

# MSDS

(S)-1-(Diphenylphosphino)-2-[(S)-4-isopropylloxazolin-2-yl]ferrocene  
Revision number: 5

## SAFETY DATA SHEET

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### Section 1. IDENTIFICATION

**Product name:** (S)-1-(Diphenylphosphino)-2-[(S)-4-isopropylloxazolin-2-yl]ferrocene

**Revision number:** 5

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### Section 2. HAZARDS IDENTIFICATION

**GHS classification**

**PHYSICAL HAZARDS** Not classified

Not classified

**HEALTH HAZARDS**

**ENVIRONMENTAL HAZARDS** Not classified

**GHS label elements, including precautionary statements**

**Pictograms or hazard symbols** None

**Signal word** No signal word

**Hazard statements** None

**Precautionary statements:** None

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### Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

**Substance/mixture:**

**Components:** (S)-1-(Diphenylphosphino)-2-[(S)-4-isopropylloxazolin-2-yl]ferrocene  
>96.0%(GC)(T)

**Percent:**

**CAS Number:** 163169-29-7

(S,S)-ip-FOXAP

**Synonyms:**

**Chemical Formula:** C<sub>28</sub>H<sub>28</sub>FeNOP

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### Section 4. FIRST AID MEASURES

**Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Get medical advice/attention if you feel unwell.

**Skin contact:** Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention.

**Eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Get medical advice/attention if you feel unwell. Rinse mouth.

**Ingestion:**

**Protection of first-aiders:**A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

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**Section5. FIRE-FIGHTING MEASURES**

Dry chemical, foam, water spray, carbon dioxide.

**Suitable extinguishing**

**media:**

**Specific hazards arising** Take care as it may decompose upon combustion or in high temperatures to

**from the chemical:**generate poisonous fume.

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**Section5. FIRE-FIGHTING MEASURES**

**Precautions for firefighters:** Fire-extinguishing work is done from the windward and the suitable fire-extinguishing

method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Remove movable containers if safe to do so.

**Special protective**When extinguishing fire, be sure to wear personal protective equipment.

**equipment for firefighters:**

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**Section6. ACCIDENTAL RELEASE MEASURES**

Use personal protective equipment. Keep people away from and upwind of spill/leak.

**Personal precautions,**

**protective equipment and** Entry to non-involved personnel should be controlled around the leakage area by

**emergency procedures:** roping off, etc.

**Environmental precautions:** Prevent product from entering drains.

**Methods and materials for** Sweep dust to collect it into an airtight container, taking care not to disperse it.

**containment and cleaning** Adhered or collected material should be promptly disposed of, in accordance with

**up:** appropriate laws and regulations.

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**Section7. HANDLING AND STORAGE**

**Precautions for safe handling**

Handling is performed in a well ventilated place. Wear suitable protective equipment.

**Technical measures:**

Prevent dispersion of dust. Wash hands and face thoroughly after handling.

Use a local exhaust if dust or aerosol will be generated.

**Advice on safe handling: Avoid contact with skin, eyes and clothing.**

**Conditions for safe storage, including any incompatibilities**

**Storage conditions:**Keep container tightly closed. Store in a cool and dark place.

Store under inert gas.

Store away from incompatible materials such as oxidizing agents.

Air-sensitive

**Packaging material:**Comply with laws.

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**Section8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

Install a closed system or local exhaust as possible so that workers should not be

**Engineering controls:**

exposed directly. Also install safety shower and eye bath.

**Personal protective equipment**

**Respiratory protection: Dust respirator. Follow local and national regulations.**

Protective gloves.

**Hand protection:**

**Eye protection:**Safety glasses. A face-shield, if the situation requires.

**Skin and body protection: Protective clothing. Protective boots, if the situation requires.**

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**Section9. PHYSICAL AND CHEMICAL PROPERTIES**

**Physical state (20°C):**Solid

**Form:**Crystal- Powder

Pale yellow - Reddish yellow

**Colour:**

**Odour:**No data available

**pH: No data available**

**Melting point/freezing point:**160°C

No data available

**Boiling point/range:**

**Flash point:**No data available

**Flammability or explosive**

**limits:**

No data available

**Lower:**

**Upper:**No data available

**Relative density:**No data available

**Solubility(ies):**

No data available

**[Water]**

**[Other solvents]**No data available

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**Section10. STABILITY AND REACTIVITY**

**Chemical stability:**Stable under proper conditions.

**Possibility of hazardous reactions:** No special reactivity has been reported.

**reactions:**

**Incompatible materials:** Oxidizing agents

**Hazardous decomposition products:** Carbon monoxide, Carbon dioxide, Nitrogen oxides (NO<sub>x</sub>), Phosphorus oxides

**products:**

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**Section11. TOXICOLOGICAL INFORMATION**

**Acute Toxicity:**No data available

**Skin corrosion/irritation:** No data available

**Serious eye damage/irritation:** No data available

**damage/irritation:**

**Germ cell mutagenicity:** No data available

**Carcinogenicity:**

**IARC =**No data available

No data available

**NTP =**

**Reproductive toxicity:**No data available

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**Section12. ECOLOGICAL INFORMATION**

**Ecotoxicity:**

**Fish:**No data available

**Crustacea:**No data available

**Algae:**No data available

**Persistence / degradability:** No data available

**Bioaccumulative potential(BCF):**No data available

**potential(BCF):**

**Mobility in soil**

**Log Pow:**No data available

**Soil adsorption (K<sub>oc</sub>):**No data available

**Henry's Law constant(PaM<sup>3</sup>/mol):**No data available

**constant(PaM<sup>3</sup>/mol):**

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### **Section13. DISPOSAL CONSIDERATIONS**

Recycle to process, if possible. Consult your local regional authorities. You may be able to dissolve or mix material

with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system.

Observe all federal, state and local regulations when disposing of the substance.

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### **Section14. TRANSPORT INFORMATION**

**Hazards Class:**Does not correspond to the classification standard of the United Nations

**UN-No:**Not listed

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### **Section15. REGULATORY INFORMATION**

**Safe management ordinance of dangerous chemical product (State Council announces on January 26, 2002**

**and revised on February 16,2011): Safe use and production, the storage of a dangerous chemical, transport, loading and unloading were prescribed.**

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### **SECTION 16 - ADDITIONAL INFORMATION**

N/A