

# **SUPPORTING INFORMATION**

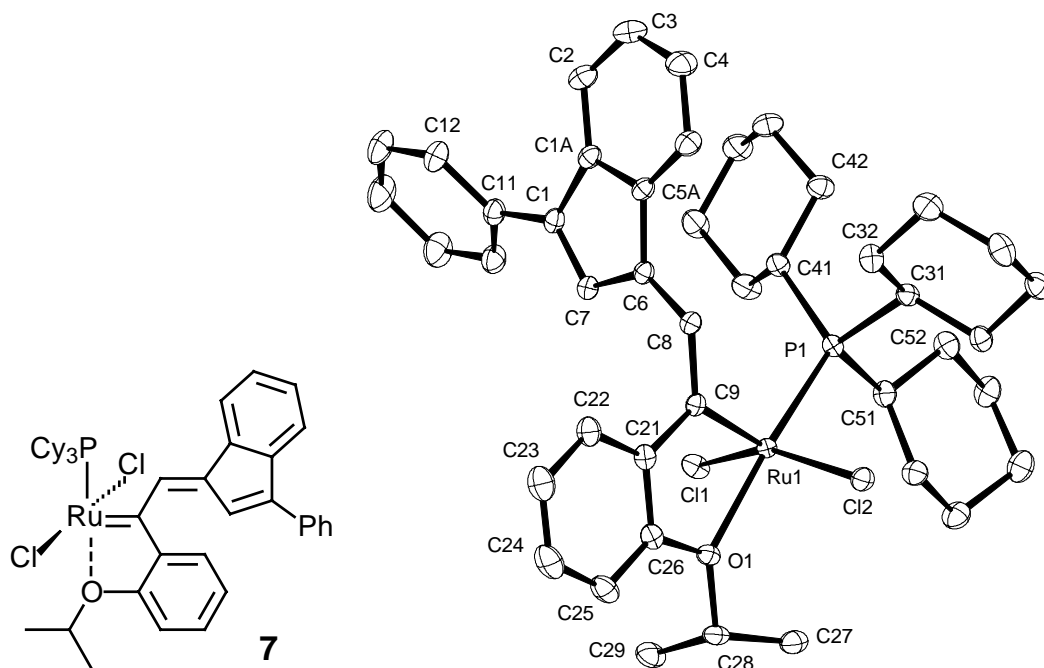
## **Bidentate Ruthenium Vinylcarbene Catalysts**

### **Derived from Enyne Metathesis**

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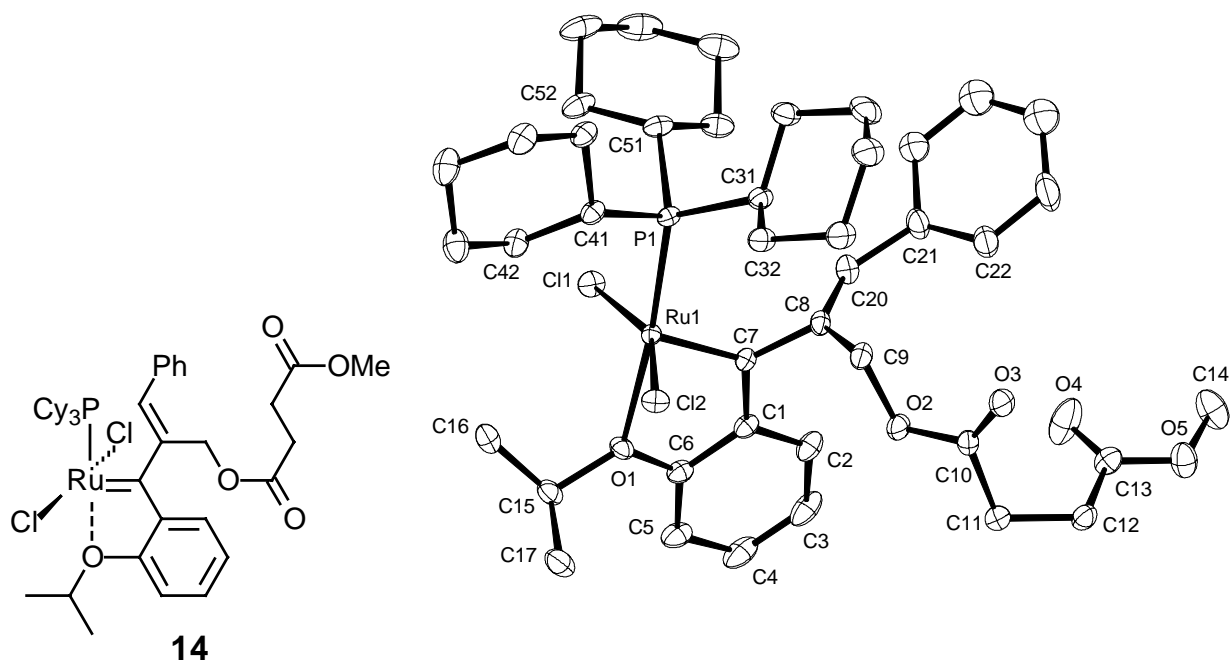
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**Figure S-1.** Molecular structure of complex **7** in the solid state. Anisotropic displacement ellipsoids are drawn at the 50% probability level.

**Table S-1.** Selected Bond Length (Å) and Angles (deg) for Complex **7**.

Ru(1)-C(9)	1.8555(11)	C(8)-C(9)	1.4630(16)
Ru(1)-P(1)	2.3142(3)	C(6)-C(8)	1.3519(16)
Ru(1)-O(1)	2.2549(9)	C(6)-C(7)	1.4604(17)
Ru(1)-Cl(1)	2.3395(3)	C(1)-C(7)	1.3676(17)
Ru(1)-Cl(2)	2.3444(3)	C(9)-C(21)	1.4614(16)
Cl(1)-Ru(1)-Cl(2)	154.361(12)	C(8)-C(6)-C(7)	128.15(11)
O(1)-Ru(1)-P(1)	174.30(2)	C(1)-C(7)-C(6)	109.84(11)
C(9)-Ru(1)-P(1)	105.62(4)	C(7)-C(6)-C(5A)	106.37(10)
C(9)-Ru(1)-O(1)	80.00(4)	C(21)-C(9)-Ru(1)	117.32(9)
C(6)-C(8)-C(9)	125.26(11)	C(26)-O(1)-Ru(1)	110.40(7)



**Figure S-2.** Molecular structure of complex **14** in the solid state. Anisotropic displacement ellipsoids are drawn at the 50% probability level.

**Table S-2.** Selected Bond Length (Å) and Angles (deg) for Complex **14**.

Ru(1)-C(7)	1.8546(14)	C(7)-C(8)	1.484(2)
Ru(1)-P(1)	2.3114(4)	C(8)-C(33)	1.346(2)
Ru(1)-O(1)	2.2380(11)	C(33)-C(21)	1.468(2)
Ru(1)-Cl(1)	2.3284(4)	C(8)-C(9)	1.504(2)
Ru(1)-Cl(2)	2.3511(4)	C(7)-C(1)	1.468(2)
Cl(1)-Ru(1)-Cl(2)	154.609(15)	P(1)-Ru(1)-Cl(2)	92.745(13)
P(1)-Ru(1)-O(1)	174.11(3)	C(7)-Ru(1)-Cl(1)	100.04(4)
C(7)-Ru(1)-O(1)	80.60(5)	C(7)-Ru(1)-Cl(2)	101.39(4)
P(1)-Ru(1)-Cl(1)	94.602(14)	C(7)-Ru(1)-P(1)	105.27(5)