# According to Regulation n. 1907/2006 and Regulation 878/2020 PD-PB ZEOLITHE FAGZPDPB



Revision n. 5 - 15.10.2024

Replaces revision n. 4 – 03.07.2023

#### 1. IDENTIFICATION OF THE MIXURE AND COMPANY IDENTIFICATION

1.1 Identification of the substance

Denomination PD-PB ZEOLITHE FAGZPDPB

Product code 214

UFI code EDK0-80CW-E00Y-7MGT

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

Intended uses Industrial use. Catalyst for synthesis

Advised against uses None in particular

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

Phone number 055311861 Fax number 055311791

Contact name lorenzo.magaldi@faggi.it

**1.4** Emergency Phone number 111 - Medical helpline operating in England, in Scotland (NHS 24)

and in Wales (NHS Direct Wales)

**1.5 Registration number** Exempt under Article 6(1)

2. HAZARD IDENTIFICATION

2.1 Mixture classification according to Reg. (CE) n. 1272/2008 : Not dangerous

Classes of danger	Danger Class	<b>Hazard statements</b>
Repr.	1A	H360
Carc.	1A	H350
STOT RE	2	H373
Aquatic chronic	1	H410

## 2.2 Label elements:





Signal word	Danger (lead hydroxid	le)
Hazards statements	H360	May damage fertility or the unborn child
	H350	May cause cancer
	H373	May cause damage to organs through prolonged or repeated exposure
	H410	Very toxic to aquatic life with long lasting effects
Safety advices	P260	Avoid breathing dust/fumes/gas/mist/vapours/spray
	P281	Use personal protective equipment as required
	P314	Get Medical advice/attention if you feel unwell.

MSGA2070 Pag. 1 di 9

# SAFETY DATA SHEET According to Regulation n. 1907/2006 and Regulation 878/2020 PD-PB ZEOLITHE FAGZPDPB



Revision n. 5 - 15.10.2024

Replaces revision n. 4 – 03.07.2023

P391 Collect spillage.

P273 Avoid release to the environment.

P308+P313 IF exposed or concerned: Get medical

advice/attention.

**UFI code** EDK0-80CW-E00Y-7MGT

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

#### 3.2 Mixture

Product Identification	Concentration	Classifica	Classification	
	%	Hazard classes	Category codes	
Silicic acid, aluminum sodium salt CAS 1344-00-9 EC: 215-684-8 INDEX: not availble N° REACH: 01-2119429887-22-XXXX ATE: not applicable M factors: not applicable	92.5 ≤ C ≤ 99.4	None	None	
Palladium CAS 7440-05-3 EC 231-115-6 INDEX: not availble N° REACH: 01-2120140175-66-XXXX ATE: not applicable M factors: not applicable	0.5 ≤ C ≤ 5	None	None	
Lead Hydroxide CAS 19783-14-3 EC: 243-310-3 INDEX: 082-001-00-6 N° REACH: exempt for quantity ATE (oral): 500 mg/kg bw ATE (inhalatory): 3000 ppm M factor (chronic): 1 Specific concentration limits: C≥ 0.5 STOT RE 2	0.1 ≤ C ≤ 2.5	Acute Tox. 4 Acute Tox. 4 Repr. 1A Carc. 1A STOT RE 2 Aquatic acute Aquatic Chronic 1	H302 H332 H360 H350 H373 H400 H410	

#### 4. FIRST AID MEASURES

# 4.1 Descriptions of first aid measures

Inhalation If irritation occurs, leave contaminated room immediately. If breathing is difficult,

call a doctor immediately.

Ingestion If the amount ingested is huge: consult a doctor immediately. Do not induce

vomiting. Do not give water to an unconscious person.

Eye contact Remove contact lenses. Wash immediately with plenty of water for at least 15

minutes, opening her eyes. Consult a doctor if the problem persists.

MSGA2070 Pag. 2 di 9

# According to Regulation n. 1907/2006 and Regulation 878/2020 PD-PB ZEOLITHE FAGZPDPB



Revision n. 5 - 15.10.2024

Replaces revision n. 4 - 03.07.2023

Skin contact In case of contact remove contaminated clothing and shoes and wash skin

immediately with water for at least 15 minutes. Get medical attention if irritation

occurs. Wash clothing before reuse. Clean shoes throughly before reuse

#### **Recommendations:**

Need to consult immediately a doctor
 Possibility of delayed effects after exposure
 Move the exposed individual from exposure place to outdoor

YES

Togliere gli indumenti e le scarpe dell'individuo esposto YES

Contaminated clothes handling
 With gloves

For first aid responders, wear PPE

YES

# 4.2 Most important symptoms and effects, both acute and delayed

This product may cause cancer.

# 4.3 Indication of any immediate medical attention

In case of accidental exposure please consult your health care provider.

#### 5. FIRE PREVENTION

# 5.1 Fire Fighting

Suitable fire fighting Water spray, sand

equipment

Non suitable fire fighting Water jets, foam

equipment

# 5.2 Special hazards arising from the mixture

In the event of a fire, hazardous combustion products such as lead oxides may be formed.

# 5.3 Special recommendations for firesighters

Wear self-contained breathing apparatus and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and procedures in case of emergency

## 6.1.1. Non-emergency personnel

Keep unnecessary and unprotected personnel away from the area.

# 6.1.2. Emergency personnel

Keep upwind, isolate the exposure and wear appropriate protective equipment. Wear suitable clothing (see point 8).

# **6.2** Environmental precautions:

Avoid infiltration into the drainage system. In the event of infiltration into the water or sewers notify the competent authorities. In case of penetration into the ground notify the competent authorities.

## 6.3 Methods and materials for containment and cleaning up

#### 6.3.1. Recommendations on how to contain a spill

Recover the dispersed product and wash the residue with plenty of water

# 6.3.2. Recommendations on how to clean up a spill

Fire extinguishing water must not be discharged into the sewers. Dispose the contaminated water used for the fire extinguishing according to current regulations. To avoid dust formation, spray water before cleaning.

#### 6.3.3. Other informations:

None

# **6.4** Reference to other sections:

None

# 7. HANDIGLING AND STORAGE

MSGA2070 Pag. 3 di 9

# According to Regulation n. 1907/2006 and Regulation 878/2020 PD-PB ZEOLITHE FAGZPDPB



Revision n. 5 - 15.10.2024

Replaces revision n. 4 – 03.07.2023

## **7.1.** Precautions for safe handling:

7.1.1. Reccomendations for the safe handling of the substance or mixture, containment and prevention measures for fires and for the formation of aerosols and dusts

Avoid raising dust clouds especially in the presence of possible ignition sources. Avoid contact with eyes and skin. Avoid the suspension in the air of pulverized materials.

7.1.2. General recommendation on workplace hygiene

Do not eat, drink or smoke in work areas; Wash hands thoroughly after use and remove contaminated clothing and protective equipment before entering areas where you eat.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1. Managing the risks associated with explosive atmospheres, corrosive conditions, dangers of flammability, incompatible substances and mixtures, evaporation conditions, potential ignition sources

Store in original closed container. Store at room temperature.

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

Store in original closed container

7.2.3. Precautions for maintaining integrity of the substances

None

7.2.4. Provisions on ventilation, specific design for storage rooms or vessels, quantity limits under storage conditions, packaging compatibilities

None.

7.3. Specific uses

8.

Industrial use. Catalyst for synthesis

**EXPOSURE CONTROLS / PERSONAL PROTECTION** 

8.1. Control parameters

For this mixture, occupational and biological exposure limit values have not been established. Below are the limit values established for lead powder with a grain size < 1 mm as it is similar to the most dangerous compound present in the mixture

<u>Lead powder granulometry < 1 mm</u>

Italy - OELS: 0.15 mg/m<sup>3</sup>

EU – Biological Action Level 70 μg/dl

DNEL Adults: 40 μg/dl blood DNEL Pregnants: 10 μg/dl blood SUBSTANCE: LEAD HYDROXIDE

**DNEL** 

No data available up to now

**PNEC** 

No data available up to now

SUBSTANCE: SILICIC ACID, ALUMINIUM SODIUM SALT

DNEL

No hazard identified

**PNEC** 

No hazard identified **SUBSTANCE: PALLADIUM** 

DNEL

No hazard identified

**PNEC** 

No hazard identified

MSGA2070 Pag. 4 di 9

# According to Regulation n. 1907/2006 and Regulation 878/2020 PD-PB ZEOLITHE FAGZPDPB



Revision n. 5 - 15.10.2024

Replaces revision n. 4 – 03.07.2023

*8.2.3.* 

# **8.2.** Exposure controls:

# 8.2.1. Control parameters

Minimize exposure by respecting good industrial hygiene practices. Ensure adequate ventilation to minimize dust concentrations.

## 8.2.2. Individual protection measures, such as personal protective equipment

**Eye protection/ face** Safety glasses

protection

Skin protection (Hands) Chemical gloves according to EN 420 EN 374

Glove material: Natural latex

Material thickness: 0.5 mm

Penetration time: ≥ 60 min DIN EN374 method

Skin protection (Body) Working clothes

**Respiratory protection** In case of insufficient ventilation, use self-contained breathing

apparatus.

Thermal hazards None Environmental exposure controls

Emissions from the production processes, including those from ventilation should be

monitored for the purposes of compliance with environmental protection

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

## 9.1 Basic Information on physical and chemical properties

Physical state Powder

Colour Black

Odour Odourless

Melting point/freezing point 1710 °C

Boiling point or initial boiling point Not applicable

and boiling range

Flammability Not applicable

Lower and upper limits of Studies not scientifically justified

explosiveness

Flash point Not flammable
Auto-ignition temperature Not flammable
Decomposition temperature Not applicable

pH About 10 (water suspension 50 g/L)

Kinematic viscosity Not applicable

Solubility Almost insoluble in water

Partition coefficient n-octanol/water Not applicable

(log value)

Vapour pressure Not applicable Density and/or relative density  $2.02 \text{ g/cm}^3 \text{ at } 20 \,^{\circ}\text{C}$  Relative vapour density Not applicable Particle characteristics D50 9 - 10  $\mu$ m

9.2. Other information

None

10. STABILITY AND REACTIVITY

10.1 Reactivity

Catalitical properties

10.2 Chemical Stability

MSGA2070 Pag. 5 di 9

# According to Regulation n. 1907/2006 and Regulation 878/2020 PD-PB ZEOLITHE FAGZPDPB



Revision n. 5 - 15.10.2024

Replaces revision n. 4 – 03.07.2023

This product shows no reactivity under the specifies conditions of storage, shipping and use.

10.3 Possibility of hazardous reactions

None

10.4 Conditions to avoid

None

10.5 Incompatible materials

Oxidizing substances

10.6 Hazardous decomposition products

Lead oxides

11. TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

(Information relating to the substance lead)

Acute toxicity Substance: Lead hydroxide

ATE (oral): 500 mg/kg bw ATE (inhalation): 3000 ppm

Substance: Silicic acid, sodium aluminum salt

LD0 (oral):  $\geq$  5000 mg/kg bw LD0 (dermal):  $\geq$  5000 mg/kg bw LC50 (inhalation): > 85.6 mg/m3

Substance: Palladium

LD50 (oral): > 2000 mg/kg bw

Mixture: based on available data the classification criteria are not met

**Corrosion/irritation**Based on available data the classification criteria

are not met

**Eye irritations/damages**Based on available data the classification criteria

are not met

**Respiratory or skin sensitization**Based on available data the classification criteria

are not met

Mutagenicity Based on available data the classification criteria

are not met

Carcinogenicity: May cause cancer

**Reproductive toxicity** May damage fertility and unborn child

Specific target organ toxicity (STOT) -

single exposure are

Specific target organ toxicity (STOT) –

repeated exposure

Aspiration hazards

Based on available data the classification criteria

are not met

Central nervous system, kidney and blood

systen

Continued inhalation of the mixture may lead, over time, to toxic effects due to the lead

present.

11.2 Information on other hazards

None

12. Ecological informations

MSGA2070 Pag. **6** di **9** 

# SAFETY DATA SHEET According to Regulation n. 1907/2006 and Regulation 878/2020 PD-PB ZEOLITHE FAGZPDPB



Revision n. 5 – 15.10.2024 Replaces revision n. 4 – 03.07.2023

12.1 Toxicity Substance: Lead salts

For fish, 51 individual reliable acute toxicity data points for three different species were put forward for hazard assessment purposes. The acute toxicity values (96h-LC<sub>50</sub>) for *Pimephales promelas* varied between of 40.8  $\mu$ g dissolved Pb/L (at pH 5.67 and hardness of 15.9 mg/L as CaCO<sub>3</sub>) and 3597.9  $\mu$ g dissolved Pb/L (at pH 7.1 and hardness of 26 mg/L as CaCO<sub>3</sub>). The acute toxicity values (96h-LC<sub>50</sub>) for *Oncorhynchus mykiss* varied between of 127  $\mu$ g dissolved Pb/L (at pH 7.6 and hardness of 32 mg/L as CaCO<sub>3</sub>) and 1470.0  $\mu$ g dissolved Pb/L (at pH 8.8 and hardness of 290 mg/L as CaCO<sub>3</sub>). For the fish *Poecilia reticulata* a LC<sub>50</sub> value of 1990  $\mu$ g dissolved Pb/L was retreived.

The high quality chronic freshwater database contains Pb toxicity data for ten fish species (A. sinensis; A. transmontanus; C. carpio; I. punctatus; L. macrochirus; P. promelas; S. salar; O. mykiss; S. fontanilis; S. namaycush). In total 47 different high-quality freshwater NOEC/EC<sub>10</sub> for fish were compiled and varied between 17.8 µg dissolved Pb/L (Cyprinus carpio; endpoint: mortality) and 1558.6 µg dissolved Pb/L (Pimephales promelas; endpoint: dry weight).

The chronic toxicity database for marine fish contains toxicity data for four marine fish (*Cyprinodon variegatus*, *Atherinops affinis*, *Mugil cephalus* and *Terapon jarbua*). In total there were 7 different high-quality marine NOEC/EC10 compiled, which varied between 11.6 µg total Pb/L (*Mugil cephalus*) and 437 µg dissolved Pb/L (*Cyprinodon variegatus*).

## Mixture:

Based on the most restrictive value, an LC50 (96h)(fish) can be calculated as: 1.63 mg Pb/L. The mixture is not classified as toxic to the aquatic environment (acute toxicity) but is classified as toxic to the aquatic environment with long-lasting effects based on the calculation method.

		lasting effects based on the calculation method.
12.2	Persistence and degradability	The mixture is a refractory material and it is not subject to
		decomposition by any enzymatic or natural chemical
		process
12.3	Bioaccumulative potential	Not bioaccumulative
12.4	Mobility in soil	Not applicable
12.5	Results of PBT and vPvB	Not applicable
	evaluation	
12.6	Properties of interference	None known effects
	with the endocrine system	
12.7	Other adverse effects	None known effects

MSGA2070 Pag. **7** di **9** 

# According to Regulation n. 1907/2006 and Regulation 878/2020 PD-PB ZEOLITHE FAGZPDPB



Revision n. 5 – 15.10.2024

Replaces revision n. 4 – 03.07.2023

13.			DISPOSAL CONSIDERATIONS		
	13.1.		Methods of Waste Treatment:		
			Either the mixture or packages must be s	ent to approved facilities for	or the disposal of
			industrial waste		
14.			TRANSPORT INFORMATION		
	14.1		UN number or ID number	3077	
	14.2		Official UN shipping name		
			ADR/ADN/RID/IMDG/ICAO-IATA	Environmentally hazardor (lead hydroxide)	us substance, solid n.o.s
	14.3		Transport hazard class		
			ADR/ADN/RID/IMDG/ICAO-IATA: Class:	9	
			ADR/ADN/RID/IMDG/ICAO-IATA: Label:	9 + mark enviromental ha	zard
			ADR: Tunnel restriction code	(-)	
			IMDG - EmS:	F-A S-F	
	14.4		Packing group	III	
	14.5		ADR/ADN/RID/ICAO-IATA:	dangerous for the environ	ment
			IMDG: Marine Contaminant:	yes	
			Special precautions for user		
	14.6		Transport must be carried out by vehicles authorized for the transport of dangerous goods		
			according to the provisions of the curren	t edition of the A.D.R. Agre	ement. and the
applicable national provisions. Transport must be carried out in the origin			original packaging and,		
			in any case, in packaging which is made of	of materials which cannot b	e attacked by the
			contents, and which are not likely to gen	erate dangerous reactions.	Those responsible for
			loading and unloading dangerous goods	must have received approp	riate training on the
			risks presented by the preparation and o	n any procedures to be ado	pted in the event of
			emergency situations.		
			Maritime transport in bulk according to	IMO instruments	
	14.7		Bulk transport is not foreseen		
<b>15</b> .			REGULATORY INFORMATION		
		15.1	Legislative and regulatory provisions on	health, safety and	<b>Applicability</b>
			environment specific for the substance	or mixture	
			Reg. (CE) 1907/2006/CE Reach		YES
			Reg. (CE) 1272/2008 CLP e succ. and sub	sequent CLP	YES
			amendments and additions		
			Reg. (CE) 2037/2000 "substances that delayer"	eplete the ozone	NO
			Reg. (CE) 850/2004 "Persistent organic	oollutants"	NO
			Reg. (EC) 689/2008 "export and import		NO
			Substance listed in Annex I of Dir. 96/82		NO
			Directive, which was transposed into na	=	
			the Legislative Decree 334/99	,	
			Italian Legislative Decree 81/2008 (Cons	olidated Act on	YES
			protection of health and safety in the w		
			amended	, <i>H</i>	
			Directive 2014/103/UE "Adr"		YES
			Reg. (CE) 1907/2006/CE Reach art. 59 -	Candidate List of	NO

MSGA2070 Pag. **8** di **9** 

**Substances of Very High Concern (SVHC)** 

# According to Regulation n. 1907/2006 and Regulation 878/2020 PD-PB ZEOLITHE FAGZPDPB



(check link)

Revision n. 5 - 15.10.2024

Replaces revision n. 4 – 03.07.2023

Reg. (CE) 1907/2006/CE Reach - Annex XIV - Authorisation YES

List

Reg. (CE) 1907/2006/CE Reach - Annex XVII - Restriction List Limited use

https://echa.europa.eu/it/substances-restricted-under- Item 28 – 30 - 63 – 72 - 75

<u>react</u>

15.2 Chemical Safety Assessment

A chemical safety assessment has not been carried out.

16. Other information

Data compared to the previous version:

Changes to sections 1-2-3-8-11-12-14-16

Abbreviations and acronyms

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

Road

ADN: European Agreement concerning the International Carriage of Dangerous Goods by

**Inland Waterways** 

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 LOEC: lowest observed effect concentration

Bw: body weight

Koc: organic carbon-water partition coefficient Key literature references and sources of data

Safety data sheets of the suppliers of substances used in the formulation

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

**Evaluating methods used for the purpose of classification:** 

Classification Classification procedure

H360 Calculation method

H350 Calculation method

H373 Calculation method

H410 Calculation method

Workers training to ensure protection of human health and environment health

Chemical risk training ex D.lgs 81/08 Titolo IX dangerous substances

Training on PPE

MSGA2070 Pag. 9 di 9