na(1)-N(51)-C(511)	-77.0(5)

Zn(1)-Na(1)-N(51)-C(511)	-39.0(9)
C(53)-Na(1)-N(51)-C(511)	97.9(6)
O(3)-Na(1)-N(51)-C(512)	122.7(7)
N(51A)-Na(1)-N(51)-C(512)	112(5)
N(4)-Na(1)-N(51)-C(512)	13.9(9)
N(54A)-Na(1)-N(51)-C(512)	-120.1(8)
N(54)-Na(1)-N(51)-C(512)	-126.0(8)
C(452)-Na(1)-N(51)-C(512)	42.7(7)
Zn(1)-Na(1)-N(51)-C(512)	80.8(8)
C(53)-Na(1)-N(51)-C(512)	-142.3(8)
O(3)-Na(1)-N(51)-C(52)	-115.1(5)
N(51A)-Na(1)-N(51)-C(52)	-126(5)
N(4)-Na(1)-N(51)-C(52)	136.0(4)
N(54A)-Na(1)-N(51)-C(52)	2.0(6)
N(54)-Na(1)-N(51)-C(52)	-3.9(6)
C(452)-Na(1)-N(51)-C(52)	164.9(6)
Zn(1)-Na(1)-N(51)-C(52)	-157.0(3)
C(53)-Na(1)-N(51)-C(52)	-20.2(4)
O(3)-Na(1)-N(54)-C(541)	-27.7(6)
N(51A)-Na(1)-N(54)-C(541)	-138.1(7)
N(4)-Na(1)-N(54)-C(541)	75.7(6)
N(54A)-Na(1)-N(54)-C(541)	170(4)
N(51)-Na(1)-N(54)-C(541)	-142.8(7)
C(452)-Na(1)-N(54)-C(541)	175.4(5)
Zn(1)-Na(1)-N(54)-C(541)	20.6(7)
C(53)-Na(1)-N(54)-C(541)	-115.0(8)
O(3)-Na(1)-N(54)-C(542)	-152.7(10)
N(51A)-Na(1)-N(54)-C(542)	97.0(11)
N(4)-Na(1)-N(54)-C(542)	-49.3(11)
N(54A)-Na(1)-N(54)-C(542)	45(3)
N(51)-Na(1)-N(54)-C(542)	92.3(10)
C(452)-Na(1)-N(54)-C(542)	50.4(14)
Zn(1)-Na(1)-N(54)-C(542)	-104.4(10)
C(53)-Na(1)-N(54)-C(542)	120.0(11)
O(3)-Na(1)-N(54)-C(53)	87.3(5)
N(51A)-Na(1)-N(54)-C(53)	-23.0(5)
N(4)-Na(1)-N(54)-C(53)	-169.3(3)
N(54A)-Na(1)-N(54)-C(53)	-75(3)

N(51)-Na(1)-N(54)-C(53)	-27.7(5)
C(452)-Na(1)-N(54)-C(53)	-69.6(11)
Zn(1)-Na(1)-N(54)-C(53)	135.6(3)
C(511)-N(51)-C(52)-C(53)	-76.2(14)
C(512)-N(51)-C(52)-C(53)	161.7(11)
Na(1)-N(51)-C(52)-C(53)	35.4(7)
C(541)-N(54)-C(53)-C(52)	169.3(10)
C(542)-N(54)-C(53)-C(52)	-63.9(17)
Na(1)-N(54)-C(53)-C(52)	60.2(6)
C(541)-N(54)-C(53)-Na(1)	109.1(14)
C(542)-N(54)-C(53)-Na(1)	-124.2(16)
N(51)-C(52)-C(53)-N(54)	-72.3(11)
N(51)-C(52)-C(53)-Na(1)	-27.1(6)
O(3)-Na(1)-C(53)-N(54)	-104.9(5)
N(51A)-Na(1)-C(53)-N(54)	151.2(6)
N(4)-Na(1)-C(53)-N(54)	24.5(6)
N(54A)-Na(1)-C(53)-N(54)	16.2(9)
N(51)-Na(1)-C(53)-N(54)	144.6(6)
C(452)-Na(1)-C(53)-N(54)	153.0(5)
Zn(1)-Na(1)-C(53)-N(54)	-71.5(5)
O(3)-Na(1)-C(53)-C(52)	129.3(3)
N(51A)-Na(1)-C(53)-C(52)	25.4(4)
N(4)-Na(1)-C(53)-C(52)	-101.3(3)
N(54A)-Na(1)-C(53)-C(52)	-109.6(6)
N(51)-Na(1)-C(53)-C(52)	18.8(4)
N(54)-Na(1)-C(53)-C(52)	-125.8(6)
C(452)-Na(1)-C(53)-C(52)	27.3(4)
Zn(1)-Na(1)-C(53)-C(52)	162.7(2)
O(3)-Na(1)-N(51A)-C(513)	24.4(7)
N(4)-Na(1)-N(51A)-C(513)	-78.2(8)
N(54A)-Na(1)-N(51A)-C(513)	143.5(8)
N(51)-Na(1)-N(51A)-C(513)	-166(5)
N(54)-Na(1)-N(51A)-C(513)	137.3(7)
C(452)-Na(1)-N(51A)-C(513)	-54.9(7)
Zn(1)-Na(1)-N(51A)-C(513)	-12.7(10)
C(53)-Na(1)-N(51A)-C(513)	123.9(8)
O(3)-Na(1)-N(51A)-C(514)	147.9(6)
N(4)-Na(1)-N(51A)-C(514)	45.2(8)

N(54A)-Na(1)-N(51A)-C(514)	-93.1(7)
N(51)-Na(1)-N(51A)-C(514)	-42(5)
N(54)-Na(1)-N(51A)-C(514)	-99.3(7)
C(452)-Na(1)-N(51A)-C(514)	68.5(7)
Zn(1)-Na(1)-N(51A)-C(514)	110.8(7)
C(53)-Na(1)-N(51A)-C(514)	-112.6(7)
O(3)-Na(1)-N(51A)-C(52A)	-93.6(6)
N(4)-Na(1)-N(51A)-C(52A)	163.8(4)
N(54A)-Na(1)-N(51A)-C(52A)	25.5(6)
N(51)-Na(1)-N(51A)-C(52A)	76(5)
N(54)-Na(1)-N(51A)-C(52A)	19.3(6)
C(452)-Na(1)-N(51A)-C(52A)	-172.9(6)
Zn(1)-Na(1)-N(51A)-C(52A)	-130.7(4)
C(53)-Na(1)-N(51A)-C(52A)	5.9(4)
O(3)-Na(1)-N(54A)-C(543)	-10.9(6)
N(51A)-Na(1)-N(54A)-C(543)	-118.4(6)
N(4)-Na(1)-N(54A)-C(543)	101.1(5)
N(51)-Na(1)-N(54A)-C(543)	-122.9(6)
N(54)-Na(1)-N(54A)-C(543)	8(3)
C(452)-Na(1)-N(54A)-C(543)	-168.2(4)
Zn(1)-Na(1)-N(54A)-C(543)	42.5(7)
C(53)-Na(1)-N(54A)-C(543)	-82.6(6)
O(3)-Na(1)-N(54A)-C(544)	-125.1(11)
N(51A)-Na(1)-N(54A)-C(544)	127.4(12)
N(4)-Na(1)-N(54A)-C(544)	-13.0(12)
N(51)-Na(1)-N(54A)-C(544)	122.9(12)
N(54)-Na(1)-N(54A)-C(544)	-106(4)
C(452)-Na(1)-N(54A)-C(544)	77.7(13)
Zn(1)-Na(1)-N(54A)-C(544)	-71.7(12)
C(53)-Na(1)-N(54A)-C(544)	163.2(13)
O(3)-Na(1)-N(54A)-C(53A)	104.2(5)
N(51A)-Na(1)-N(54A)-C(53A)	-3.3(6)
N(4)-Na(1)-N(54A)-C(53A)	-143.7(4)
N(51)-Na(1)-N(54A)-C(53A)	-7.8(6)
N(54)-Na(1)-N(54A)-C(53A)	123(4)
C(452)-Na(1)-N(54A)-C(53A)	-53.0(10)
Zn(1)-Na(1)-N(54A)-C(53A)	157.6(4)
C(53)-Na(1)-N(54A)-C(53A)	32.6(3)

Electronic Supplementary Information

C(543)-N(54A)-C(53A)-C(52A)	84.9(14)
C(544)-N(54A)-C(53A)-C(52A)	-161.9(14)
Na(1)-N(54A)-C(53A)-C(52A)	-21.1(7)
N(54A)-C(53A)-C(52A)-N(51A)	50.4(11)
C(513)-N(51A)-C(52A)-C(53A)	-173.1(9)
C(514)-N(51A)-C(52A)-C(53A)	67.6(15)
Na(1)-N(51A)-C(52A)-C(53A)	-49.7(8)

Symmetry transformations used to generate equivalent atoms: