

Safety data sheet
According to Regulation n. 1907/2006 and Regulation 878/2020
BIS (ACETONITRILE)PALLADIUM CHLORIDE



Revision I – 09.01.2023

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


- 1.1 Product identifier**
 Chemical name Bis (acetonitrile) palladium (II) chloride
 Product code 344
 CAS number 14592-56-4
 EC number 238-637-3
 Molecular weight 259,4 g/mol
 Raw formula C₄H₆Cl₂N₂Pd
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**
 Recommended uses 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.
 Address 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 number** 111 - Medical helpline operating in England, in Scotland (NHS 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.

2. HAZARDS IDENTIFICATION

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

Hazard class	Category codes	Hazards indications
Acute Tox.	3	H301 Toxic if swallowed
Acute Tox.	3	H311 Toxic if on skin
Acute Tox.	3	H330 Toxic if inhaled

2.2 Label elements

Pictograms		
Signal word	DANGER	
Hazard statements	H301 H311 H330	Toxic if swallowed Toxic if on skin Fatal if inhaled
Precautionary advice	P270 P301+P310 P280	Do not eat, drink or smoke when using this product IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Wear protective gloves/protective

Safety data sheet
According to Regulation n. 1907/2006 and Regulation 878/2020
BIS (ACETONITRILE)PALLADIUM CHLORIDE



Revision I – 09.01.2023

P302+P352	clothing/eye protection/face protection.
P304 + P340	IF ON SKIN: Wash with plenty of water.
P361+P364	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Take off immediately all contaminated clothing and wash it before reuse.

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: Bis (acetonitrile) palladium (II) chloride

CAS number 14592-56-4
 CE number 238-637-3
 INDEX number Not available
 M factor Not applicable
 ATE (oral) 100 mg/kg bw
 ATE (dermal) 300 mg/kg bw
 ATE (dust) 0.5 mg/L

4. FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation	Take the person to a very well-ventilated area and consult a doctor immediately. If the person is unconscious, keep him stable on his side during transport. If not breathing, give artificial respiration.
Ingestion	Call a doctor immediately. Give water immediately (maximum of 2 glasses).
Contact with skin	Wash immediately with soap and 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.

Recommendations:

- | | |
|--|-------------|
| • Need to see a doctor immediately | YES |
| • Possibility of delayed effects following exposure | NO |
| • Move the exposed individual from the place of exposure to the open air | YES |
| • Remove the clothing and shoes of the exposed individual | YES |
| • How to handle contaminated clothing | With gloves |

Safety data sheet
According to Regulation n. 1907/2006 and Regulation 878/2020
BIS (ACETONITRILE)PALLADIUM CHLORIDE



Revision I – 09.01.2023

- For those who take first care, wear PPE YES

4.2 Most important symptoms and effects, both acute and delayed

No data available

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 CO₂, powder or water spray. Extinguish large fires with water spray or alcohol-resistant foam.

Unsuitable extinguishing media None

5.2 Special hazards arising from the substance or mixture

Avoid breathing fumes. If involved in a fire, the following may develop: carbon monoxide, hydrochloric acid, nitrogen oxides.

5.3 Advice for firefighters

Avoid breathing fumes. Prevent the water used to extinguish the fire from flowing into the sewer, groundwater or surface water.

Normal fire-fighting clothing, such as self-contained open-circuit compressed air breathing apparatus (EN137), flame retardant suit (EN469), flame retardant gloves (EN659) and firefighter boots (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 immediately and keep to windward.

6.1.2. For emergency responders

Wear: Chemical risk gloves 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. In case of penetration into the ground or infiltration of bodies of water, notify the competent authorities..

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 the contaminated area with water.

6.3.3 Other information

None.

6.4 Reference to other sections

None

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

7.1.1. Recommendations in order to manipulate the substance or the mixture in a safe manner, such as containment measures and prevention of fire and aerosol and powders formation

Keep containers tightly closed in a cool and dry place

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

Safety data sheet
According to Regulation n. 1907/2006 and Regulation 878/2020
BIS (ACETONITRILE)PALLADIUM CHLORIDE



Revision I – 09.01.2023

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

Do not store along with oxidizing agents

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

Keep away from humidity, air and direct light.

7.2.3. Conditions for keeping substances / mixtures intact

Store in closed and labeled containers. Close the containers immediately after use.

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

The storage rooms must be cool and dry. Store in an area without drains or access to sewers

7.3. Specific end use(s)

Industrial use

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

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

Use under a fume hood. Periodically check the range of the hood.

8.2.2. Individual protection measures, such as personal protective equipment

Eye/face protection Splash goggles compliant with Directive 89/686 / EEC and with standard EN166: 2001

Skin protection (hands) Protective gloves in latex or nitrile rubber, compliant with EU Directive 89/89 / EEC and the resulting standards (EN374). The breakthrough time of the gloves must be ≥ 480 min and the thickness 0.11 mm.

Skin protection (body) Complete clothing compliant with UNI EN 13034: 2006 type 6

Respiratory protection Mask with P2 filters

Thermal hazards None

8.2.3. Environmental exposure controls

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 Information on basic physical and chemical properties

Physical state	Solid
Color	Yellow
Odor	Odorless
Melting point / freezing point	Data not available

Safety data sheet
According to Regulation n. 1907/2006 and Regulation 878/2020
BIS (ACETONITRILE)PALLADIUM CHLORIDE



Revision I – 09.01.2023

	Boiling point or initial boiling point and boiling range	Not applicable
	Flammability	Not inflammable
	Lower and upper explosive limits	Not explosive
	Flash point	Not inflammable
	Self-ignition temperature	Not inflammable
	Decomposition temperature	Data not available
	pH	Not defined
	Cinematic viscosity	Not applicable
	Solubility	Insoluble
	Production coefficient n-octanol / water (logarithmic value)	Not applicable
	Vapor pressure	Not applicable
	Density and / or relative density	Data not available
	Relative vapor density	Not applicable
	Characteristics of the particles	Data not available
9.2.	Other information	
	None	
10.	STABILITY AND REACTIVITY	
10.1	Reactivity	
	The product has catalytic properties	
10.2	Chemical stability	
	The product is stable under normal conditions of use.	
10.3	Possibility of hazardous reactions	
	May react violently with strong oxidizing agents	
10.4	Conditions to avoid	
	Humidity	
10.5	Incompatible materials	
	Oxidizing agents, steel, aluminium	
10.6	Hazardous decomposition products	
	Carbon monoxide, hydrochloric acid, nitrogen oxides	
11.	TOXICOLOGICAL INFORMATION	
11.1	Information on hazard classes as defined in Regulation (EC) No 1272/2008	
	Acute toxicity	The product is toxic by ingestion, skin contact and inhalation
	Skin corrosion / irritation	Data not available
	Serious eye damage/irritation	Data not available
	Respiratory or skin sensitization	Data not available
	Germ cell mutagenicity	Data not available
	Carcinogenicity	Data not available
	Reproductive toxicity	Data not available
	STOT – single exposure	Data not available
	STOT – repeated exposure	Based on the available data, the classification criteria are not met
11.2	Information on other hazards	
	None	

Safety data sheet
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BIS (ACETONITRILE)PALLADIUM CHLORIDE



Revision I – 09.01.2023

12.	ECOLOGICAL INFORMATION	
12.1	Toxicity	Based on available data, the classification criteria are not met
12.2	Persistence and degradability	No information available
12.3	Bioaccumulative potential	No information available
12.4	Mobility in soil	No information available
12.5	Results of PBT and vPvB assessment	Not applicable
12.6	Endocrine disrupting properties	No known effects
12.7	Other adverse effects	None known
13.	DISPOSAL CONSIDERATIONS	
13.1.	Waste treatment methods	The substance and its packaging must be disposed of as hazardous waste by authorized companies.
14.	TRANSPORT INFORMATION	
14.1	UN number or ID number	UN2811
14.2	UN proper shipping name	Toxic, solid, organic n.o.s.
14.3	Transport hazard class(es)	6.1
14.4	Packing group	III
14.5	Environmental hazards	NO
14.6	Special precautions for user	Use approved packaging
14.7	Maritime transport in bulk according to IMO instruments	Not applicable
15.	REGULATORY INFORMATION	
15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture	Applicability
	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	NO
	Legislative Decree 81/2008 Consolidated Law on health and safety at work	YES
	Directive 2014/103 / EU "Adr"	NO
	Reg. (CE) 1907/2006/CE Reach art. 59 – Candidate List of Substances of Very High Concern (SVHC)	NO
	Reg. (CE) 1907/2006/CE Reach - Annex XIV – Authorisation List	NO
	Reg. (CE) 1907/2006/CE Reach - Annex XVII – Restriction List	NO
	https://echa.europa.eu/it/substances-restricted-under-reach	(check link)
15.2	Chemical safety assessment	
	A chemical safety assessment was not carried out	
16.	OTHER INFORMATION	
	Changes compared to the previous edition	
	First revision	
	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	

Safety data sheet
According to Regulation n. 1907/2006 and Regulation 878/2020
BIS (ACETONITRILE)PALLADIUM CHLORIDE



Revision I – 09.01.2023

CAS: Chemical Abstract Service

Main references and data sources

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

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

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