

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten! See the following pages for more information!



## Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

## Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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# Tris(4,7-diphenyl-1,10-phenanthroline) ruthenium(II) bis(perchlorate): sc-216022



#### MATERIAL SAFETY DATA SHEET

The Power to Question

#### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Tris(4,7-diphenyl-1,10-phenanthroline)ruthenium(II) bis(perchlorate)

Product Number: sc-216022

**Supplier:** Santa Cruz Biotechnology, Inc.

2145 Delaware Avenue Santa Cruz, CA 95060 800.457.3801 or 831.457.3800

**Emergency:** ChemWatch

Within the US & Canada: 877-715-9305

Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

#### 2. HAZARDS IDENTIFICATION

**Emergency Overview** 

**OSHA Hazards** 

No known OSHA hazards

Not a dangerous substance according to GHS.

**HMIS Classification** 

Health hazard: 0 Flammability: 0 Physical hazards: 0

**NFPA Rating** 

Health hazard: 0
Fire: 0
Reactivity Hazard: 0
Potential Health Effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.Skin May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation. **Ingestion** May be harmful if swallowed.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

No ingredients are hazardous according to HCS criteria.

Formula: C72H48Cl2N6O8Ru Molecular Weight: 1,297.16 g/mol

CAS-No. EC-No. Index-No. Concentration

Tris(4,7-diphenyl-1,10-phenanthroline)ruthenium(II) bis(perchlorate)

75213-31-9 - - -

#### 4. FIRST AID MEASURES

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

#### 5. FIREFIGHTING MEASURES

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### **Hazardous combustion products**

Hazardous decomposition products formed under fire conditions - carbon oxides, nitrogen oxides (NOx), hydrogen chloride gas, ruthenium oxide.

#### 6. ACCIDENTAL RELEASE MEASURES

#### **Personal precautions**

Avoid dust formation. Avoid breathing vapors, mist or gas.

#### **Environmental precautions**

Do not let product enter drains.

#### Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 7. HANDLING AND STORAGE

#### **Precautions for safe handling**

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

#### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Store under inert gas. Moisture sensitive. Keep in a dry place.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

#### Personal protective equipment

#### Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### Eye protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin and body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Hygiene measures

General industrial hygiene practice.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	powder	рН	no data available
Melting point/freezing point	no data available	Boiling point	no data available
Flash point	no data available	Evaporation rate	no data available
Ignition temperature	no data available	Autoignition temperature	no data available
Lower explosion limit	no data available	Upper explosion limit	no data available

Vapour pressureno data availableDensityno data availableWater solubilityno data availableRelative vapour densityno data availableOdourno data availableOdour Thresholdno data available

Partition coefficient: no data available

n-octanol/water

#### 10. STABILITY AND REACTIVITY

#### **Chemical stability**

Stable under recommended storage conditions.

#### Possibility of hazardous reactions

no data available

#### Conditions to avoid

no data available

#### Materials to avoid

Strong oxidizing agents.

#### **Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions - carbon oxides, nitrogen oxides (NOx), hydrogen chloride gas, ruthenium oxide

#### Other decomposition products

no data available

#### 11. TOXICOLOGICAL INFORMATION

#### **Acute toxicity**

#### Oral LD50

no data available

#### Inhalation LC50

no data available

#### **Dermal LD50**

no data available

#### Other information on acute toxicity

no data available

#### Skin corrosion/irritation

no data available

#### Serious eye damage/eye irritation

no data available

#### Respiratory or skin sensitization

no data available

#### Germ cell mutagenicity

no data available

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a

known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by OSHA.

#### Reproductive toxicity

no data available

#### **Teratogenicity**

no data available

#### Specific target organ toxicity - single exposure (Globally Harmonized System)

no data available

#### Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

#### **Aspiration hazard**

no data available

#### Potential health effects

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation.

Synergistic effects no data available Additional Information RTECS: Not available

#### 12. ECOLOGICAL INFORMATION

Toxicity Persistence and degradability

no data available

Bioaccumulative potential
no data available

PBT and vPvB assessment
no data available

no data available

Other adverse effects
no data available

no data available

#### 13. DISPOSAL CONSIDERATIONS

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

#### Contaminated packaging

Dispose of as unused product.

#### 14. TRANSPORT INFORMATION

DOT (US) IMDG IATA

#### 15. REGULATORY INFORMATION

#### **OSHA Hazards**

No known OSHA hazards

#### **SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### **SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### SARA 311/312 Hazards

No SARA Hazards

#### **Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

#### Pennsylvania Right To Know Components

Tris(4,7-diphenyl-1,10-phenanthroline)ruthenium(II) bis(perchlorate) complex CAS-No. 75213-31-9

#### **New Jersey Right To Know Components**

Tris(4,7-diphenyl-1,10-phenanthroline)ruthenium(II) bis(perchlorate) complex CAS-No. 75213-31-9

#### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

#### 16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.