

Safety data sheet
According to Regulation n. 1907/2006 and Regulation 830/2015
Pd Chloride in Salt



Revision n. III dd 01.21.2019
 Replaces revision n II dd 06.01.2015

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

1.1 Product Identifier

Commercial name Pd chloride (II)
 C.A.S. Registry Number 7647-10-1
 EINECS number 231-596-2
 Molecular weight 177.3 g/mol
 Chemical Formula PdCl₂

1.2 Pertinent use of the substance and recommended use

Addictive for electroplating baths

1.3 Informations about the furniture of the safety data sheet

Name FAGGI ENRICO S.P.A.
 Address Via Majorana, 101/103 50019 Sesto Fiorentino FI
 Telephone number 055311861
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 Competent person responsible for the safety data sheet lorenzo.magaldi@faggi.it
 Emergency telephone number Tel. 0557947819 Centro Antiveleni di Firenze

1.5 Registration number

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

2. HAZARDS IDENTIFICATION

2.1 Classification of the mixture in accordance with Regulation (CE) n. 1272/2008

Hazard classes	Category codes	Hazard statements
Metal corrosive	1	H290
Acute tox.	4	H302
Skin sens.	1	H317
Eye damage	1	H318
Aquatic acute	1	H400
Aquatic chronic	1	H410

**2.2 Label elements
 Pittogrammi**



**Warnings
 Hazard statements**

DANGER

H290 May be corrosive to metals
 H302 Harmful if swallowed
 H317 May cause an allergic skin reaction
 H318 Causes serious eye damage
 H410 Very toxic to aquatic life with long-lasting effects

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Safety Advice	P270	Do not eat, drink or smoke when using this product
	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.
	P310	Immediately call a POISON CENTER/doctor/
	P330	Rinse mouth
	P501	Dispose of contents/container in accordance with local/regional/national/international regulation
• Futher Informations Results of PBT e vPvB	None	
	PBT : not applicable	
	vPvB : not applicable	

3. **COMPOSITION/INFORMATION ON INGREDIENTS**

3.1

Substance

	Classification	
	Hazard classes Category codes	Hazard Statements
Palladium (II) chloride	Met. Corr.1	H290
CAS 7647-10-1	Acute Tox. 4	H302
EINECS 231-596-2	Skin Sens. 1	H317
	Eye Dam. 1	H318
	Aquatic Acute 1	H400
	Aquatic Chronic 1	H410

4. **FIRST-AID MEASURES**

4.1

Description of the first-aid measures

Inhalation	If the subject is unconsciousness bring patient into stable side position for transportation
Ingestion	Call a doctor for medical treatment
Skin contact	Take off immediately all contaminated clothing, and wash immediately with plenty of water and soap
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes after removing contact lenses, occasionally lifting the upper and lower eyelids. Consult an ophthalmologist

Recommendations:

- **Need for immediate medical attention** YES
- **Possibility of delayed effects subsequent the exposition** YES
- **Move the exposed individual from the** YES

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area to fresh air

- **Remove clothes and shoes from the individual** YES

Modality of manipulation of contaminated garments With gloves

For lenders of first aid, wear the DPI YES

4.2 Main symptoms and effects both acute and delayed

The contact may cause allergic reactions or dermatitis

4.3 Indication of the possible urgency to consult immediately a doctor or of special treatments

Symptoms of poisoning may occur even after several hours; therefore medical observation is suggested for at least 48 hours after the accident

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media CO₂, powder or water spray

Unsuitable extinguishing media None in particular

5.2 Special hazards arising from the substance or the mixture

Avoid breathing fumes

5.3 Advice for firefighters

General informations Avoid that the water used to extinguish the fire goes into sewage system, aquifers or to superficial waters

Equipment Normal garments for firefighting, as an air breathing apparatus (ref. standard EN 137) or fresh air hose breathing, protective clothing for welding (EN 469), flame resistant gloves (EN659) and fireman's boots (HOA29 or A30)

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Get away immediately from the contaminated area.

6.1.2. For emergency responders

Wear:

Chemical risks Gloves conform to the standards EN420 EN374

Complete clothing complying with the UNI EN 13034: 2006 regulation

Mask with K filters

6.2 Environmental precautions

Prevent product from going into sewers and water sources or soil. . In case of seepage into water or sewage system or in case of seepage into the ground inform responsible authorities

6.3 Methods and materials for containment and clean-up

6.3.1. Recommendations about the methods of containment of a spill

Contain the spill with appropriate absorbent material (sand, sawdust) and put in an airtight container

6.3.2. Recommendations about the methods of reclamation of a spill

Wash the contaminated area with plenty of water

6.3.3. Any other informations

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None

6.4 Reference to other sections

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7. HANDLING AND STORAGE

7.1. Precautions for safe handling

7.1.1. Recommendations that allow safe handling of the substance or mixture, such as containment and measures to prevent fine as well as aerosol and dust generation

Use under hood ventilation. Close the jars immediately after use. The use is permitted only to a trained and informed personnel

7.1.2. Advice on general occupational hygiene

Do not eat, drink or smoke in designated work areas. Wash hands after handling. To remove contaminated clothing and protective equipment before entering eating areas

7.2. Conditions for safe storage, including any incompatibilities

7.2.1. Risk management decisions arising from explosive atmospheres, corrosive conditions, flammability hazards, incompatible materials, evaporative conditions, potential ignition sources

Store in an area without drain or sewer access and protected from moisture

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

Store in closed and labeled containers

7.2.4. Conditions to maintain the integrity of the substance or mixture

Store in a cool dry place

7.2.5. Decisions about ventilation requirements, specific design for storage rooms or vessels, quantitative limits in storage conditions, compatibility of the packaging.

The containers used for storage must be approved according to ADR regulation and labeled

7.3. Specific end use

Professional use

8. EXPOSURE CONTROL/ INDIVIDUAL PROTECTION

8.1. Controller 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

Ventilation systems. Periodically check the flow rate of the exhaust hood.

8.2.2. Individual measures, such as personal protective equipment

Eye/face protection

Protective glasses complying with 89/686/CEE and EN166:2001 regulations

Skin protection (hands)

Protective gloves material complying

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Skin protection (body)	with EN420 and E374 regulations Complete clothing antacid complying with UNI EN 13034: 2006 type 6 regulation
Respiratory protection	half-mask with P2 filters
Thermal hazards	None

8.2.3. Environmental exposure controls

Keep suction all environments using capture systems localized. Conveying the withdrawn volumes to an abatement system and then into the atmosphere. Do not use vacuum systems to air recirculation.

9. PROPERTIES (PHYSICAL/CHEMICAL)

9.1 Informations about the main physical and chemical properties

Aspect	red brown solid
Odour	None
Odour threshold	Undefined
pH	Not applicable
Melting point/freezing point	500 °C
Initial boiling point and boiling range	680 °C
Flashpoint	Not flammable
Evaporation rate	Not applicable
Flammability solids/gases	Not flammable
Upper/lower flammability or explosive limits	Not flammable nor explosive
Vapour pressure	Not determined
Vapour density	Not applicable
Relative density	4 g/ml at 25 °C
Solubility/Solubilities	Insoluble in water
The log octanol/water partition Coefficient	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not applicable
Viscosity	Undefined
Explosive properties	Not explosive
Oxidising properties	Not oxidizing

9.2. Other informations (miscibility, solubility, fat solubility, conductivity, redox potential, radical formation potential and photocatalytic properties)

None

10. STABILITY AND REACTIVITY

10.1 Reactivity

It can be corrosive to some metals because of the presence of chloride

10.2 Chemical stability

The product is stable

10.3 Possibility of hazardous reactions

None

10.4 Conditions to avoid

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10.5	Incompatible materials Strong oxidizing agents
10.6	Hazardous decomposition products The product does not decompose
11.	TOXICOLOGICAL INFORMATION
11.1	Informations about toxicological effects (relatively to ammonia)
	Acute toxicity LD50 oral 2704 mg/kg rat
	Skin corrosion/irritation Irritating effects
	eye damage/irritation Risk of serious eye May cause damage.
	Skin sensitization or corrosion/irritation May cause an allergic reaction on skin
	Germ cell mutagenicity Not mutagenic
	Carcinogenicity Not carcinogenic
	Reproductive toxicity Not toxic for reproduction
	Specific target organ toxicity There are no available (STOT)-repeated exposure data
	Specific target organ toxicity There are no available (STOT)-repeated exposure data
	Aspiration hazard Intoxication
11.2	Specific target organ toxicity Eyes, skin
11.3	Symptoms related to the physical, chemical and toxicological characteristic Serious eye damage, sensitization by contact with skin
11.4.	Delayed, immediate and chronic effects from short and long term exposure Irritant effects to the skin and to the eyes. Serious eye damage. May cause allergic reactions
11.5.	Interactive effects There are no known interactive effects
11.6.	In the absence of specific data -
11.7.	Other informations None
12.	ECOLOGICAL INFORMATIONS (data relating to substance: ammonia)
	Toxicity chronic toxicity 96 h LC50 (for fish) ≤ 1 mg / l and / or EC50 to 48 hours (for crustaceans) ≤ 1 mg / l and / or 72 or 96 hr ErC50 (for algae and other aquatic plants) ≤ 1 mg / l
	Persistence and degradability There are no available informations

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13.	Bioaccumulation potential	There are no available informations
	Mobility in soil	There are no available informations
	Results of PBT e vPvB	There are no available informations
	Other adverse effects	There are no available informations
13.1.	DISPOSAL CONSIDERATIONS	
	Waste treatment methods	
	This product and its packaging must be disposed of in licensed facilities.	
14.	TRANSPORT INFORMATION	
	ONU number	1759
	Name	Solid, corrosive n.a.s. (Pd dichloride)
	Transport Hazard class	8
	Pack Group	III
	Environmental Hazards	YES
	Special precautions for user	Use plastic packaging
15.	REGULATORY INFORMATION	
	15.1	Applicability
	Legislation	
	<i>Reg. (CE) 1907/2006/CE Reach</i>	YES
	<i>Reg. (CE) 1272/2008 CLP and subsequent amendments and addenda</i>	YES
	<i>Reg. (CE) 2037/2000 "Substances that deplete the ozone layer"</i>	NO
	<i>Reg. (CE) 850/2004 "The persistent organic pollutants"</i>	NO
	<i>Reg. (CE) 689/2008 "The export and import of dangerous chemicals"</i>	NO
	<i>Substance listed in Annex I 2012/18/UE cd Seveso</i>	YES
	<i>D.lgs 81/2008 Uniform Occupational Health and Safety Code</i>	YES
	<i>DirettivE 2014/103/UE "Adr"</i>	YES
	15.2	
	Chemical Safety Assessment	
	A chemical safety assessment has not been carried out	
16.	OTHER INFORMATIONS	
	16.1	
	Changes as compared to the previous version	
	Modified section 1	
	16.2	
	Legend to abbreviations and acronyms	
	ADR: European Agreement on the international carriage of goods by road GHS: Globally Harmonised System of Classification and Labelling EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstract Service	
	16.3	
	Bibliographical references and data sources	
	ECHA substance data bank:	

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<http://echa.europa.eu/web/guest/information-on-chemicals/registered-substances>

Platform ESIS

<http://esis.jrc.ec.europa.eu>

16.4 Evaluating method adopted for mixtures classification

	Classification	Classification procedure
Metal Corrosive	1	Method of calculation
Eye damage	1	Method of calculation
Aquatic chronic	1	Method of calculation
Aquatic acute	1	Method of calculation
Acute Tox	4	Method of calculation
Skin Sensitive	1	Method of calculation

16.5. Advice on any training appropriate for workers to ensure protection of human health and the environment

- Training sessions on Chemical Risk pursuant to Legislative Decree 81/08 Title IX hazardous substances
- Training sessions on DPI

16.6. . Other informations

Not available