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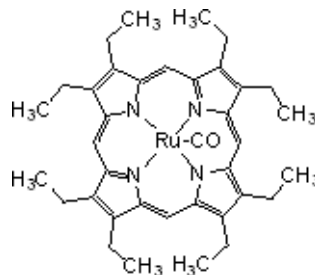
Outside USA: eurtechserv@sial.com

## Certificate of Analysis

Product Name:

2,3,7,8,12,13,17,18-Octaethyl-21H,23H-porphine ruthenium(II) carbonyl

**Product Number:** 392456  
**Batch Number:** MKBN8764V  
**Brand:** ALDRICH  
**CAS Number:** 41636-35-5  
**MDL Number:** MFCD00135460  
**Formula:** C<sub>37</sub>H<sub>44</sub>N<sub>4</sub>ORu  
**Formula Weight:** 661.84 g/mol  
**Quality Release Date:** 13 MAR 2013



Test	Specification	Result
Appearance (Color) Red to Red-Brown	Conforms to Requirements	Very Dark Red
Appearance (Form)	Powder or Crystals	Powder
Infrared spectrum	Conforms to Structure	Conforms
Proton NMR Spectrum	Conforms to Structure	Conforms
Wavelength C= 0.002 G/L CH <sub>2</sub> CL <sub>2</sub>	387 - 395 nm	392 nm
Extinction Coefficient	≥ 75000	123878
Carbon	57.1 - 77.2 %	65.7 %
Nitrogen	7.2 - 9.7 %	7.6 %

Jamie Gleason, Manager  
 Quality Control  
 Milwaukee, Wisconsin US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.