## Safety data sheet According to Regulation n. 1907/2006 and Regulation 878/2020

**PALLADIUM ACETATE II** 



Revision n. VIII of 22.11.2022 Replaces revision VII of 16.12.2021

#### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

> Chemical name Palladium Acetate (II)

C.A.S. Registry Number 3375-31-3 **EINECS** number 222-164-4 Molecular weight 224.5 g/mol Brute formula (CH<sub>3</sub>COO)<sub>2</sub>Pd

Product code 145

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

Intended use: Industrial use

Uses advised against: check section 15

1.3 Details of the supplier of the safety data sheet

> Name FAGGI ENRICO S.P.A.

Adress Via Majorana, 101/103 50019 Sesto Fiorentino FI

Telephone number 055311861 Fax number 055311791

Competent person

responsible for the safety

data sheet lorenzo.magaldi@faggi.it

1.4 **Emergency telephone** 111 - Medical helpline operating in England, in Scotland (NHS

number 24) and in Wales (NHS Direct Wales).

1.5 **Registration number** A REACH registration number is not available for this

substance as the annual quantity produced or imported is

less than one tonne.

### **HAZARDS IDENTIFICATION** 2.

#### 2.1 Classification of the mixture according to Regulation (EC) n. 1272/2008

Hazard class	Category codes	Hazards indications
Skin sens.	1	H317 May cause an allergic
		skin reaction
Eye Dam.	1	H318 Causes serious eye
		damage
Aquatic acute	1	H400 Very toxic to aquatic
		life
Aquatic chronic.	1	H410 Very toxic to aquatic
		life with long lasting effects

#### 2.2 Label elements:

**Pictograms** 



Signal word **DANGER Hazard statement** 

> H317 May cause an allergic skin

> > reaction

## According to Regulation n. 1907/2006 and Regulation 878/2020 PALLADIUM ACETATE II



Revision n. VIII of 22.11.2022 Replaces revision VII of 16.12.2021

H318	Causes serious eye damage
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H400 Very toxic to aquatic

organisms

H410 Very toxic to aquatic life with

long lasting effects

**Precautionary advise** P273 Do not disperse in the

environment

P280 Wear protective gloves /

protective clothing / eye protection / face protection

P305+P351+P338 In case of contact with eyes:

rinse thoroughly for several minutes. Remove any contact lenses if easy to do. Continue

rinsing.

P310 Immediately call a POISON

CENTER / doctor

P333+P313 If skin irritation or rash

occurs: seek medical

attention

2.3 Other hazards It does NOT contain PBT / vPvB substances according to

Regulation (EC) 1907/2006, annex XIII

It does NOT contain substances that interfere with the endocrine system in accordance with Regulation (EC) 1907/2006 art.59 paragraph 1 and in accordance with the criteria established in Regulation (EU) 2017/2100 and

Regulation (EU) 2018/605.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1** Substance: PALLADIUM ACETATE (II) ≤ 100%

CAS number: 3375-31-3 EINECS number: 222-164-4 Index Number: Not available STA: Oral LD50 > 5110 mg/kg (rat)

Acute M factor: 100 Cronic M factor: 10 FIRST AID MEASURES

### 4.1 Description of first aid measures

Inhalation Take the person to a very well ventilated area and consult a doctor

for safety. If the person is unconscious, keep him stable on his side

during transport.

Ingestion Call a doctor immediately. Make victim drink water (two glasses at

most). Do not induce vomiting.

Contact with skin 
Immediately wash with water and rinse thoroughly.

Contact with eyes Rinse with plenty of running water for at least 15 minutes while

keeping the eyelids open (remove contact lenses if it is easy to do so).

Consult an ophthalmologist.

4.

## According to Regulation n. 1907/2006 and Regulation 878/2020 PALLADIUM ACETATE II



Revision n. VIII of 22.11.2022 Replaces revision VII of 16.12.2021

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<ul> <li>Need to</li> </ul>	see a doct	or immediately	YES

Possibility of delayed effects following exposure

• Move the exposed individual from the place of exposure to the open

air

• Remove the clothing and shoes of the exposed individual YES

• How to handle contaminated clothing Use gloves

• For those providing first aid, wear PPE

YES

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

Irritation and burning to eyes and skin

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

Consult a doctor immediately

### 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

Suitable extinguishing media Suitable extinguishing media: CO2, powder or water spray.

Extinguish large fires with water spray or alcohol-resistant

foam.

Unsuitable extinguishing media No one in particular

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

In case of fire, toxic fumes may be produced: carbon monoxide.

### 5.3 Advice for firefighters

General Prevent the water used to extinguish the fire from flowing into the sewer,

informations groundwater or surface water.

Equipment Protective helmet with visor, fireproof clothing, fireproof gloves, an

overpressure mask with a facepiece that covers the entire face of the operator or self-contained breathing apparatus in the event of large

quantities of smoke.

### 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 immediately and keep upwind.

### **6.1.2.** For emergency responders

Wear:

Gloves for chemical risks compliant with EN420 EN374 Standards Complete clothing compliant with the UNI EN 13034: 2006 standard

Semi-face masks with ABEK2P3 R filters conforming to EN14387: 2004 + A1: 2008

### **6.2** Environmental precautions

Prevent infiltration into the sewer, groundwater and surface water

### 6.3 Methods and material for containment and cleaning up

### 6.3.1. Advice in order to contain a spill

Avoid formation of dust

### 6.3.2. Advice in order to clean-up a spill

Wash contamined area with water

### 6.3.3 Other information

None

## According to Regulation n. 1907/2006 and Regulation 878/2020 PALLADIUM ACETATE II



Revision n. VIII of 22.11.2022 Replaces revision VII of 16.12.2021

### 6.4 Reference to other sections

None

### 7. HANDLING AND STORAGE

### 7.1. Precautions for safe handling

# 7.1.1. Raccomentations in order to manipulate the substance or the mixture in a safe manner, such as containement measures and prevention of fire and aereosol and powders formation

Store in the original labeled packaging. Close immediately after use

### 7.1.2. General recommendation on work hygiene

Do not eat, drink and smoke in work areas. Wash your hands after use. Remove contaminated clothing and protective equipment before entering eating areas

### 7.2. Conditions Safe storage, including any incompatibilities

7.2.1. Risk management associated with explosive atmospheres, corrosive conditions, flammability hazards, incompatible substances or mixtures, evaporative conditions, potential ignition sources

Store in an area without drains or access to sewers and away from humidity and direct light.

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

Store in closed and labeled containers

### 7.2.3. Conditions for keeping substances / mixtures intact

Keep in a cool and dry place in tightly closed containers at temperatures not exceeding 25 ° C

# 7.2.4 Provisions relating to ventilation, specific design of storage rooms or containers, quantitative limits in storage conditions, compatibility of packaging Use approved ADR packaging

### 7.3. Specific end use(s)

Industrial use

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters (related to metallic Silver species)

For this substance, the occupational and biological exposure limit values corresponding to the relative Community limit values referred to in Directives 98/24 / EC and 2004/37 / EC have not been established.

### 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

Periodically check the range of the extractor hood.

### 8.2.2. Individual protection measures, such as personal protective equipment

**Eye/face protection** Splash goggles compliant with Directive 89/686 /

EEC and standard EN166: 2001

**Skin protection (hands)** Gloves for chemical risks compliant with EN420

**EN374 Standards** 

**Skin protection (body)**Complete clothing compliant with the UNI EN

13034: 2006 standard

**Respiratory protection** semifacial mask with P2 filters

Thermal hazards none

### 8.2.3. Environmental exposure controls

# According to Regulation n. 1907/2006 and Regulation 878/2020 PALLADIUM ACETATE II



Revision n. VIII of 22.11.2022 Replaces revision VII of 16.12.2021

Maintain suction in all environments using localized collection systems and ambient air exchange. Convey the aspirated volumes to an abatement system and then into the atmosphere. Do not use recirculating air suction systems. Avoid any spillage into the environment.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

	9.1 Inf	formation on	basic phy	sical and	chemical	properties
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Physical state Dust

Color Orange

Odor Undefined

Melting point / freezing point 450 ° C

Boiling point or initial boiling point and Not applicable

boiling range

Flammability

Lower and upper explosive limits

Flash point

Self-ignition temperature

Decomposition temperature

Not inflammable

Not inflammable

Not inflammable

pH Unavailable
Kinematic viscosity Not applicable

Solubility 922 mg / L at 20  $^{\circ}$  C and pH 3.5

Partition coefficient n-octanol / water -0.17 to 20 ° C

(logarithmic value)

Vapor pressure 0.002 Pa at 25 ° C

Density and / or relative density 2.35 g/cm<sup>3</sup>
Relative vapor density > 220 ° C

Characteristics of the particles <100 µm: 87.7%

### 9.2. Other information

None

### 10. STABILITY AND REACTIVITY

10.1 Reactivity

No relevant information

10.2 Chemical stability

The product is stable under normal working conditions

10.3 Possibility of hazardous reactions

No relevant information

10.4 Conditions to avoid

strong heating

10.5 Incompatible materials

Aluminum and iron

10.6 Hazardous decomposition products

carbon monoxide

11. TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Oral LD50> 5110 mg / kg (rat)

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Revision n. VIII of 22.11.2022 Replaces revision VII of 16.12.2021

		Skin corrosion / irritation	Based on available data, the
		Skii Corrosion / irritation	classification criteria are not met
		Sorious ava damaga/irritation	
		Serious eye damage/irritation	It can cause irreversible injuries
		Respiratory or skin sensitization	May cause skin allergy
		Germ cell mutagenicity	Based on available data, the
			classification criteria are not met
		Carcinogenicity	Based on available data, the
			classification criteria are not met
		Reproductive toxicity	Based on available data, the
			classification criteria are not met
		STOT – single exposure	Based on available data, the
			classification criteria are not met
		STOT – repeated exposure	Based on available data, the
		·	classification criteria are not met
	11.2	Information on other hazards	
		None	
12.		ECOLOGICAL INFORMATION	
	12.1	Toxicity	LC50 (4 days) 154 - 530 μg / L (fish)
			PNEC (freshwater) 45 ng / L
			PNEC (marine water): 4.5 ng / L
			NOEC (21 days) 14.3 - 102 μg / L
			(invertebrates)
			EC10 (21 days) 35.7 - 84.9 μg / L
			(invertebrates)
	12.2	Persistence and degradability	Data not available
	12.3 12.4	Bioaccumulative potential  Mobility in soil	Data not available  Data not available
	12.4	Results of PBT and vPvB assessment	Not applicable
	12.6	Endocrine disrupting properties	No known effects
	12.7	Other adverse effects	No known effects
13.	12.7	DISPOSAL CONSIDERATIONS	NO KIIOWII EITECLS
13.	13.1.	Waste treatment methods	
	13.1.	The substance and its packaging must be dis	sposed of as hazardous waste by
		authorized companies.	posed of as mazardous music sy
14.		TRANSPORT INFORMATION	
	14.1	UN number or ID number	UN3077
	14.2	UN proper shipping name	Dangerous material from the point of
			view of the environment n.o.s.
	14.3	Transport hazard class(es)	9
	14.4	Packing group	III
	14.5	Environmental hazards	Yes
	14.6	Special precautions for user	Approved packaging
	14.7		
	14./	Maritime transport in bulk according to IMO instruments	n.a.
15.		REGULATORY INFORMATION	
10.		ALGOLATORI INI ORIVIATION	

# According to Regulation n. 1907/2006 and Regulation 878/2020 PALLADIUM ACETATE II



Revision n. VIII of 22.11.2022 Replaces revision VII of 16.12.2021

<i>15.1</i>	Safety, health and environmental regulations/legislation specific	
	for the substance or mixture	<b>Applicability</b>
	Reg. (EC) 1907/2006 / EC Reach	YES
	Reg. (EC) 1272/2008 CLP and subsequent changes and additions	YES
	Reg. (CE) 2037/2000 "Substances that deplete the ozone layer"	NO
	Reg. (EC) 850/2004 "Persistent organic pollutants"	NO
	Reg. (EC) 689/2008 "export and import of dangerous chemicals"	NO
	Substance listed in Annex I of Dir. 2012/18 / EU so-called Seveso	YES
	Legislative Decree 81/2008 Consolidated Law on health and	YES
	safety at work	
	Directive 2014/103 / EU "Adr"	YES
	Reg. (CE) 1907/2006/CE Reach art. 59 – Candidate List of	NO
	Substances of Very High Concern (SVHC)	
	Reg. (CE) 1907/2006/CE Reach - Annex XIV - Authorisation List	NO
	Reg. (CE) 1907/2006/CE Reach - Annex XVII - Restriction List	Limited use
	https://echa.europa.eu/it/substances-restricted-under-reach	Item 75
		(check link)

### 15.2 Chemical safety assessment

A chemical safety assessment was not carried out

### 16. OTHER INFORMATION

Changes compared to the previous edition

Regulatory update.

### Acronim and abbreviation legend

ADR: Agreement concerning the International Carriage of Dangerous Goods by Road GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstract Service

### Main references and data sources

ECHA's data bank on registered substances and soon to be registered substances: <a href="http://echa.europa.eu/web/guest/information-on-chemicals/registered-substances">http://echa.europa.eu/web/guest/information-on-chemicals/registered-substances</a>

## Adequate training for workers in order to ensure the protection of human health and the environment

- Training on Chemical Risk pursuant to Legislative Decree 81/08 Title IX dangerous substances
- PPE training