



## Material Safety Data Sheet

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### SECTION 1: Product Identification

<b>Product name</b>	Bis(2,6,6-trimethylcyclohexadienyl)ruthenium
<b>CAS #</b>	Not available
<b>Catalog #</b>	0441050
<b>Chemical family</b>	Cyclohexadienyl metal derivatives

### SECTION 2: Composition, Information on Ingredients

<b>Component</b>	<b>%</b>	<b>CAS #</b>	<b>EINECS #</b>	<b>Hazard Symbol</b>	<b>R-Phrase</b>
Bis(2,6,6-trimethylcyclohexadienyl)ruthenium		NA	none	none	36/37/38

### SECTION 3: Hazard Identification

<b>Emergency overview</b>	Irritating to eyes, respiratory system and skin.
<b>Eye contact</b>	Causes slight eye irritation.
<b>Skin contact</b>	Causes slight to mild skin irritation.
<b>Inhalation</b>	Irritating to the respiratory tract.
<b>Ingestion</b>	May be harmful if swallowed.
<b>Chronic health effects</b>	The toxicological properties have not been thoroughly investigated.

### SECTION 4: First Aid Measures

<b>Eye exposure</b>	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.
<b>Skin exposure</b>	In case of contact, immediately wash skin with soap and copious amounts of water.
<b>Inhalation</b>	Remove from exposure to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Get medical aid immediately.
<b>Ingestion</b>	If swallowed, wash out mouth with water provided person is conscious. Get medical aid immediately.

### SECTION 5: Fire Fighting Measures

<b>General information</b>	If this material is involved in a fire, fire fighters should be equipped with a NIOSH approved positive pressure self-contained breathing apparatus and full protective clothing. Emits toxic fumes under fire conditions.
<b>Extinguishing media</b>	Carbon dioxide, dry chemical powder, or appropriate foam.

### SECTION 6: Accidental Release Measures

<b>Spill and leak procedures</b>	Small spills can be mixed with vermiculite or sodium carbonate or other inert material and swept up.
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SECTION 7: Handling and Storage	
<b>Handling</b>	Avoid contact with skin, eyes and clothing. Use this material under inert material of nitrogen or argon.
<b>Storage</b>	Store in a cool, dry place. Store in a tightly closed container under inert atmosphere of nitrogen or argon.
SECTION 8: Exposure Controls and Personal Protection	
<b>Eye protection</b>	Always wear approved safety glasses when handling a chemical substance in the laboratory.
<b>Skin protection</b>	Wear protective chemical-resistant gloves.
<b>Ventilation</b>	Handle the material only in an efficient fume hood.
<b>Respirator</b>	If ventilation is not available a respirator should be worn. The use of respirators requires Respirator Protection Program to be in compliance with 29CFR 1910.134.
SECTION 9: Physical and Chemical Properties	
<b>Appearance</b>	Yellow viscous liq.
<b>Odor</b>	No data
<b>Melting point</b>	No data
<b>Boiling point</b>	No data
<b>Flash point</b>	No data
<b>Solubility in water</b>	No data
<b>Specific gravity</b>	No data
<b>Molecular formula</b>	C18H26Ru
<b>Molecular weight</b>	343.47
SECTION 10: Stability and Reactivity	
<b>Stability</b>	Air sensitive solid.
<b>Hazardous polymerization</b>	No hazardous polymerization.
<b>Conditions to avoid</b>	Contact with air, oxidizing agents.
<b>Incompatibilities with other materials</b>	Air, oxidizing agents, halogens.
<b>Hazardous decomposition products</b>	Carbon dioxide, carbon monoxide, ruthenium oxides.
SECTION 11: Toxicological Information	
<b>RTECS Data</b>	No data available.
<b>Carcinogenic effects</b>	No data available.
<b>Mutagenic effects</b>	No data available.
<b>Tetratogenic effects</b>	No data available.
SECTION 12: Ecological Information	
<b>Ecological information</b>	No data available
SECTION 13: Disposal Considerations	
Dispose of in a manner consistent with federal, state, and local regulations.	

SECTION 14: Transport Information	
<b>Shipping name (CFR)</b>	Non-hazardous
<b>Hazard class (CFR)</b>	NA
<b>Additional hazard class (CFR)</b>	NA
<b>Packing group (CFR)</b>	NA
<b>UN ID number (CFR)</b>	NA
<b>Shipping name (IATA)</b>	Non-hazardous
<b>Hazard class (IATA)</b>	NA
<b>Additional hazard class (IATA)</b>	NA
<b>Packing group (IATA)</b>	NA
<b>UN ID number (IATA)</b>	NA
SECTION 15: Regulatory Information	
<b>TSCA</b>	Title compound not listed.
<b>SARA</b>	Title compound not listed.
SECTION 16: Other Information	
<b>Preparation date</b>	15.08.07
<b>Revision date</b>	15.08.07
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