

Safety data sheet
According to Regulation n. 1907/2006 and Regulation 878/2020
Tris(dibenzylidenacetone)dipalladium(0)
Pd₂(DBA)₃



Revision n. V of 29.11.2022
 Replaces revision IV of 08.08.2022

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

1.1 Product identifier

Chemical name	Tris(dibenzylidenacetone)dipalladium(0)
Product code	184
CAS number	51364-51-3
EC number	610-654-4
Molecular weight	915.72 g/mol
Brut formula	C ₅₁ H ₄₂ O ₃ Pd ₂
Commercial name	PD TRIS (dibenzylideneacetone)

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.
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 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
Skin corr.	1	H317
Aquatic Chronic (Fattore M: 1)	2	H411

2.2 Label elements

Pictograms



Signal word

WARNING

Hazard statements

H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects

Precautionary advice

P261	Avoid breathing dust / fume / gas / mist / vapors / spray.
P273	Avoid release to the environment

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P280	Wear protective gloves / protective clothing / eye protection / face protection
P302+P352	In case of skin contact: wash with plenty of water and soap.
P333-P313	If skin irritation or rash occurs: seek medical attention
P501	Dispose of the product / container in accordance with national regulations

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: Tris(dibenzilidenacetone)dipalladio

CAS number: 51364-51-3
 EC number: 610-654-4
 N° REACH : Not available
 INDEX number: Not available
 ATE: Not applicable
 M factor acute Not applicable
 M factor cronic 1

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 for safety. If the person is unconscious, keep him stable on his side during transport.
Ingestion	Call a doctor immediately. Don't dare to drink or eat.
Contact with skin	Remove contaminated clothing immediately
Contact with eyes	Wash immediately with soap and water and rinse thoroughly.

Recommendations:

- **Need to see a doctor immediately** YES
- **Possibility of delayed effects following exposure** YES
- **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
- **For those who take first care, wear PPE** YES

4.2 Most important symptoms and effects, both acute and delayed

No known significant effects or criticalities

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4.3 Indication of any immediate medical attention and special treatment needed

If swallowed or inhaled, 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

If heated, it can generate ammonia vapors. In the event of a fire, toxic fumes of nitrogen oxides or sulfur oxides may be formed.

5.3 Advice for firefighters

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

General information

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)

Equipment

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Keep away from contaminated area 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

Mask with K-type filters compliant with EN14387: 2004 + A1: 2008

6.2 Environmental precautions

Prevent infiltration into the sewer, groundwater and surface water. In case of infiltration into bodies of water or sewers or in case of penetration into the ground, 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. Prevent infiltration into the sewer, groundwater and surface water

6.3.3 Other information

Disposal of contaminated material in accordance with point 13. Provide adequate ventilation.

6.4 Reference to other sections

None

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

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7.1.1. *Raccomentations 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

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*

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*

Use ADR approved 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 (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*

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

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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	Crystalline powder
Color	Pale purple
Odor	Odorless
Melting point / freezing point	152 - 155 ° C
Boiling point or initial boiling point and boiling range	Not defined as the product decomposes
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 applicable
Cinematic viscosity	Not applicable
Solubility	Insoluble in water
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

Reactions with strong oxidants

10.4 Conditions to avoid

Humidity

10.5 Incompatible materials

Oxidizing agents

10.6 Hazardous decomposition products

Carbon monoxide

11. TOXICOLOGICAL INFORMATION

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11.1	Information on hazard classes as defined in Regulation (EC) No 1272/2008	
	Acute toxicity	Based on available data, the classification criteria are not met
	Skin corrosion / irritation	Based on available data, the classification criteria are not met
	Serious eye damage/irritation	Based on available data, the classification criteria are not met
	Respiratory or skin sensitization	May cause allergic reactions
	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	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	No known effects
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	3077
14.2	UN proper shipping name	Environmentally hazardous substance, solid, 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	Use approved and labeled packaging
14.7	Maritime transport in bulk according to IMO instruments	Not applicable

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15.	REGULATORY INFORMATION	
	Safety, health and environmental regulations/legislation specific for the substance or mixture	Applicability
15.1	<p>Reg. (EC) 1907/2006 / EC Reach</p> <p>Reg. (EC) 1272/2008 CLP and subsequent changes and additions</p> <p>Reg. (CE) 2037/2000 "Substances that deplete the ozone layer"</p> <p>Reg. (EC) 850/2004 "Persistent organic pollutants"</p> <p>Reg. (EC) 689/2008 "export and import of dangerous chemicals"</p> <p>Substance listed in Annex I of Dir. 2012/18 / EU so-called Seveso</p> <p>Legislative Decree 81/2008 Consolidated Law on health and safety at work</p> <p>Directive 2014/103 / EU "Adr"</p> <p>Reg. (CE) 1907/2006/CE Reach art. 59 – Candidate List of Substances of Very High Concern (SVHC)</p> <p>Reg. (CE) 1907/2006/CE Reach - Annex XIV – Authorisation List</p> <p>Reg. (CE) 1907/2006/CE Reach - Annex XVII – Restriction List</p> <p>https://echa.europa.eu/it/substances-restricted-under-reach</p>	<p>YES</p> <p>YES</p> <p>NO</p> <p>NO</p> <p>NO</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>NO</p> <p>NO</p> <p>Limited use</p> <p>Item 75</p> <p>(check link)</p>
15.2	<p>Chemical safety assessment</p> <p>A chemical safety assessment was not carried out</p>	
16.	OTHER INFORMATION	
16.1	Changes compared to the previous edition	
	Regulatory update	
16.2	Acronim and abbreviation legend	
	<p>ADR : Agreement concerning the International Carriage of Dangerous Goods by Road</p> <p>GHS: Globally Harmonized System of Classification and Labelling of Chemicals</p> <p>EINECS: European Inventory of Existing Commercial Chemical Substances</p> <p>CAS: Chemical Abstract Service</p>	
16.3	Main references and data sources	
	<p>ECHA's data bank on registered substances and soon to be registered substances:</p> <p>http://echa.europa.eu/web/guest/information-on-chemicals/registered-substances</p>	
16.5	Adequate training for workers in order to ensure the protection of human health and the environment	
	<ul style="list-style-type: none"> • Chemical Risk Training pursuant to Legislative Decree 81/08 Title IX dangerous substances • PPE training 	