

# SAFETY DATA SHEET

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## SECTION 1. IDENTIFICATION

**Product Identifier:** (4N) 99.99% 1,4-Bis(diphenylphosphino)butane-palladium(II) Chloride

**Product Code:** PD-OMX-04

**CAS Number:** 29964-62-3

**Relevant identified uses of the substance:** Scientific research and development

Supplier details:

American Elements  
10884 Weyburn Ave.  
Los Angeles, CA 90024  
Tel: +1 310-208-0551  
Fax: +1 310-208-0351  
Emergency telephone number:  
+1 800-424-9300

## SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS07

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H335 May cause respiratory irritation.

Eye Irrit. 2B H320 Causes eye irritation.

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).



Hazard pictograms

GHS07

Signal word Warning

Hazard statements

H315+H320 Causes skin and eye irritation.

H335 May cause respiratory irritation.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P262 Do not get in eyes, on skin, or on clothing.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:

NFPA ratings (scale 0 - 4)

1

0

0

Health = 1

Fire = 0

Reactivity = 0

HMIS-ratings (scale 0 - 4)

HEALTH

FIRE

REACTIVITY

1

0

0

Health = 1

Fire = 0

Reactivity = 0

Other hazards

Results of PBT and vPvB assessment

PBT: N/A

vPvB: N/A

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## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components: not applicable

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## SECTION 4. FIRST AID MEASURES

Description of first aid measures

If inhaled: Supply fresh air; consult doctor in case of complaints.

In case of skin contact: Generally the product does not irritate the skin.

In case of eye contact: Rinse opened eye for several minutes under running water. Consult a physician.

If swallowed: If symptoms persist consult doctor.

Most important symptoms and effects, both acute and delayed:

No data available

Indication of any immediate medical attention and special treatment needed

No data available

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## SECTION 5. FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing agents:

CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture No data available

Advice for firefighters

Protective equipment: No special measures required.

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## SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Not required.

Environmental precautions: No special measures required.

Methods and materials for containment and cleanup: Pick up mechanically.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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## SECTION 7. HANDLING AND STORAGE

Precautions for safe handling No special precautions are necessary if used correctly.

Information about protection against explosions and fires: No special measures required.

Conditions for safe storage, including any incompatibilities:

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: None.

Specific end use(s) No data available

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures: Wash hands before breaks and at the end of work.

Breathing equipment: Not required.

Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the

chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and

varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance

of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Safety glasses

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance:

Form: Powder

Color: Light yellow

Odor: Odorless

Odor threshold: No data available.

pH: N/A

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 0 °C (32 °F)

Flash point: 0 °C (32 °F)

Flammability (solid, gas): No data available.

Ignition temperature:

Decomposition temperature: No data available.

Autoignition: Product is not selfigniting.

Danger of explosion: Product does not present an explosion hazard.

Explosion limits:

Lower: No data available.

Upper: No data available.

Vapor pressure: N/A

Density: No data available.

Relative density No data available.

Vapor density N/A

Evaporation rate N/A

Solubility in / Miscibility with

Water: Insoluble.

Partition coefficient (n-octanol/water): No data available.

Viscosity:

Dynamic: N/A

Kinematic: N/A

Solvent content:

Organic solvents: 0.0 %

Other information No data available

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## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

#### Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known.

Conditions to avoid No data available

Incompatible materials: No data available

Hazardous decomposition products: No dangerous decomposition products known.

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## SECTION 11. TOXICOLOGICAL INFORMATION

### Information on toxicological effects

#### Acute toxicity:

#### Primary irritant effect:

on the skin: No irritant effect.

on the eye: No irritating effect.

Sensitization: No sensitizing effects known.

#### Additional toxicological information:

#### Carcinogenic categories

IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

NTP (National Toxicology Program)

None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

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## SECTION 12. ECOLOGICAL INFORMATION

### Toxicity

Aquatic toxicity: No data available

Persistence and degradability No data available

Bioaccumulative potential No data available

Mobility in soil No data available

Additional ecological information: Not known to be hazardous to water.

#### Results of PBT and vPvB assessment

PBT: N/A

vPvB: N/A

Other adverse effects No data available

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## SECTION 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

#### Recommendation:

Must not be disposed of together with household garbage. Do not allow product to enter drains, sewage systems, or other water courses system.

#### Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

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## SECTION 14. TRANSPORT INFORMATION

UN-Number  
DOT, ADN, IMDG, IATA not regulated  
UN proper shipping name  
DOT, ADN, IMDG, IATA not regulated  
Transport hazard class(es)  
DOT, ADN, IMDG, IATA  
Class not regulated  
Packing group  
DOT, IMDG, IATA not regulated  
Environmental hazards:  
Marine pollutant: No  
Special precautions for user N/A  
Transport in bulk according to Annex II of  
MARPOL73/78 and the IBC Code N/A  
UN "Model Regulation": -

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## SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture  
Sara  
Section 355 (extremely hazardous substances):  
None of the ingredients is listed.  
Section 313 (Specific toxic chemical listings):  
None of the ingredients is listed.  
TSCA (Toxic Substances Control Act):  
None of the ingredients is listed.  
Proposition 65  
Chemicals known to cause cancer:  
None of the ingredients is listed.  
Chemicals known to cause reproductive toxicity for females:  
None of the ingredients is listed.  
Chemicals known to cause reproductive toxicity for males:  
None of the ingredients is listed.  
Chemicals known to cause developmental toxicity:  
None of the ingredients is listed.  
Carcinogenic categories  
EPA (Environmental Protection Agency)  
None of the ingredients is listed.  
TLV (Threshold Limit Value established by ACGIH)  
None of the ingredients is listed.  
NIOSH-Ca (National Institute for Occupational Safety and Health)  
None of the ingredients is listed.  
GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).  
Hazard pictograms  
GHS07  
Signal word Warning  
Hazard statements  
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P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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## 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.