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



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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 $C_4H_6Cl_2N_2Pd$

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

Recommended uses Industrial use. Catalyst for synthesis.

Uses adviced against Non in particular.

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.

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	Toxic if swallowed
	H311	Toxic if on skin
	H330	Fatal if inhaled
Precautionary advice		
	P270	Do not eat, drink or smoke when using this product
	P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

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P280 Wear protective

gloves/protective

clothing/eye protection/face

protection.

P302+P352 IF ON SKIN: Wash with plenty

of water.

P304 + P340 IF INHALED: Remove victim

to fresh air and keep at rest in a position comfortable for

breathing.

P361+P364 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).

• Possibility of delayed effects following exposure

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

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

air YES

YES

NO

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Remove the clothing and shoes of the exposed individual

How to handle contaminated clothing
 With gloves

For those who take first care, wear PPE

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. 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

Keep containers tightly closed in a cool and dry place

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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

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

EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.

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 \geq 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

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		Color	Yellow
		Odor	Odorless
		Melting point / freezing point	Data not available
		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
		рН	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.	10.1	STABILITY AND REACTIVITY	
	10.1	Reactivity The product has catalytic properties	
	10.2	Chemical stability	
		The product is stable under normal condition	s of use.
	10.3	Possibility of hazardous reactions	
		May react violently with strong oxidizing age	nts
	10.4	Conditions to avoid	
	10.5	Humidity	
	10.5	Incompatible materials Oxidizing agents, steel, aluminium	
	10.6	Hazardous decomposition products	
		Carbon monoxide, hydrochloric acid, nitroger	n oxides
11.		TOXICOLOGICAL INFORMATION	
	11.1	Information on hazard classes as defined in	
		Acute toxicity	ATE (oral) 100 mg/kg bw
			ATE (dermal) 300 mg/kg bw
			ATE (dust) 0.5 mg/L
		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

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		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	
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 dis	sposed 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
		ADR/RID/ICAO-IATA	
		IMDG Marine contaminant	
	14.4	Packing group	III
	14.5	Environmental hazards	NO
	14.6	Special precautions for user	Transport must be carried out by vehicles
	14.0	Special precautions for user	authorized for the transport of dangerous
			goods according to the provisions of the
			current edition of the A.D.R. Agreement.
			_
			and the applicable national provisions.
			Transport must be carried out in the
			original packaging and, in any case, in
			packaging which is made of materials
			which cannot be attacked by the contents
			and which are not likely to generate
			dangerous reactions. Those responsible
			for loading and unloading dangerous
			goods must have received appropriate
			training on the risks presented by the
			preparation and on any procedures to be
			adopted in the event of emergency
			situations.
			3.644.0113.

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	14.7	Maritime transport in bulk according to Bulk transport is not fore. IMO instruments	seen
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	YES
		safety at work	
		Directive 2014/103 / EU "Adr"	NO
		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	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	

16

Changes compared to the previous edition

Changes to sections 1 - 11 - 14

Production site

The substance is produced in the Faggi Enrico S.p.A. plant. located in via dei Cattani 222, 50145 Florence

Acronim and abbreviation legend

ADR: Agreement concerning the International Carriage of Dangerous Goods by Road

Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

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