

## SAFETY DATA SHEET

Version 8.2  
Revision Date 09/29/2020  
Print Date 02/11/2022

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifiers**

Product name : Chloro(1-naphthyl)bis(triphenylphosphine)nickel(II)

Product Number : 767662  
Brand : Aldrich  
CAS-No. : 54806-25-6

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Identified uses : Laboratory chemicals, Synthesis of substances

**1.3 Details of the supplier of the safety data sheet**

Company : Sigma-Aldrich Inc.  
3050 SPRUCE ST  
ST. LOUIS MO 63103  
UNITED STATES

Telephone : +1 314 771-5765  
Fax : +1 800 325-5052

**1.4 Emergency telephone**

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Skin sensitization (Category 1), H317  
Carcinogenicity (Category 1B), H350  
Short-term (acute) aquatic hazard (Category 3), H402  
Long-term (chronic) aquatic hazard (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

**2.2 GHS Label elements, including precautionary statements**

Pictogram



Signal word

Danger

|                            |                                                                             |
|----------------------------|-----------------------------------------------------------------------------|
| Hazard statement(s)        |                                                                             |
| H317                       | May cause an allergic skin reaction.                                        |
| H350                       | May cause cancer.                                                           |
| H412                       | Harmful to aquatic life with long lasting effects.                          |
| Precautionary statement(s) |                                                                             |
| P201                       | Obtain special instructions before use.                                     |
| P202                       | Do not handle until all safety precautions have been read and understood.   |
| P261                       | Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.                       |
| P272                       | Contaminated work clothing should not be allowed out of the workplace.      |
| P273                       | Avoid release to the environment.                                           |
| P280                       | Wear protective gloves.                                                     |
| P302 + P352                | IF ON SKIN: Wash with plenty of soap and water.                             |
| P308 + P313                | IF exposed or concerned: Get medical advice/ attention.                     |
| P321                       | Specific treatment (see supplemental first aid instructions on this label). |
| P333 + P313                | If skin irritation or rash occurs: Get medical advice/ attention.           |
| P363                       | Wash contaminated clothing before reuse.                                    |
| P405                       | Store locked up.                                                            |
| P501                       | Dispose of contents/ container to an approved waste disposal plant.         |

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Sensitizer

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

|                  |                                                             |
|------------------|-------------------------------------------------------------|
| Synonyms         | : trans-Chloro(1-naphthyl)bis(triphenylphosphine)nickel(II) |
| Formula          | : C <sub>46</sub> H <sub>37</sub> ClNiP <sub>2</sub>        |
| Molecular weight | : 745.88 g/mol                                              |
| CAS-No.          | : 54806-25-6                                                |

| Component                                                  | Classification                                                                              | Concentration |
|------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------|
| <b>Chloro(1-naphthyl)bis(triphenylphosphine)nickel(II)</b> |                                                                                             |               |
|                                                            | Skin Sens. 1; Carc. 1B;<br>Aquatic Acute 3; Aquatic<br>Chronic 3; H317, H350,<br>H402, H412 | <= 100 %      |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

#### General advice

Consult a physician. Show this material safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**

Flush eyes with water as a precaution.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**

No data available

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**SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**

Carbon oxides, Oxides of phosphorus, Hydrogen chloride gas, Nickel/nickel oxides

**5.3 Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**

No data available

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**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

**6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**6.3 Methods and materials for containment and cleaning up**

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**

For disposal see section 13.

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## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

### **7.2 Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place.

Keep in a dry place.

Storage class (TRGS 510): 6.1D: Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

### **7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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## **SECTION 8: Exposure controls/personal protection**

### **8.1 Control parameters**

#### **Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

### **8.2 Exposure controls**

#### **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### **Personal protective equipment**

##### **Eye/face protection**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

##### **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

##### **Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|                                                 |                                      |
|-------------------------------------------------|--------------------------------------|
| a) Appearance                                   | Form: powder<br>Color: yellow-orange |
| b) Odor                                         | No data available                    |
| c) Odor Threshold                               | No data available                    |
| d) pH                                           | No data available                    |
| e) Melting point/freezing point                 | 187 - 191 °C (369 - 376 °F)          |
| f) Initial boiling point and boiling range      | No data available                    |
| g) Flash point                                  | ( )Not applicable                    |
| h) Evaporation rate                             | No data available                    |
| i) Flammability (solid, gas)                    | No data available                    |
| j) Upper/lower flammability or explosive limits | No data available                    |
| k) Vapor pressure                               | No data available                    |
| l) Vapor density                                | No data available                    |
| m) Relative density                             | No data available                    |
| n) Water solubility                             | insoluble                            |
| o) Partition coefficient: n-octanol/water       | No data available                    |
| p) Autoignition temperature                     | No data available                    |
| q) Decomposition temperature                    | No data available                    |
| r) Viscosity                                    | No data available                    |
| s) Explosive properties                         | No data available                    |
| t) Oxidizing properties                         | No data available                    |

### 9.2 Other safety information

No data available

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### **10.3 Possibility of hazardous reactions**

No data available

### **10.4 Conditions to avoid**

No data available

### **10.5 Incompatible materials**

Strong oxidizing agents

### **10.6 Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Oxides of phosphorus, Hydrogen chloride gas, Nickel/nickel oxides

Other decomposition products - No data available

In the event of fire: see section 5

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## **SECTION 11: Toxicological information**

### **11.1 Information on toxicological effects**

#### **Acute toxicity**

No data available

Inhalation: No data available

Dermal: No data available

No data available

#### **Skin corrosion/irritation**

No data available

#### **Serious eye damage/eye irritation**

No data available

#### **Respiratory or skin sensitization**

#### **Germ cell mutagenicity**

No data available

#### **Carcinogenicity**

Possible human carcinogen

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

#### **Reproductive toxicity**

No data available

No data available

#### **Specific target organ toxicity - single exposure**

No data available

#### **Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**Additional Information**

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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**SECTION 12: Ecological information****12.1 Toxicity**

No data available

**12.2 Persistence and degradability**

No data available

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Harmful to aquatic life.

No data available

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**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**

Dispose of as unused product.

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**SECTION 14: Transport information****DOT (US)**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

**Further information**

Not classified as dangerous in the meaning of transport regulations.

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**SECTION 15: Regulatory information****SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

|                                                     |                       |               |
|-----------------------------------------------------|-----------------------|---------------|
| Chloro(1-naphthyl)bis(triphenylphosphine)nickel(II) | CAS-No.<br>54806-25-6 | Revision Date |
|-----------------------------------------------------|-----------------------|---------------|

**New Jersey Right To Know Components**

|                                                     |                       |               |
|-----------------------------------------------------|-----------------------|---------------|
| Chloro(1-naphthyl)bis(triphenylphosphine)nickel(II) | CAS-No.<br>54806-25-6 | Revision Date |
|-----------------------------------------------------|-----------------------|---------------|

**California Prop. 65 Components**

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

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**SECTION 16: Other information****Further information**

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