

ORGANOMETALLICS

Organometallics, 1998, 17(23), 4992-4996, DOI: [10.1021/om980267v](https://doi.org/10.1021/om980267v)

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Table S1: Crystal data and structure refinement for **14**

Empirical formula	C ₁₃ H ₁₂ SiFO ₆ CoFe
Molecular Weight	426.10
Description	parallelepiped
Dimensions, mm	0.02 x 0.04 x 0.04
Temperature, K	300(2)
Wavelength, Å	0.71073
Crystal system	Monoclinic
Space group	P21/n
Z	4
a, Å	8.2492(2)
b, Å	15.4888(2)
c, Å	13.6408(3)
β, deg	94.7430(10)
Volume, Å ³	1736.92(6)
Calcd Density, g/cm ³	1.629
Abs coeff, mm ⁻¹	1.892
F(000)	856
θ-range for collection, deg.	1.99 to 26.58
Index ranges	-10 ≤ h ≤ 10, -19 ≤ k ≤ 19, -16 ≤ l ≤ 16
No. Reflections collected	14037
No. Independent reflection	3375
R(int)	0.0470
Refinement method	Full-matrix least-squares on F ²
Data / restraints / parameter	3375 / 0 / 209
Goodness-of-fit on F ²	1.059
Final R indices (I>2σ(I))*	R1 = 0.0396, wR2 = 0.0890
R indices (all data)*	R1 = 0.0622, wR2 = 0.1016
Largest diff. Peak, e/Å ³	0.479
Largest diff. Hole, e/Å ³	-0.360

$$*R_1 = \sum ||F_o| - |F_c|| / \sum |F_o| ; wR_2 = (\sum [w(F_o^2 - F_c^2)^2] / \sum [wF_o^4])^{1/2}$$

Table S2: Atomic coordinates ($\times 10^4$) and equivalent isotropic displacement parameters ($\text{\AA}^2 \times 10^3$) for **14**. $U(\text{eq})$ is defined as one third of the trace of the orthogonalized U_{ij} tensor.

Co(2)	800(1)	7041(1)	4073(1)	37(1)
Fe(1)	1263(1)	8169(1)	2764(1)	35(1)
Si(1)	4268(1)	6491(1)	2941(1)	39(1)
C(2)	2798(4)	7264(2)	3355(2)	34(1)
C(3)	2538(4)	7878(2)	4029(2)	34(1)
C(4)	2745(4)	8762(2)	4134(2)	38(1)
C(5)	1855(5)	9300(3)	4837(3)	55(1)
C(6)	4329(5)	9172(3)	3869(3)	51(1)
C(7)	5218(6)	5862(3)	3983(3)	67(1)
C(8)	5758(6)	7046(3)	2236(3)	64(1)
F(1)	3277(3)	5833(2)	2210(2)	74(1)
C(11)	353(5)	7499(3)	1810(3)	50(1)
O(11)	-195(4)	7067(2)	1188(2)	79(1)
C(12)	-384(5)	8925(3)	2884(3)	50(1)
O(12)	-1397(4)	9409(2)	2998(3)	78(1)
C(13)	2384(5)	8770(3)	1920(3)	48(1)
O(13)	3073(4)	9127(2)	1363(2)	79(1)
C(21)	1594(5)	6448(3)	5148(3)	55(1)
O(21)	2118(5)	6086(3)	5823(3)	92(1)
C(22)	-918(5)	7590(3)	4517(3)	54(1)
O(22)	-2025(4)	7917(3)	4797(3)	87(1)
C(23)	-148(5)	6149(3)	3346(3)	50(1)
O(23)	-718(4)	5600(2)	2902(3)	83(1)

Table S3: Selected bond lengths [Å] and angles [deg] for **14**.

Co(2)-C(22)	1.800(4)	C(22)-Co(2)-C(21)	102.1(2)
Co(2)-C(21)	1.807(5)	C(22)-Co(2)-C(23)	103.0(2)
Co(2)-C(23)	1.838(4)	C(21)-Co(2)-C(23)	99.5(2)
Co(2)-C(3)	1.937(4)	C(22)-Co(2)-C(3)	107.5(2)
Co(2)-C(2)	2.015(3)	C(21)-Co(2)-C(3)	98.4(2)
Co(2)-Fe(1)	2.5494(7)	C(23)-Co(2)-C(3)	140.3(2)
Fe(1)-C(11)	1.781(4)	C(22)-Co(2)-C(2)	141.4(2)
Fe(1)-C(13)	1.795(4)	C(21)-Co(2)-C(2)	103.0(2)
Fe(1)-C(12)	1.812(4)	C(23)-Co(2)-C(2)	101.3(2)
Fe(1)-C(3)	1.997(3)	C(3)-Co(2)-C(2)	39.95(14)
Fe(1)-C(2)	2.012(3)	C(22)-Co(2)-Fe(1)	94.59(14)
Fe(1)-C(4)	2.335(3)	C(21)-Co(2)-Fe(1)	148.40(14)
Si(1)-F(1)	1.601(3)	C(23)-Co(2)-Fe(1)	102.68(13)
Si(1)-C(2)	1.826(3)	C(3)-Co(2)-Fe(1)	50.63(10)
Si(1)-C(8)	1.837(4)	C(2)-Co(2)-Fe(1)	50.67(10)
Si(1)-C(7)	1.843(4)	C(11)-Fe(1)-C(13)	92.4(2)
C(2)-C(3)	1.352(5)	C(11)-Fe(1)-C(12)	99.7(2)
C(3)-C(4)	1.386(5)	C(13)-Fe(1)-C(12)	98.8(2)
C(4)-C(5)	1.506(5)	C(11)-Fe(1)-C(3)	131.3(2)
C(4)-C(6)	1.522(5)	C(13)-Fe(1)-C(3)	114.2(2)
C(11)-O(11)	1.144(5)	C(12)-Fe(1)-C(3)	114.4(2)
C(12)-O(12)	1.142(5)	C(11)-Fe(1)-C(2)	95.7(2)
C(13)-O(13)	1.130(5)	C(13)-Fe(1)-C(2)	106.1(2)
C(21)-O(21)	1.133(5)	C(12)-Fe(1)-C(2)	150.0(2)
C(22)-O(22)	1.138(5)	C(3)-Fe(1)-C(2)	39.42(14)
C(23)-O(23)	1.124(5)	C(11)-Fe(1)-C(4)	167.2(2)
		C(13)-Fe(1)-C(4)	92.6(2)
		C(12)-Fe(1)-C(4)	91.1(2)

C(3)-Fe(1)-C(4)	36.28(13)	C(3)-C(4)-Fe(1)	58.5(2)
C(2)-Fe(1)-C(4)	71.53(13)	C(5)-C(4)-Fe(1)	118.5(3)
C(11)-Fe(1)-Co(2)	91.93(13)	C(6)-C(4)-Fe(1)	112.2(2)
C(13)-Fe(1)-Co(2)	156.85(13)	O(11)-C(11)-Fe(1)	178.3(4)
C(12)-Fe(1)-Co(2)	102.85(13)	O(12)-C(12)-Fe(1)	177.2(4)
C(3)-Fe(1)-Co(2)	48.59(10)	O(13)-C(13)-Fe(1)	177.6(4)
C(2)-Fe(1)-Co(2)	50.78(9)	O(21)-C(21)-Co(2)	178.7(4)
C(4)-Fe(1)-Co(2)	78.93(9)	O(22)-C(22)-Co(2)	178.3(4)
F(1)-Si(1)-C(2)	106.9(2)	O(23)-C(23)-Co(2)	179.5(4)
F(1)-Si(1)-C(8)	107.5(2)		
C(2)-Si(1)-C(8)	110.2(2)		
F(1)-Si(1)-C(7)	107.9(2)		
C(2)-Si(1)-C(7)	111.0(2)		
C(8)-Si(1)-C(7)	113.0(2)		
C(3)-C(2)-Si(1)	144.9(3)		
C(3)-C(2)-Fe(1)	69.7(2)		
Si(1)-C(2)-Fe(1)	138.1(2)		
C(3)-C(2)-Co(2)	66.9(2)		
Si(1)-C(2)-Co(2)	128.9(2)		
Fe(1)-C(2)-Co(2)	78.54(12)		
C(2)-C(3)-C(4)	137.7(3)		
C(2)-C(3)-Co(2)	73.1(2)		
C(4)-C(3)-Co(2)	138.0(3)		
C(2)-C(3)-Fe(1)	70.9(2)		
C(4)-C(3)-Fe(1)	85.3(2)		
Co(2)-C(3)-Fe(1)	80.78(13)		
C(3)-C(4)-C(5)	123.3(3)		
C(3)-C(4)-C(6)	119.2(3)		
C(5)-C(4)-C(6)	113.2(3)		

Table S4: Anisotropic displacement parameters ($\text{\AA}^2 \times 10^3$) for **18**. The anisotropic displacement factor exponent takes the form:

$$-2p^2 [h^2 a^{*2} U_{11} + \dots + 2 h k a^* b^* U_{12}]$$

	U11	U22	U33	U23	U13	U12
Co(2)	35(1)	37(1)	40(1)	1(1)	5(1)	0(1)
Fe(1)	34(1)	37(1)	34(1)	1(1)	-1(1)	4(1)
Si(1)	36(1)	38(1)	44(1)	-6(1)	3(1)	6(1)
C(2)	29(2)	36(2)	37(2)	2(2)	3(1)	0(1)
C(3)	33(2)	36(2)	32(2)	0(2)	-2(1)	4(1)
C(4)	40(2)	35(2)	36(2)	0(2)	-5(2)	2(2)
C(5)	63(3)	47(2)	54(2)	-13(2)	9(2)	4(2)
C(6)	47(2)	45(2)	60(3)	-6(2)	0(2)	-10(2)
C(7)	63(3)	66(3)	72(3)	12(2)	9(2)	24(2)
C(8)	54(3)	86(3)	55(3)	8(2)	19(2)	12(2)
F(1)	67(2)	63(2)	89(2)	-39(2)	-6(2)	1(1)
C(11)	45(2)	58(3)	46(2)	0(2)	-1(2)	-2(2)
O(11)	78(2)	97(3)	59(2)	-28(2)	-12(2)	-18(2)
C(12)	49(2)	53(2)	47(2)	5(2)	-2(2)	11(2)
O(12)	67(2)	85(3)	80(2)	2(2)	3(2)	41(2)
C(13)	48(2)	53(2)	43(2)	3(2)	-3(2)	0(2)
O(13)	82(2)	91(3)	66(2)	20(2)	18(2)	-16(2)
C(21)	55(3)	55(3)	56(3)	10(2)	12(2)	5(2)
O(21)	105(3)	97(3)	73(2)	38(2)	8(2)	24(2)
C(22)	45(2)	62(3)	57(3)	5(2)	10(2)	3(2)
O(22)	58(2)	107(3)	100(3)	-6(2)	32(2)	24(2)
C(23)	38(2)	45(2)	68(3)	-2(2)	6(2)	-3(2)
O(23)	66(2)	66(2)	118(3)	-30(2)	4(2)	-20(2)

Table S5: Hydrogen coordinates ($\times 10^4$) and isotropic displacement parameters ($\text{\AA}^2 \times 10^3$) for **14**.

	x	y	z	U(eq)
H(5A)	2180(5)	9892(3)	4790(3)	82
H(5B)	2114(5)	9097(3)	5496(3)	82
H(5C)	705(5)	9252(3)	4672(3)	82
H(6A)	4291(5)	9783(3)	3980(3)	76
H(6B)	4474(5)	9063(3)	3189(3)	76
H(6C)	5223(5)	8927(3)	4272(3)	76
H(7A)	5984(6)	5462(3)	3747(3)	100
H(7B)	4393(6)	5552(3)	4293(3)	100
H(7C)	5771(6)	6247(3)	4450(3)	100
H(8A)	6524(6)	6634(3)	2022(3)	96
H(8B)	6324(6)	7473(3)	2643(3)	96
H(8C)	5206(6)	7321(3)	1672(3)	96