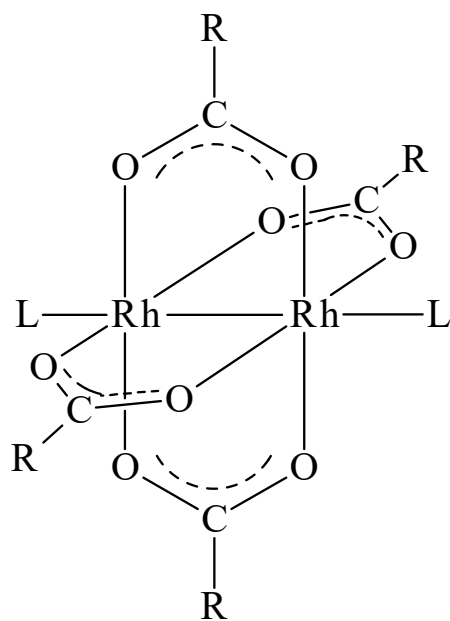




>>Entry Name: Tetrakis[ $\mu$ -(trifluoroacetato-*O*:*O'*)]dirhodium(II)



L = donor molecule  
R = CF<sub>3</sub>

**CAS Registry Number:** 31126-95-1

**Molecular Formula:** C<sub>8</sub>F<sub>12</sub>O<sub>8</sub>Rh<sub>2</sub>

**Molecular Weight:** 657.875

**Accurate Mass:** 657.751156

**Percentage Composition:** C 14.61%; F 34.65%; O 19.46%; Rh 31.28%

**Source/Synthesis:** Anhydrous compd. obt. by heating dihydrate at 150° for 30 mins.

**Physical Description:** Blue-green cryst. at r.t., green at high temp., purple at 77K. Rapidly absorbs H<sub>2</sub>O

**Boiling Point:** Subl. 350°

**Solubility:** Sol. H<sub>2</sub>O, THF, EtOH, Me<sub>2</sub>CO, MeCN

**Aldrich:** 39919-1

**Fluka:** 83785

>>Derivative: Dihydrate

**Synonym(s):** Diaquatetrakis[ $\mu$ -(trifluoroacetato-*O*:*O'*)]dirhodium(II). Rhodium(II) acetate hydrate

**CAS Registry Number:** 70084-34-3

**Molecular Formula:** C<sub>8</sub>H<sub>4</sub>F<sub>12</sub>O<sub>10</sub>Rh<sub>2</sub>

**Molecular Weight:** 693.905

**Accurate Mass:** 693.772286

**Percentage Composition:** C 13.85%; H 0.58%; F 32.85%; O 23.06%; Rh 29.66%

**Physical Description:** Dark green cryst.

>>Derivative: Bis-EtOH complex

**CAS Registry Number:** 15259-45-7

**Molecular Formula:** C<sub>12</sub>H<sub>12</sub>F<sub>12</sub>O<sub>10</sub>Rh<sub>2</sub>

**Molecular Weight:** 750.013

**Accurate Mass:** 749.834886

**Percentage Composition:** C 19.22%; H 1.61%; F 30.40%; O 21.33%; Rh 27.44%

**Physical Description:** Cryst., loses EtOH over several days in air

**Solubility:** Sol. CHCl<sub>3</sub>

>>Derivative: Bis-DMSO complex

**Synonym(s):** Bis(dimethyl sulfoxide)tetrakis(trifluoroacetato)dirhodium(II). Bis[sulfinylbis(methane)-*O*]tetrakis[ $\mu$ -(trifluoroacetato-*O*:*O'*)]dirhodium(II), 10Cl. Rhodium(II) trifluoroacetate DMSO complex

**CAS Registry Number:** 72665-42-0

**Molecular Formula:** C<sub>12</sub>H<sub>12</sub>F<sub>12</sub>O<sub>10</sub>Rh<sub>2</sub>S<sub>2</sub>

**Molecular Weight:** 814.145

**Accurate Mass:** 813.779026

**Percentage Composition:** C 17.70%; H 1.49%; F 28.00%; O 19.65%; Rh 25.28%; S 7.88%

**Physical Description:** Dark blue cryst. (CHCl<sub>3</sub>/C<sub>6</sub>H<sub>6</sub>)

**Other Data:** Dichroic: red in some orientations, in transmitted light. DMSO ligands coordinate through O