MOLCORE
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CAT# MC444980

Date Updated: Sep. 13, 2017

SAFETY DATA SHEET

Email : sales@molcore.com

Website : www.molcore.com

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product Name	:	**Chloro[(S)-(-)-2,2'-bis(diphenylphosphino)-1,1'-binaphthyl](p-cymene)ruthenium(II) Chloride**
Product Number	:	MC444980
CAS-No.	:	130004-33-0
Brand.	:	MolCore

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

Identified uses	:	Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company	:	Hangzhou MolCore BioPharmatech Co.,Ltd. No. 5 Xianglin Road, Gongshu District Hangzhou, Zhejiang, 310011 China.
Telephone	:	+86 571 8102-5280
Fax	:	+86 571 8580 6285
E-mail	:	sales@molcore.com

1.4 Emergency telephone number

Emergency Phone #	:	+86 571 8102-5280

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Hazard statement(s)

Precautionary statement(s)

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

-None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Formula	:	C54H46Cl2P2Ru
Molecular Weight	:	928.87
CAS-No.	:	130004-33-0

EC-No. : Not available

Hazardous components

Component	Classification	Concentration
Chloro[(S)-(-)-2,2'-bis(diphenylphosphino)-1,1'-binaphthyl](p-cymene)ruthenium(II) Chloride		<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

If inhaled

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

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

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. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

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

5.2 Special hazards arising from the substance or mixture

Nature of decomposition products not known.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.3 Further information

No data available

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust.
For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.
Storage class (TRGS 510): Non Combustible Solids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin 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.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator.For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

8.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance	:	No data available
b) Odour	:	No data available
c) Odour Threshold	:	No data available
d) pH	:	No data available
e) Melting point	:	No data available
f) Boiling point	:	No data available
g) Flash Point	:	No data available
h) Evaporation rate	:	No data available
i) Flammability (solid, gas)	:	No data available
j) Upper/lower flammability or explosive limits	:	No data available
k) Vapour pressure	:	No data available
l) Vapour density	:	No data available
m) Relative density	:	No data available
n) Water solubility	:	No data available
o) Auto-ignition temperature	:	No data available
p) Decomposition temperature	:	No data available
q) Viscosity	:	No data available
r) Explosive properties	:	No data available
s) Oxidizing properties	:	No data available

9.2 Other safety information

No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong oxidizing agents, Strong acids

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx)
Other decomposition products - No data available
In the event of fire: see section 5

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

No data available
Inhalation: No data available
Dermal: No data available
No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

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.
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

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

No data available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and nonrecyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

DOT (US)

No data available

IMDG

No data available

IATA

No data available

SECTION 15: REGULATORY INFORMATION

SARA 302 Components

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

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (DeMinimis) 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

	CAS-No.	Revision Date
Chloro[(S)-(-)-2,2'-bis(diphenylphosphino)-1,1'-binaphthyl](p-cymene)ruthenium(II) Chloride	130004-33-0	-

New Jersey Right To Know Components

	CAS-No.	Revision Date
Chloro[(S)-(-)-2,2'-bis(diphenylphosphino)-1,1'-binaphthyl](p-cymene)ruthenium(II) Chloride	130004-33-0	-

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.

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Resp. Sens.	Respiratory sensitisation

HMIS Rating

Health hazard:	0
Chronic Health Hazard:	*
Flammability:	0
Physical Hazard:	0

NFPA Rating

Health hazard:	0
Fire Hazard:	*
Reactivity Hazard:	0

Further information

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Preparation Information

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