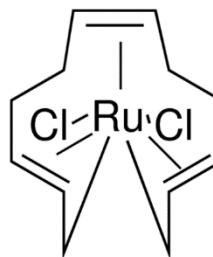




Product Specification

Chemical Name:	Dichloro((1,2,3,6,7,10,11,12-ETA)-2,6,10-dodecatriene-1,12-diyl)-ruthenium
CMI Product Code:	8095
CAS Number:	12170-97-7
Formula:	$C_{12}H_{18}Cl_2Ru$
Formula Weight:	334.23 g/mol
Theoretical Ru %:	30.25%



PARAMETER

SPECIFICATION

Ru Assay	$30.25 \pm 0.8\%$
Chemical Purity	$\geq 97.0\%$ (based on carbon %)
Microanalysis	Carbon: $43.1 \pm 1.3\%$ Hydrogen: $5.4 \pm 0.4\%$
Infrared Spectrum	Conforms to structure
Appearance	Yellow to orange-brown crystals
Storage	Moisture sensitive. Store under inert gas in a tightly sealed container. Store cold ($2-8^{\circ}C$).

Reviewing Chemist: Dr. Bryan Frauhiger, Ph.D., Organometallic Technical Director: BEF

Specification Approval: Dr. Ernest Addo, Ph.D., Director of Quality & Analytical Testing: EA

Specification Revision Date: February 29th, 2016

Revision Level: 0

Colonial Metals warrants, that at the time of product release this product conformed to the information contained on this specification sheet. Purchaser must determine the suitability of the product for its particular use.