Strem Chemicals, Inc

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Catalog # 44-1043 Carbonylchlorohydrido[bis(2-di-cyclohexylphosphinoethyl)amine]ruthenium(II), min. 97%

$$\begin{array}{c|c}
H & CI & Cy \\
N & Ru & P & Cy \\
P & Cy & CO \\
Cy & H & CO
\end{array}$$

Technical Notes:

- 1. Catalyst for the hydrogenation of ethylene carbonate to methanol.
- 2. Catalyst for the generation of hydrogen from aqueous ethanol solution.
- 3. Catalyst for the N-formylation of morpholine with hydrogen and carbon dioxide.

O +
$$H_2$$
 Catalyst, KOtBu + HO OH + MeOH + HCOOMe Tech. Note (1) Ref. (1)

OH
$$\xrightarrow{\text{Catalyst}}$$
 H₂ Tech. Note (2) Ref. (2)

References:

- 1. Angew. Chem. Int. Ed., 2012, 51, 13041.
- 2. ChemSusChem, 2014, 7, 2419.
- 3. Angew. Chem. Int. Ed., 2015, 54, 6186.