

Revision Date 27-Feb-2012

Revision Number 3

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Description: Bis-(2-methylallyl)cycloocta-1,5-diene ruthenium(II) complex
Cat No. 295780000; 295782500
Synonyms None Known.

Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Laboratory chemicals
Uses advised against No Information available

Details of the supplier of the safety data sheet

Company

Acros Organics BVBA
 Janssen Pharmaceuticaaan 3a
 2440 Geel, Belgium

E-mail address begel.sdsdesk@thermofisher.com

Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01
 For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99
 Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300
 CHEMTREC Phone Number, Europe: 001-703-527-3887

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Acute oral toxicity	Category 4
Acute dermal toxicity	Category 4
Acute Inhalation Toxicity - Dusts and Mists	Category 4

Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

Symbol(s) Xn - Harmful
R-phrases none
Risk Combination Phrases R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed

Bis-(2-methylallyl)cycloocta-1,5-diene ruthenium(II) complex

Revision Date 27-Feb-2012

SECTION 2. HAZARDS IDENTIFICATION

Label Elements



Signal Word

Warning

Hazard Statements

H312 - Harmful in contact with skin
H302 - Harmful if swallowed
H332 - Harmful if inhaled

Precautionary Statements - EU (§28, 1272/2008)

P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell
P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing

Other Hazards

No information available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC-No.	Weight %	CAS-No	67/548/EEC Classification	CLP Classification - Regulation (EC) No 1272/2008	REACH No.
Bis-(2-methylallyl)cycloocta-1,5-diene ruthenium(II) complex 12289-94-0		100	12289-94-0	Xn; R20/21/22	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332)	-

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

SECTION 4. FIRST AID MEASURES

Description of first aid measures

Bis-(2-methylallyl)cycloocta-1,5-diene ruthenium(II) complex

Revision Date 27-Feb-2012

SECTION 4. FIRST AID MEASURES

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Ingestion	Clean mouth with water. Get medical attention.
Inhalation	Remove from exposure, lie down. Move to fresh air.
Notes to Physician	Treat symptomatically

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Carbon dioxide (CO₂). Dry chemical. chemical foam.

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Explosive properties.

Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Environmental precautions

Prevent further leakage or spillage if safe to do so

Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid contact with skin and eyes. Do not breathe dust. Do not breathe vapors or spray mist. Use only in area provided with appropriate exhaust ventilation.

Bis-(2-methylallyl)cycloocta-1,5-diene ruthenium(II) complex

Revision Date 27-Feb-2012

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep refrigerated.

Specific End Uses

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological limit values This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

Exposure controls

Engineering Measures Ensure that eyewash stations and safety showers are close to the workstation location

Personal protective equipment

Eye Protection

Goggles

Hand Protection

Protective gloves

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

Respiratory Protection

A NIOSH/MSHA approved air purifying dust or mist respirator or European Standard EN 149

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls No information available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Powder, Solid
Appearance	Beige
odor	odorless
pH	No information available.
Boiling Point/Range	No information available.
Melting Point/Range	81 - 85°C / 177.8 - 185°F
Flash Point	No information available.
Autoignition Temperature	No information available.
Water Solubility	soluble in acetone, methylene chloride, ethanol
Specific Gravity	> 1.0
Molecular Formula	C ₁₆ H ₂₆ Ru
Molecular Weight	319.44

Bis-(2-methylallyl)cycloocta-1,5-diene ruthenium(II) complex

Revision Date 27-Feb-2012

SECTION 10. STABILITY AND REACTIVITY**Reactivity****Chemical Stability**

Moisture sensitive.

Possibility of Hazardous Reactions

Hazardous Polymerization	No information available.
Hazardous Reactions .	No information available.

Conditions to Avoid

Incompatible products, Exposure to moist air or water.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition ProductsCarbon monoxide (CO). Carbon dioxide (CO₂).**SECTION 11. TOXICOLOGICAL INFORMATION****Information on Toxicological Effects****Acute Toxicity**

Product Information	No acute toxicity information is available for this product
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Component Information**Chronic Toxicity**

Carcinogenicity	There are no known carcinogenic chemicals in this product
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Sensitization	No information available.
Mutagenic Effects	No information available
Reproductive Effects	No information available.
Developmental Effects	No information available.
Target Organs	No information available.
Other Adverse Effects	The toxicological properties have not been fully investigated.
Endocrine Disruptor Information	None known

Bis-(2-methylallyl)cycloocta-1,5-diene ruthenium(II) complex

Revision Date 27-Feb-2012

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

Ecotoxicity effects

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants

Persistence and degradability

No information available

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Results of PBT and vPvB assessment

Other adverse effects

No information available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from Residues / Unused Products

Dispose of in accordance with local regulations

Contaminated Packaging

Empty containers should be taken to local recyclers for disposal

SECTION 14. TRANSPORT INFORMATION

IMDG/IMO

Not regulated

ADR

Not regulated

IATA

Not regulated

Bis-(2-methylallyl)cycloocta-1,5-diene ruthenium(II) complex

Revision Date 27-Feb-2012

SECTION 15. REGULATORY INFORMATION**Safety, health and environmental regulations/legislation specific for the substance or mixture****International Inventories****Legend****TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**ENCS** - Japan Existing and New Chemical Substances**CHINA** - China Inventory of Existing Chemical Substances**AICS** - Inventory of Chemical Substances**KECL** - Existing and Evaluated Chemical Substances**Chemical Safety Assessment****SECTION 16. OTHER INFORMATION****Full text of R-phrases referred to under sections 2 and 3**

R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed

Revision Date

27-Feb-2012

Revision Summary

Not applicable

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet