SAFETY DATA SHEET

Oakwood Products, Inc
730 Columbia HWY N
Estill, SC 29918
www.oakwoodchemical.com

Phone Numbers:
- Product Information: 803-739-8800
- Transportation Emergency: 800-451-8346
- Outside the USA: 760-602-8700

MATERIAL IDENTIFICATION

NAME: 1,1'-Bis(2-diphenylphosphino)ferrocene-palladium(II) dichloride
dichloromethane complex

CAS#: [95464-05-4]
CAT#: 048593
For R&D use only.

HAZARDS IDENTIFICATION

GHS Classification
- Acute toxicity, oral (Category 4)
- Acute toxicity, dermal (Category 4)
- Skin corrosion/irritation (Category 2)
- Serious eye damage/eye irritation (Category 2A)
- Acute toxicity, inhalation (Category 4)
- Respiratory tract irritation (Category 3)
- Carcinogenicity (Category 2)
- Specific target organ toxicity, single exposure (Category 2)

GHS Label elements, including precautionary statements

Signal Word: Warning

Hazard Statement(s)
- H302 - Harmful if swallowed
- H312 - Harmful in contact with skin
- H315 - Causes skin irritation
- H319 - Causes serious eye irritation
- H322 - Harmful if inhaled
- H335 - May cause respiratory irritation
- H351 - Suspected of causing cancer
- H373 - Causes damage to organs through prolonged or repeated exposure
Precautionary Statement(s)
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P312 IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell.
P302 + P352 IF ON SKIN: wash with plenty of soap and water.
P304 + P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P332 + P352 IF SKIN irritation occurs: Get medical advice/attention.
P337 + P313 IF eye irritation persists: Get medical advice/attention.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS</th>
<th>Description</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>95464-05-4</td>
<td>[1,1’-Bis(diphenylphosphino)ferrocene]dichloropalladium(II), complex with dichloromethane</td>
<td>70-90%</td>
</tr>
<tr>
<td>75-09-2</td>
<td>Methylene chloride</td>
<td>10-30%</td>
</tr>
</tbody>
</table>

FIRST AID MEASURES

In case of eye contact
Immediately flush eyes with running water for at least 15 minutes while keeping eyes open. Seek medical attention.

In case of skin contact
Wash thoroughly with soap and plenty of water. Seek medical attention.

If inhaled
Remove victim from source of exposure to fresh air. If breathing is difficult, administer oxygen. Seek medical attention.

If swallowed
Do not induce vomiting. Give water to victim to drink. Seek medical attention.

FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use carbon dioxide, dry chemical powder, alcohol-resistant or polymer foam.
Special protective equipment for fire-fighters
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Unusual fire and explosion hazards/decomposition of product
emits toxic fumes under fire conditions.

ACCIDENTAL RELEASE MEASURES

Personal precautions
Use personal protective equipment. Avoid breathing fumes, vapors, mists or gas. Ventilate area. Remove all sources of ignition. Evacuate personnel.

Environmental precautions
Prevent further leakage if safe to do so.

Methods and materials for containment and clean up
Absorb spills on sand or vermiculite and place in closed container for disposal.

HANDLING AND STORAGE

Precautions for safe handling
Avoid prolonged use. Avoid all direct contact with material. Do not breathe dust or vapor. Wash thoroughly after handling.

Precautions for safe storage
Keep container tightly closed. Store in a cool, dry, well-ventilated area.

EXPOSURE CONTROL/PERSONAL PROTECTION

Exposure Limits:

<table>
<thead>
<tr>
<th>Component Name (CAS)</th>
<th>Reference</th>
<th>ppm</th>
<th>mg/m3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methylene chloride (75-09-2)</td>
<td>OSHA</td>
<td>25</td>
<td>--</td>
</tr>
</tbody>
</table>

Personal protective equipment

Eye/face protection
Wear protective safety goggles or face shields tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Hand/skin protection
Avoid all direct contact with product.
Wear chemical-resistant gloves.
Wear protective clothing and boots.
After contact with skin, wash immediately.

Respiratory protection
Ensure adequate ventilation during use. Approved respiratory equipment must be used when airborne concentrations are unknown or exceed the exposure limits.

PHYSICAL AND CHEMICAL PROPERTIES
STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
no data available

Conditions to avoid
no data available

Incompatible materials
Strong oxidizing agents.

Hazardous decomposition products
May evolve carbon monoxide, carbon dioxide, phosphorus oxides, hydrogen chloride, and hydrogen fluoride.

TOXICOLOGICAL INFORMATION

Acute toxicity

Skin corrosion/irritation
Causes skin irritation

Serious eye damage/eye irritation
Causes serious eye irritation

Respiratory or skin sensitization
no data available

Germ cell mutagenicity
no data available

Carcinogenicity
no data available
no data available

**Reproductive toxicity**
no data available

**STOT-single exposure**
Respiratory system

**STOT-repeated exposure**
Oral - Blood, Liver
Inhalation - Central nervous system

**Aspiration hazard**
no data available

**Exposure Routes**
May be harmful to skin, eyes, and respiratory system. May have harmful effects if inhaled or swallowed.

To the best of our knowledge, the health hazards of this material have not been fully investigated.

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### ECOLOGICAL INFORMATION

**Toxicity**  
no data available

**Persistence and degradability**  
no data available

**Bioaccumulative potential**  
no data available

**Mobility in soil**  
no data available

**PBT and vPvB assessment**  
no data available

**Other adverse effects**  
no data available

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### DISPOSAL CONSIDERATIONS

Dissolve in or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all Federal, State and local laws.

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### TRANSPORT INFORMATION

**DOT**
Classed non-hazardous for shipping.

**IMDG**
Classed non-hazardous for shipping.

**IATA**
Classed non-hazardous for shipping.

REGULATORY INFORMATION

**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: The following chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313:

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**New Jersey Right to Know Components**
This product contains a chemical on the New Jersey Right to Know Components List.

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**California Prop. 65 Components**
WARNING! This product contains a chemical known to the State of California to cause cancer, birth defects, or any other reproductive harm.

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OTHER INFORMATION

Version : 1.3

Revision Date : 12/19/2017

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Oakwood shall not be held liable for any damage resulting from handling or from contact with the above product.