

SAFETY DATA SHEET
According to Regulation n. 1907/2006 and Regulation 830/2015
Diclorobis(trifenilfosphine) palladium(II)



Revision n. III dd 21.01.2019
Replaces revision n II dd 01.06.2015

1. 1. IDENTIFICATION OF THE SUBSTANCE AND COMPANY

1.1 Product Identifier

Denomination **Diclorobis (trifenilfosphine) Palladium(II),**
C.A.S. Registry Number 13965-03-2
EINECS No. 237-744-2
Molecular weight 701.99 g/mol
Formula bruta $[(C_6H_5)_3P]_2PdCl_2$
Commercial Name **Diclorobis (trifenilfosphine) Palladium(II)**

1.2 Substance or Mixture Identified pertinent uses and suggested uses

Omogeneous Catalyst

1.3 Safety Data Sheet supplier information

EU market introducing responsible

Name FAGGI ENRICO S.P.A.
Address Via Majorana, 101/103 50019 Sesto Fiorentino FI
Telephone number 055311861
Fax number 055311791

Qualified person responsible for SDS

lorenzo.magaldi@faggi.it

1.4 Emergency Telephone Number: Tel. 0557947819 Centro Antiveleni di Firenze

1.5 Registry number

For this product is not available a registration number as the annual produced or imported quantity is below one ton

2. 2. HAZARDS IDENTIFICATION

2.1 Mixture classification according to Reg. (CE) n. 1272/2008 :

Hazard Classes	Categories	Hazard codes
Aquatic chronic	4	H413 May be harmful for aquatic life with long lasting effects

2.2 Label elements :

Pictograms:

Advices	ATTENTION	
	H413	May be harmful for aquatic life with long lasting effects

Safety advices

P273	Avoid release to the environment.
P333-P313	If skin irritation or a rash occurs: Get medical advice/attention.
P501	Dispose of contents / container in accordance with local / regional / national / international regulation

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More information None
PBT : not applicable
• **Results of PBT and vPvB ev.** vPvB : not applicable

3. **3. COMPOSITION / INFORMATION ON INGREDIENTS**

3.1 **Substance Dichlorobis (trifenilfosphine) Palladium(II)**

CAS No : 13965-03-2
EINECS No. 237-744-2
CE No. : -
IUPAC No. -

4. **FIRST AID MEASURES**

4.1 **Description of first aid measures**

Inhalation Move the subject from exposure to fresh air. By security consult a doctor. If the subject is unconsciousness bring him into stable side position for transportation.

Ingestion Call immediately a doctor. Let drink water immediately (at least 2 glasses)

Skin contact Wash immediately with water and soap, rinsing carefully

Eye contact Remove contact lenses. Wash immediately with plenty of water for at least 15 minutes, opening eyes. Consult a doctor if the problem persists.

Recommendations:

- **Need to consult immediately a doctor** YES
- **Possibility of delayed effects after exposure** NO
- **Move the exposed individual from exposure place to outdoor** YES
- **Remove individual's clothes and shoes** YES
- **Contaminated clothes handling** With gloves
- **For first aid responders, wear IPD** YES

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

no significant or critical effects are known

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

Consult immediately a doctor

5. **FIREFIGHTING MEASURES**

5.1 **Extinguishing media**

Suitable extinguishing media: CO₂, water dust or spray. Fight larger fires with water spray or alcohol resistant foam.

Non suitable extinguishing media: None in particular

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

Avoid to breath smokes. If involved in a fire may generate: Carbon monoxide, hydrochloric acid, phosphorus oxides

5.3 **Advice for firefighters**

General information Do not allow water used to extinguish the fire flows into drain, in groundwater or surface water.

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Devices Normal clothing to fight the fire, such as a compressed air breathing apparatus open circuit (EN137), full flame retardant (EN469), fire resistant gloves (EN659) and boots for firefighters (HOA29 or A30)

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Move away from the contaminated area and keep upwind.

6.1.2. For emergency responders

Wear :

Gloves for chemical risks comply with the rule EN420 EN374

Complete acid-proof clothing in conformity with the UNI EN 13034: 2006

Half-facial masks with filters ABEK2P3 R complies with EN14387: 2004 + A1: 2008

6.2 Environmental precautions:

Do not allow to enter drainage system, ground water and surface water. In case of water penetration or infiltration to terrain, warn qualified authorities

6.3 Methods and materials for containment and cleaning up

6.3.1. Recommendations on how to contain a spill

Avoid powder formation

6.3.2. Recommendations on how to clean up a spill

Wash the area with plenty of water.

6.3.3. Other informations:

None

6.4 Reference to other sections:

-

7. HANDLING AND STORAGE

7.1. Precautions for safe handling:

7.1.1. General recommendations

Store in original packaging and labeled. Maintain container well sealed in a fresh and dry space

7.1.2. General recommendations on personal hygiene

Do not eat, drink or smoke in work areas; Wash hands thoroughly after use and remove contaminated clothing and protective equipment before entering areas where you eat.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1. Managing the risks associated with explosive atmospheres, corrosive conditions, dangers of flammability, incompatible substances and mixtures, evaporation conditions, potential ignition sources

Store into original container and close immediately after use

7.2.2. Containment of the effects of weather conditions, pressure, temperature, sunlight, humidity and vibrations

Keep protected from direct sunlight in a dry, cool and well-ventilated space.

7.2.4. Precautions for maintaining integrity of the substances

Please store at 6° temperature and inert atmosphere

7.2.5. Provisions on ventilation, specific design for storage rooms or vessels, quantity limits under storage conditions, packaging compatibilities

Stockage spaces must be fresh and dry. Store in an area without manhole or access to sewerage

7.3. Specific end use

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8. Omogeneous Catalyst for pharmaceutical uses
EXPOSURE CONTROLS / PERSONAL PROTECTION
- 8.1. **Control parameters**
For this substance It has not been established values for professional and biological exposure limits corresponding to EC limits referred to in Directives 98/24 / EC and 2004/37 / EC
- 8.2. **Exposure controls:**
- 8.2.1. **Appropriate engineering controls**
Use under extractor hood. Verify periodically hood capacity.
- 8.2.2. **Individual protection measures, such as personal protective equipment**
- | | |
|--------------------------------|--|
| Protection Eye / face | protective goggles for the eyes conform to Directive 89/686 / EEC and to the standard EN166: 2001 |
| Skin protection (Hands) | Latex protective gloves or nitrile rubber comply with directive UE89/89/CEE and with standard(EX374). Gloves permeation time must be ≥ 480 min. and thickness of 0,11 mm. |
| Skin protection (Body) | Clothing complete conformity with the UNI EN 13034: 2006 |
| Respiratory protection | Mask with P3 filters |
| Thermal hazards | Info not available |
- 8.2.3. **Environmental exposure controls**
Maintain aspiration to all environments using local capture systems and ambient air change. Conveying the withdrawn volumes to an abatement system and then into the atmosphere. Do not use vacuum systems to air recirculation. Avoid any spillage in the environment.
9. **9. PHYSICAL AND CHEMICAL PROPERTIES**
- 9.1 **Basic Information on physical and chemical properties**
- | | |
|---|-----------------------|
| Appearances | Yellow crystal powder |
| Odour | Odourless |
| Odour Threshold | Not defined |
| pH | Not applicable |
| Melting point/freezing | Decomposed |
| Initial boiling point and boiling range: | Not applicable |
| Flash point | Not flammable |
| Evaporation Rate | Not applicable |
| Flammability (solid & gas) | Not applicable |
| Upper/Lower flammability or explosive limits | Not applicable |

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	Vapour pressure	Not defined
	Vapour Density	Not defined
	Bulk density	Not defined
	Solubility in water	Insoluble in water
	Partition coefficient n-octanol/Water	Not defined
	Auto-ignition Temperature	Not subject to spontaneous ignition
	Decomposition Temperature	Not defined
	Viscosity	Not applicable
	Explosive Properties	Not explosive
	Oxidazing Properties	Not Oxidizing
9.2.	Other informations	
	None	
10.	STABILITY AND REACTIVITY	
10.1	Reactivity	
	The product has catalytic properties	
10.2	Chemical stability	
	The product oxidizes in contact with the air	
10.3	Possibility of hazardous reactions	
	Can react violently with nitric acid or hot sulfuric	
10.4	Conditions to avoid	
	Do not expose it to the oxidizing action of the air	
10.5	Incompatible materials	
	Nitric Acid and sulfuric acid	
10.6	Hazardous decomposition products	
	Carbon monoxide, hydrochloric acid, phosphorus oxides	
11.	TOXICOLOGICAL INFORMATION	
11.1	Information on toxicological effects	
	Acute toxicity:	Data not available
	Corrosion / irritation	Not irritant
	Eye irritations/damages	Causes serious eyes irritation
	Sensitization	Data not available
	Mutagenicity	non-sensitizing
	Carcinogenicity:	non-carcinogenic
	Reproductive toxicity	Not toxic for reproduction
	Specific target organ toxicity (STOT) - single exposure	Data not available
	Specific target organ toxicity (STOT) – repeated exposure	Data not available
	Inhalation hazards	Irritant for mucose

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- 11.2 Information about exposure routes**
 Skin, Eyes
- 11.3 Symptoms related to the physical, chemical and toxicological**
 Itching in the eyes and skin
- 11.4 Immediate, delayed and chronic effects from exposure to short and long term**
 Risk of allergic reaction
- 11.5 Interactive effects**
 Unknown interactive effects
- 11.6 Absence of specific data**
 -
- 11.7 Other Information**
 None
- 12. Ecological informations**
Specific data for this substance are unknown, so dichloromethane data have been used
- | | |
|---|--|
| Toxicity | For this product specific data are unknown |
| Persistence and degradability | No information available |
| Bioaccumulative potential | No information available |
| Mobility in soil | No information available |
| Results of PBT and vPvB evaluation | No information available |
| Other adverse effects | No information available |
- 13. DISPOSAL CONSIDERATIONS**
- 13.1. 13. Methods of Waste Treatment:**
 The substance and packages must be sent to approved facilities for the disposal of industrial waste
- 14. TRANSPORT INFORMATION**
 The substance is not submitted to ADR law
- 15. REGULATORY INFORMATION**
- | 15.1 | Legislazione | Applicabilità |
|-------------|--|----------------------|
| | Reg. (CE) 1907/2006/CE Reach | SI |
| | Reg. (EC) 1272/2008 and subsequent CLP. amendments and additions | SI |
| | Reg. (EC) 2037/2000 "substances that deplete the ozone layer" | NO |
| | Reg. (EC) 850/2004 "Persistent organic pollutants" | NO |
| | Reg. (EC) 689/2008 "export and import hazardous chemicals" | NO |
| | Substance listed in Annex I of Dir. 96/82 / EC - "Seveso II" | NO |
| | Directive, which was transposed into national legislation by the Legislative Decree 334/99 | |
| | Italian Legislative Decree 81/2008 (Consolidated Act on protection of health and safety in the workplace), as amended | SI |
| | Directive 2014/103/UE "Adr" | NO |
| 15.2 | Chemical Safety Assessment | |
| | A chemical safety assessment has not been carried out. | |
- 16. OTHER INFORMATION**
- 16.1 Data compared to the previous version:**
 Modified sections 1
- 16.2 Abbreviations and acronyms**

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ADR: European Agreement on the transport of dangerous goods by road
GHS: Globally Harmonized System of Classification and Labelling of Chemicals.
EINECS: European chemical substance inventory
CAS: Chemical Abstracts Service

16.3 Key literature references and sources of the data on this MSDS:

<http://echa.europa.eu/web/guest/information-on-chemicals/registered-substances>
platform ESIS <http://esis.jrc.ec.europa.eu>
Safety data sheets of the suppliers of substances used in the formulation

16.4 Classification and procedure used to derive it in accordance with Reg. (EC) 1272/2008 in relation to the mixtures.

Classification according to Regulation (CE) 1272/2008 **Classification Procedure**

16.5. Formazioni adeguate per i lavoratori al fine di garantire la protezione della salute umana e dell'ambiente

- Training in accordance with the provisions of the Legislative Decree 81/2008 (Consolidated Act on protection of health and safety in the workplace), as amended.
- PPE use

16.6. Other informations

None