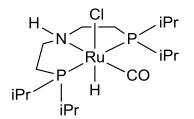
## **Strem Chemicals, Inc**

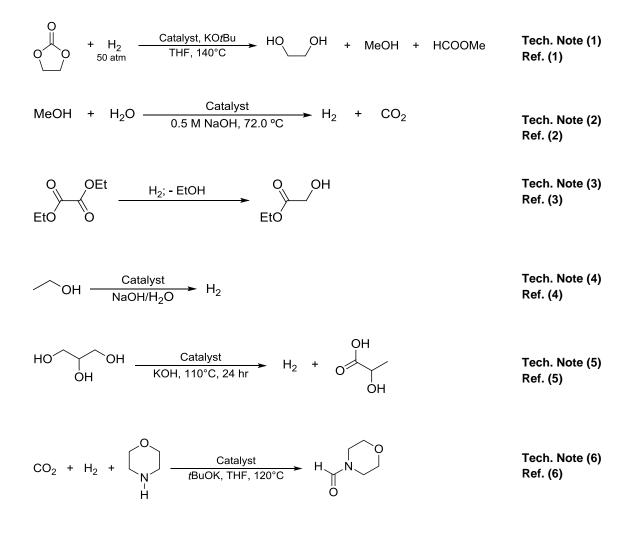
## www.strem.com

Catalog # 44-1032 Carbonylchlorohydrido[bis(2-di-i-propylphosphinoethyl)amine]ruthenium(II), min. 97%



**Technical Notes:** 

- 1. Catalyst for hydrogenation of ethylene carbonate to methanol.
- 2. Catalyst for dehydrogenation of aqueous-phase methanol to hydrogen and carbon dioxide.
- 3. Catalyst for hydrogenation of diethyl oxalate.
- 4. Catalyst for generation of hydrogen from aqueous ethanol solution.
- 5. Ruthenium- catalyzed hydrogen generation from glycerol and selective synthesis of lactic acid.
- 6. Catalyst N-formylation of morpholine with hydrogen and carbon dioxide.



References:

- 1. Angew. Chem. Int. Ed., 2012, 51, 13041.
- 2. Nature, **2013**, 495, 85.
- 3. ChemCatChem, **2013**, 5, 3228.
- 4. ChemSusChem, **2014**, 7, 2419.
- 5. *Green Chem.*, **2015**, *17*, 193.
- 6. Angew. Chem. Int. Ed., 2015, 54, 6186.