SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

Product Name: Tetrakis(triphenylphosphine)palladium(0)

Product Number: All applicable American Elements product codes, e.g. PD-OM9-02-C 02

CAS #: 14221-01-3

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
The substance is not classified according to the Globally Harmonized System (GHS).
GHS label elements not applicable
Hazard pictograms not applicable
Signal word not applicable
Hazard statements not applicable
Precautionary statements
P231 Handle under inert gas.
P235 Keep cool.
P222 Do not allow contact with air.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present
and easy to do. Continue rinsing.
P422 Store contents under inert gas.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:
NFPA ratings (scale 0 - 4)
0
0
0
Health = 0
Fire = 0
Reactivity = 0
HMIS-ratings (scale 0 - 4)
HEALTH
FIRE
REACTIVITY
0
0
0
Health = 0
Fire = 0
Reactivity = 0
Other hazards
Results of PBT and vPvB assessment
PBT: N/A
vPvB: N/A

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances
CAS # / Substance Name
14221-01-3 Tetrakis(triphenylphosphine)palladium(0), 99% (99.9+%-%-Pd)
Identification number(s)
EC number: 238-086-9

SECTION 4. FIRST AID MEASURES

Description of first aid measures
General information: No special measures required.
If inhaled: Supply fresh air; consult doctor in case of complaints.
In case of skin contact: Immediately rinse with water.
In case of eye contact: Rinse opened eye for several minutes under running water. Consult a physician.
If swallowed: If symptoms persist consult doctor.
Information for 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

SECTION 5. FIREFIGHTING MEASURES

Extinguishing media
Suitable extinguishing agents:
CO2, 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.
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:
Dispose contaminated material as waste according to item 13.
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.

SECTION 7. HANDLING AND STORAGE

Handling: Handle under inert gas.
Precautions for safe handling:
No special measures required.
Open and handle receptacle with care.
Information about protection against explosions and fires: No special measures required.
Conditions for safe storage, including any incompatibilities:
Keep cool.
Store contents under inert gas.
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: Keep receptacle tightly sealed.
Recommended storage temperature: Store at temperatures not exceeding -18 °C.
Specific end use(s) No data available

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: Not required.
Additional information: The lists that were valid during the creation were used as basis.
Exposure controls
Personal protective equipment:
General protective and hygienic measures:
The usual precautionary measures for handling chemicals should be followed.
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. 
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 

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties
Appearance:
Form: Powder
Color: Yellow
Odor: Odorless
Odor threshold: No data available.
pH: N/A
Melting point/Melting range: No data available.
Boiling point/Boiling range: No data available.
Flash point: N/A
Flammability (solid, gas): Product is not flammable.
Ignition temperature:
Decomposition temperature: No data available.
Autoignition: No data available.
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 %
VOC content: 0.0 g/l / 0.00 lb/gl
Solids content: 100.0 %
Other information No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity No data available
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.

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:
When used and handled according to specifications, the product does not have any harmful effects according to
our experience and the information provided to us.
The substance is not subject to classification.
Carcinogenic categories
IARC (International Agency for Research on Cancer)
Substance is not listed.
NTP (National Toxicology Program)
Substance is not listed.
OSHA-Ca (Occupational Safety & Health Administration)
Substance is not listed.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity
Aquatic toxicity: No data available
Persistence and degradability No data available
Behavior in environmental systems:
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

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods
Recommendation: Disposal must be made according to official regulations.
Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations
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": not regulated

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Sara
Section 355 (extremely hazardous substances):
Substance is not listed.

Section 313 (Specific toxic chemical listings):
Substance is not listed.

TSCA (Toxic Substances Control Act):
Substance is listed.

Proposition 65
Chemicals known to cause cancer:
Substance is not listed.

Chemicals known to cause reproductive toxicity for females:
Substance is not listed.

Chemicals known to cause reproductive toxicity for males:
Substance is not listed.

Chemicals known to cause developmental toxicity:
Substance is not listed.

Carcinogenic categories
EPA (Environmental Protection Agency)
Substance is not listed.

TLV (Threshold Limit Value established by ACGIH)
Substance is not listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)
Substance is not listed.

GHS label elements not applicable
Hazard pictograms not applicable
Signal word not applicable
Hazard statements not applicable
Precautionary statements
P231 Handle under inert gas.
P235 Keep cool.
P222 Do not allow contact with air.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses,
if present
and easy to do. Continue rinsing.
P422 Store contents under inert gas.
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.

SECTION 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
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