Section 1 - Chemical Product and Company Identification

MSDS Name: Dichlorobis(tricyclohexylphosphine)palladium(II)
Catalog Numbers: AC395890000
Synonyms: 
Company Identification:
Acros Organics N.V.
One Reagent Lane
Fair Lawn, NJ 07410
For information in North America, call: 800-ACROS-01
For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>29934-17-6</td>
<td>Dichlorobis(tricyclohexylphosphine)palladium(II)</td>
<td></td>
<td>unlisted</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Not available.
Target Organs: Respiratory system, eyes, skin.

Potential Health Effects

Eye: Causes eye irritation.
Skin: Causes skin irritation. May be harmful if absorbed through the skin.
Ingestion: Harmful if swallowed. May cause irritation of the digestive tract.
Inhalation: Causes respiratory tract irritation. May be harmful if inhaled.
Chronic: Not available.

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Ingestion: Get medical aid. Wash mouth out with water.
Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.
Flash Point: Not available.
Autoignition Temperature: Not available.
Explosion Limits, Lower: Not available.
Upper: Not available.
NFPA Rating: Not published.

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling: Avoid breathing dust, mist, or vapor. Avoid contact with skin and eyes. Avoid ingestion and inhalation.
Storage: Store in a cool, dry place. Store in a tightly closed container.
Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dichlorobis(tricyclohexylphosphine)palladium(II)</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs: Dichlorobis(tricyclohexylphosphine)palladium(II): No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear chemical splash goggles.
Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Solid
Appearance: yellow
Odor: Not available.
pH: Not available.
Vapor Pressure: Not available.
Vapor Density: Not available.
Evaporation Rate: Not available.
Viscosity: Not available.
Boiling Point: Not available.
Freezing/Melting Point: 270 deg C
Decomposition Temperature: Not available.
Solubility: Not available.
Specific Gravity/Density: Not available.
Molecular Formula: C36H66Cl2P2Pd
Molecular Weight: 738.18

Section 10 - Stability and Reactivity

Chemical Stability: Not available.
Conditions to Avoid: Incompatible materials.
Incompatibilities with Other Materials: Strong oxidizing agents.
Hazardous Decomposition Products: Hydrogen chloride, carbon monoxide, oxides of phosphorus, carbon dioxide.
Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 29934-17-6 unlisted.
LD50/LC50: Not available.
Carcinogenicity: CAS# 29934-17-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
Epidemiology: No data available.
Teratogenicity: No data available.
Reproductive Effects: No data available.
Mutagenicity: No data available.
Neurotoxicity: No data available.
Other Studies:

Section 12 - Ecological Information

Ecotoxicity: No data available. No information available.
Environmental: No information available.
Physical: No information available.
Other: Do not empty into drains.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.
RCRA U-Series: None listed.

Section 14 - Transport Information

<table>
<thead>
<tr>
<th>Shipping Name:</th>
<th>US DOT</th>
<th>Canada TDG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard Class:</td>
<td></td>
<td>No information available.</td>
</tr>
</tbody>
</table>
Section 15 - Regulatory Information

US FEDERAL

TSCA
CAS# 29934-17-6 is not listed on the TSCA inventory. It is for research and development use only.

Health & Safety Reporting List
None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.

Section 12b
None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs
None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances
None of the chemicals in this product have a TPQ.

Section 313
No chemicals are reportable under Section 313.

Clean Air Act:
This material does not contain any hazardous air pollutants.
This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 2 Ozone depletors.

Clean Water Act:
None of the chemicals in this product are listed as Hazardous Substances under the CWA.
None of the chemicals in this product are listed as Priority Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:
None of the chemicals in this product are considered highly hazardous by OSHA.

STATE
CAS# 29934-17-6 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65
California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations
European Labeling in Accordance with EC Directives

Hazard Symbols:
XN

Risk Phrases:
R 22 Harmful if swallowed.
R 36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases:
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 37/39 Wear suitable gloves and eye/face protection.

WGK (Water Danger/Protection)
CAS# 29934-17-6: No information available.

Canada - DSL/NDSL
None of the chemicals in this product are listed on the DSL or NDSL list.

Canada - WHMIS
not available.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

Section 16 - Additional Information

MSDS Creation Date: 11/30/2007
Revision #1 Date: 3/26/2008

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.