

Safety information sheet
PD ON GRANULAR COAL – PTA CATALYST



Revision 1 – 24.01.2025

1.	IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE COMPANY		
1.1	Product identifier		
	Commercial name	Product code	
	PTA CATALYST	328	
1.2	Relevant identified uses of the mixture and advised uses		
	Industrial use. Catalyst for synthesis No particular use advised against.		
1.3	Information on 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 registration number is not available for this product as it is a mixture		
2.	HAZARDS IDENTIFICATION		
2.1	Classification of the substance according to Regulation (EC) no. 1272/2008		
	Not dangerous		
2.2	Label elements		
	Not applicable		
2.3	Other hazards	Under certain conditions, the mixture of coal dust and air can give rise to an explosive atmosphere. Damp coal removes oxygen from the air, causing serious dangers for people in low oxygen environments.	
3.	COMPOSITION INFORMATION ON INGREDIENTS		
3.1	Mixture		
	Product identifier	Concentration %	Classification
			Dangerous class Category codes
	Active Carbon CAS 7440-44-0 N. Reach: 01-2119488894-16	99.2 ≤ C ≤ 99.8	None None
	Palladium CAS 7440-05-03 N. Reach 01-2120140175-66-XXXX	0.2 ≤ C ≤ 0.8	None None
4.	FIRST AID MEASURES		
4.1	Description of first aid measures		
	Inhalation: Remove from exposure and breathe fresh air. If breathing is difficult, call a doctor right away.		
	Ingestion: Wash mouth immediately and drink two glasses of water.		
	Skin contact: Remove contaminated clothing and shoes and wash immediately and abundantly with water for at least 15 minutes. Get medical attention if irritation occurs. Wash clothing before reuse. Thoroughly clean shoes before using them again.		

Safety information sheet
PD ON GRANULAR COAL – PTA CATALYST



Revision 1 – 24.01.2025

		Contact with eyes: Eliminate any contact lenses. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids well. Consult a physician if the problem persists.
	RECOMMENDATIONS:	
	• Need to see a doctor immediately	NO
	• Possibility of delayed effects following exposure	NO
	• Move the exposed individual from the place of exposure to open air	NO
	• Remove clothing and shoes of the exposed individual	YES
	• How to handle contaminated clothing	With gloves
	• For those providing first aid, wear PPE	YES
4.2	Most important symptoms and effects, both acute and delayed	
	Contact with eyes and skin and inhalation can cause irritation due to the abrasive action of the dust.	
4.3	Indication of any need to immediately consult a doctor and special treatments	
	No specific provisions are known.	
5.	FIRE FIGHTING MEASURES	
5.1	Fire fighting	
	Suitable extinguishing media	water spray, foam
	Unsuitable extinguishing media	dust
5.2	Special hazards arising from the substance or mixture	
	Avoid raising dust clouds. Under certain conditions, coal dust/air mixtures can produce an explosive atmosphere. There is a risk of dust explosion if the following conditions are met: - The substance exists in a very finely distributed form (dust, powder). - The substance is thrown into the air in sufficient quantities. - An ignition source is present (flame, spark, electrostatic discharge, etc.).	
5.3	Special recommendations for firefighters	
	Avoid raising dust clouds. 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 those who do not intervene directly	
		Move away in case of dust formation
	6.1.2. For those who intervene directly	
		In case of dry product, use respiratory protection devices (filter mask P2) and dust-proof gloves.
6.2	Environmental precautions	
	No specific provisions are required	
6.3	Methods and materials for containment and cleaning up	
	6.3.1. Recommendations on how to contain a spill	
		Collect the dispersed product and wash the residue with plenty of water.
	6.3.2. Recommendations on how to clean up a spill	
		The fire extinguishing water must not be discharged into the sewers. Dispose of the contaminated water used for extinguishing and the residue of the fire according to current regulations. To avoid dust formation, spray water before cleaning.
	6.3.3. Any other information	
		None

Safety information sheet
PD ON GRANULAR COAL – PTA CATALYST



Revision 1 – 24.01.2025

6.4	References to other sections
	None
7.	HANDLING AND STORAGE
7.1.	Precautions for Safe Handling
7.1.1.	<i>Recommendations that allow the substance or mixture to be handled safely, such as containment and prevention measures for fires and for the formation of aerosols and dusts</i>
	Avoid raising dust clouds especially in the presence of possible sources of ignition. Moist activated carbon removes oxygen from the air, causing serious dangers for people who are in environments with a low oxygen level. Appropriate work procedures must be followed for operations in low oxygen potential environments.
7.1.2.	<i>Generic recommendations on occupational hygiene</i>
	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 for safe storage, including any incompatibilities
7.2.1.	Management of risks associated with explosive atmospheres, corrosive conditions, flammability hazards, incompatible substances and mixtures, evaporation conditions, potential sources of ignition
	Store in closed original container
7.2.2.	Containment of the effects of weather conditions, pressure, temperature, sunlight, humidity and vibrations
	Store in closed original closed container.
7.2.3.	Conditions for keeping substances / mixtures intact
	Keep away from oxidizing substances, unsaturated oils, gases or vapors, direct heat sources, open flames, other ignition sources and direct sunlight.
7.2.4.	Provisions relating to ventilation, specific design of storage rooms or containers, quantitative limits in storage conditions, compatibility of packaging
	None in particular
7.3.	Specific end uses
	Industrial use. Catalyst for synthesis
8.	EXPOSURE CONTROL / PERSONAL PROTECTION
8.1.	Control parameters
	No occupational and biological exposure limits have been established for this mixture. The limit values established for the contained substance are listed below <u>Activated carbon</u> EU - Indicative Occupational Exposure Limit Value (IOEL TWA): 1 mg/m ³ (respirable dust) DNEL Workers Short-term systemic effects – inhalation: 1.84 mg/m ³ Long-term local effects – inhalation: 1.84 mg/m ³ General population Short-term systemic effects – inhalation: 0.9 mg/m ³ Long-term local effects – inhalation: 0.9 mg/m ³ PNEC Soil: 10 mg/kg dry weight of soil <u>Palladium</u>

Safety information sheet
PD ON GRANULAR COAL – PTA CATALYST



Revision 1 – 24.01.2025

		DNEL No hazard identified	
		PNEC No hazard identified	
8.2.		Exposure controls	
	8.2.1.	Appropriate technical controls	
		In the wet form, with low dustiness, no risk management measures are required	
	8.2.2.	Individual protection measures, such as personal protective equipment	
		Eye / face protection	Glasses with side protections compliant with Directive 89/686/EEC and standard EN166:2001
		Skin protection (hands)	Gloves of any type
		Skin (body) protection	Work clothing
		Respiratory protection	In the wet form, with low dustiness, no risk management measures are required.
		Thermal hazards	None
	8.2.3.	Environmental exposure controls	
		Emissions from manufacturing processes, including those from ventilation equipment, should be controlled for compliance with environmental protection legislation.	
9.		PHYSICAL AND CHEMICAL PROPERTIES	
	9.1	Information on basic physical and chemical properties	
		Appearance	Black wet powder
		Smell	Odorless
		Odor threshold	Not applicable
		pH	6-7 at 50 g / l 20 ° C (dough)
		Melting point / freezing point	Not applicable
		Initial boiling point and boiling range	Not applicable
		Flash point	Scientifically not justified studies
		Evaporation rate	Not applicable
		Flammability (solid, gas)	Flammable in the dry state
		Upper / lower flammability or explosive limits	Check section 5.2
		Vapor pressure	Not applicable
		Vapor density	Not applicable
		Relative density (in solid form)	2.31 g / cm ³
		The solubility (ies)	Insoluble
		Partition coefficient n-octanol / water	Not applicable
		Self-ignition temperature	Data not available
		Decomposition temperature	Not applicable
		Viscosity	Not applicable
		Explosive properties	Clouds or dust in confined spaces can give rise to explosive atmospheres
		Oxidizing properties	Not oxidizing
	9.2.	Other information	
		None	
10.		'STABILITY AND REACTIVITY'	
	10.1	Reactivity	
		Catalytic properties	

Safety information sheet
PD ON GRANULAR COAL – PTA CATALYST



Revision 1 – 24.01.2025

10.2	Chemical stability	
		This product does not exhibit reactivity under the specified conditions of storage, shipping and use.
10.3	Possibility of hazardous reactions	
		Flammable in the dry state
10.4	Conditions to avoid	
		Do not allow the material to dry completely. Do not store together with oxidizing material.
10.5	Incompatible materials	
		Keep away from strong oxidizing agents
10.6	Hazardous decomposition products	
		CO, CO ₂
11.	TOXICOLOGICAL INFORMATION	
11.1	Information on the toxicological effects of aluminum oxide	
	Acute toxicity	Oral: Acute toxicological classification method (OECD 423): LD50 >2000 mg/kg (rat) Inhalation: Based on available data, the classification criteria are not met Skin: Absorption highly unlikely. There are no known health effects
	Skin corrosion / irritation	Based on available data, the classification criteria are not met
	Serious eye damage / eye irritation	Based on available data, the classification criteria are not met
	Respiratory or skin sensitization	Based on available data, the classification criteria are not met
	Germ cell mutagenicity	Based on available data, the classification criteria are not met
	Carcinogenicity	Based on available data, the classification criteria are not met
	Toxic for reproduction	Based on available data, the classification criteria are not met
	Specific target organ toxicity (STOT) single exposure	Based on available data, the classification criteria are not met
	Specific target organ toxicity (STOT) repeated exposure	Based on available data, the classification criteria are not met
	Aspiration hazard	Based on available data, the classification criteria are not met
11.2	Other information	
		None
12.	ECOLOGICAL INFORMATION	
12.1	Toxicity	Non-toxic. The mixture is highly insoluble in water and unlikely to cross biological membranes.
12.2	Persistence and degradability	The substance is a refractory material and not subject to decomposition by any natural enzymatic or chemical process.
12.3	Bioaccumulation potential	The mixture is not bioaccumulative
12.4	Mobility in soil	Not pertinent data
12.5	Results of PBT and vPvB assessment	Not applicable

Safety information sheet
PD ON GRANULAR COAL – PTA CATALYST



Revision 1 – 24.01.2025

	12.7	Other adverse effects	
13.		DISPOSAL CONSIDERATIONS	
	13.1.	Waste treatment methods	
		Both the mixture and the packaging must be sent to plants authorized for the disposal of industrial waste	
14.		INFORMAZION ON TRASPORT	
		Not subject to ADR regulations. Steam-activated carbon is used for the preparation of this mixture and is therefore not classified as a dangerous good. Reference of special provision ADR 646.	
15.		REGULATORY INFORMATION	
	15.1	Health, safety and environmental legislation and regulations specific to the substance or mixture	Applicability
		Reg. (EC) 1907/2006 / EC Reach	YES
		Reg. (EC) 1272/2008 CLP and following 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
	15.2	Chemical safety assessment	
		A chemical safety assessment was not carried out	
16.		OTHER INFORMATION	
		Changes compared to previous edition	
		First revision	
		Key to abbreviations and acronyms	
		ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road GHS: Globally Harmonized System of Classification and Labeling of Substances EINECS: European Inventory of Chemical Substances CAS: Chemical Abstract Service STA: Acute Toxicity Estimate PBT: Persistent, Bioaccumulative and Toxic. vPvB: (very persistent and very bioaccumulative). Very persistent and very bioaccumulative LD: lethal dose PNEC: predicted no effect concentration DNEL: derived no effect level TLV (ceiling value): threshold limit value STEL: short-term exposure limit EU-OEL: European occupational exposure limit TWA: time-weighted average EC: effective concentration NOAEL: no observed adverse effect level LC: lethal concentration NOEC: no observed effect concentration	

Safety information sheet
PD ON GRANULAR COAL – PTA CATALYST



Revision 1 – 24.01.2025

		<p>LOEC: lowest observed effect concentration Bw: body weight Koc: organic carbon-water partition coefficient</p>
		Main bibliographic references and data sources
		<p>ECHA database on registered substances and those under registration: http://echa.europa.eu/web/guest/information-on-chemicals/registered-substances</p>
		Indication, for mixtures, of which methods of evaluation of the information have been used for the purposes of classification
		Classification: Non dangerous
		Classification procedure: Calculation method
		Adequate training for workers in order to ensure the protection of human health and the environment
		<p>Training on Chemical Risk pursuant to Legislative Decree 81/08 Title IX dangerous substances Training on PPE</p>