

# Material Safety Data Sheet

## bis(Triphenylphosphine)nickel(II) chloride , 98%

ACC# 75747

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** bis(Triphenylphosphine)nickel(II) chloride , 98%

**Catalog Numbers:** AC217500000, AC217500100, AC217500500

**Synonyms:** Dichlorobis(triphenylphosphine)nickel(II).

**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

CAS#	Chemical Name	Percent	EINECS/ELINCS
14264-16-5	Bis(triphenylphosphine)nickel(II) chloride	98%	238-154-8

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: dark gray solid.

**Danger!** Causes eye and skin burns. Causes digestive and respiratory tract burns. Cancer hazard. Harmful if swallowed, inhaled, or absorbed through the skin. Moisture sensitive. The toxicological properties of this material have not been fully investigated.

**Target Organs:** Eyes, skin, mucous membranes.

#### Potential Health Effects

**Eye:** Causes eye burns.

**Skin:** Harmful if absorbed through the skin. Causes skin burns. Causes "nickel itch" which is a dermatitis resulting from sensitization to nickel, which is characterized by skin eruptions, followed by discrete ulcers that may discharge and become crusted, or by eczema.

**Ingestion:** Harmful if swallowed. Causes gastrointestinal tract burns.

**Inhalation:** Harmful if inhaled. May cause allergic respiratory reaction. Causes chemical burns to the respiratory tract.

**Chronic:** May cause cancer in humans. Symptoms of overexposure to nickel can cause sensitization, dermatitis, allergic asthma and pneumonitis. Chronic exposure may cause effects similar to those of acute exposure.

### Section 4 - First Aid Measures

**Eyes:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid immediately.

**Skin:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.

**Ingestion:** If swallowed, do NOT induce vomiting. Get medical aid immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

**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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**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:** (estimated) Health: 3; Flammability: 0; Instability: 1

### 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. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

## Section 7 - Handling and Storage

**Handling:** Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Do not ingest or inhale. Use only in a chemical fume hood. Discard contaminated shoes.

**Storage:** Store in a cool, dry place. Keep container closed when not in use. Store in a tightly closed container. Keep under a nitrogen blanket.

## 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

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Bis(triphenylphosphine)nickel(II) chloride	none listed	0.015 mg/m <sup>3</sup> TWA (as Ni excluding Nickel carbonyl) (listed under Nickel compounds).10 mg/m <sup>3</sup> IDLH (as Ni except Nickel carbonyl) (listed under Nickel compounds).	1 mg/m <sup>3</sup> TWA (as Ni) (listed under Nickel soluble compounds).

**OSHA Vacated PELs:** Bis(triphenylphosphine)nickel(II) chloride: No OSHA Vacated PELs are listed for this chemical.

### Personal Protective Equipment

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A NIOSH/MSHA approved air purifying dust or mist respirator or European Standard EN 149.

## Section 9 - Physical and Chemical Properties

**Physical State:** Solid

**Appearance:** dark gray

**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:**250 deg C

**Decomposition Temperature:**Not available.

**Solubility:** Insoluble.

**Specific Gravity/Density:**Not available.

**Molecular Formula:**C<sub>36</sub>H<sub>30</sub>Cl<sub>2</sub>NiP<sub>2</sub>

**Molecular Weight:**654.20

## Section 10 - Stability and Reactivity

**Chemical Stability:** Moisture sensitive.

**Conditions to Avoid:** Incompatible materials, moisture, excess heat.

**Incompatibilities with Other Materials:** Strong oxidizing agents.

**Hazardous Decomposition Products:** Hydrogen chloride, phosphine, carbon monoxide, oxides of phosphorus, carbon dioxide.

**Hazardous Polymerization:** Has not been reported.

## Section 11 - Toxicological Information

### RTECS#:

**CAS#** 14264-16-5: QR6170000

### LD50/LC50:

Not available.

### Carcinogenicity:

CAS# 14264-16-5:

- **ACGIH:** Not listed.
- **California:** carcinogen, initial date 5/7/04 (listed as Nickel compounds).
- **NTP:** Known carcinogen (listed as Nickel compounds).
- **IARC:** Group 1 carcinogen (listed as Nickel compounds).

**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:** Fish: *Pseudomonas putida*:

## 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

	US DOT	Canada TDG
<b>Shipping Name:</b>	CORROSIVE SOLID, TOXIC, N.O.S.	CORROSIVE SOLID, TOXIC, N.O.S.
<b>Hazard Class:</b>	8	8
<b>UN Number:</b>	UN2923	UN2923
<b>Packing Group:</b>	III	III

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 14264-16-5 is listed on the TSCA inventory.

#### 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

This material contains Bis(triphenylphosphine)nickel(II) chloride (listed as Nickel compounds), 98%, (CAS# 14264-16-5) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

#### Clean Air Act:

CAS# 14264-16-5 (listed as Nickel compounds) is listed as a hazardous air pollutant (HAP).

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

#### 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. CAS# 14264-16-5 is listed as a Toxic Pollutant under the Clean Water Act.

#### OSHA:

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

#### STATE

CAS# 14264-16-5 can be found on the following state right to know lists: California, (listed as Nickel compounds), Pennsylvania, (listed as Nickel compounds), Minnesota, (listed as Nickel soluble compounds).

#### California Prop 65

**The following statement(s) is(are) made in order to comply with the California Safe Drinking Water Act:**

WARNING: This product contains Bis(triphenylphosphine)nickel(II) chloride, listed as 'Nickel compounds', a chemical known to the state of California to cause cancer.

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:

T

#### Risk Phrases:

R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R 34 Causes burns.

R 43 May cause sensitization by skin contact.

R 45 May cause cancer.

#### Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 53 Avoid exposure - obtain special instructions before use.

**WGK (Water Danger/Protection)**

CAS# 14264-16-5: No information available.

**Canada - DSL/NDSL**

CAS# 14264-16-5 is listed on Canada's NDSL List.

**Canada - WHMIS**

This product has a WHMIS classification of D2A, E.

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**

CAS# 14264-16-5 (listed as Nickel soluble compounds) is listed on the Canadian Ingredient Disclosure List.

<b>Section 16 - Additional Information</b>
--

**MSDS Creation Date:** 9/02/1997

**Revision #4 Date:** 8/19/2005

*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.*