

Revision III of 2021.09.24 Replace revision: II of 2019.01.21

#### **IDENTIFICATION OF THE SUBSTANCE/MIXURE AND THE COMPANY** 1. 1.1 **Product Identifier** Commercial name Product code CARBO FAST FAGC1PD10UR 188 CARBO FAST FAGC3PD10UR 178 1.2 Mixture Identified pertinent uses and suggested uses: Catalyst for synthesis. Industrial use 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 055311791 Fax number Competent person responsible for the safety data sheet lorenzo.magaldi@faggi.it 1.4 **Emergency Telephone Number:** Ph. 0557947819 Florence Poison center 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 mixture according to Regulation (EC) n. 1272/2008: Not dangerous 2.2 Label elements: not applicable 2.3

.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 Mixure

Product identifier	Concentration %	Clas Classes of danger	sification Category codes
Activated carbon CAS 7440-44-0 EC: 231-153-3 N. Reach 01-2119488894-16-XXXX	89.5 ≤ C ≤ 92	None	None
Palladium monoxide CAS 1314-08-5 EC: 215-218-3 N. Reach: exempt for quantity	8≤C≤ 10.5	Ox. Sol. 1	H271

#### 4. **FIRST AID MEASURES**

#### 4.1 Descrizione delle misure di primo soccorso

Inhalation	Remove from exposure and breathe fresh air. If breathing is difficult,
	call a doctor right away.
Ingestion	Wash your mouth and give 2 glasses of water to drink



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	Skin contact	t 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.	
	Eye contact	Eliminate any contact lenses. Wash immediatel for at least 15 minutes, opening the eyelids well the problem persists.	
	Recommendations:		
	<ul> <li>Need to see a doctor immediately</li> <li>Possibility of delayed effects following exposure</li> <li>Move the exposed individual from the place of exposure to the open air</li> </ul>		NO NO
			NO
			YES
	• Remove the clothing a	nd shoes of the exposed individual	With gloves
	• How to handle contan	ninated clothing	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. FIRE FIGHTING MEASURES		
5.1	Fire fighting media Suitable extinguishing Unsuitable extinguishi		
5.2	Under certain conditi	g from the substance or mixture ions, the mixture of coal dust and air can give	rise to an explosive
5.3	atmosphere. <b>Raccomandazioni speciali per gli addetti all'estinzione degli incendi</b> 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)		
6.1	6.1.1. For non-eme	MEASURES protective equipment and procedures in case of or rgency personnel in case of dust formation.	emergency
	6.1.2. For emergene	cy responders y product, use respiratory protection devices (filte	er mask P2) and dust-
6.2	Environmental precau		
6.3	No specific precaution	s are required Is for containment and cleaning up	
0.3	wicthous and materia	is for containing in cleaning up	

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#### 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

#### 6.4 Reference to other sections:

## 7. HANDLING AND STORAGE

## 7.1 Precautions for Safe Handling

7.1.1. 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

Avoid raising dust clouds especially in the presence of possible sources of ignition. Wet 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. Generic recommendations on occupational 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.
   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

Conservare nel contenitore originale chiuso.

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

Store in closed original container.

## **7.2.4.** 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.

- **7.2.5.** 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

## **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 Activated carbon Germany: limit value for air - alveolar fraction: 1.5 mg / m3 (long-term) Germany: limit value for air - respirable fraction: 4 mg / m3 (long-term)

8.

7.2



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MSGA2031

	8.2		Long-term temporary inhalatic m3Professional workers: 3 mg / r Consumers: 0.5 mg / m3 <b>Exposure controls</b>	on DNEL (repeated): Industrial workers: 3 mg / m3
	0.2	8.2.1.	Appropriate technical controls	
		012.12.		ess, no risk management measures are required
		8.2.2.		such as personal protective equipment
		0	Eye / face protection Glasses	Eye / face protection Glasses
			Skin (hand) protection Gloves	Skin (hand) protection Gloves
			Skin (body) protection Work	Skin (body) protection Work clothes
			clothes	
			Respiratory protection In wet	Respiratory protection In wet form, with low
			form, with low dustiness, no	dustiness, no risk management measures are
			risk management measures	required.
			are required.	
			Thermal hazards	None
		8.2.3.	Environmental exposure control	ls
			Emissions from manufacturing p	rocesses, including those from ventilation equipment,
			should be controlled for complia	nce with environmental protection legislation.
9.			PHYSICAL AND CHEMICAL PROP	ERTIES
	9.1		Information on basic physical an	nd chemical properties
			Physical state	Wet powder
			Color	Black
			Smell	Odorless
			Melting point / freezing point	Not applicable
			Boiling point or initial boiling po	int and Not applicable
			boiling range	
			Flammability	Flammable in the dry state
			Lower and upper explosive limit	•
			Flash point	Not applicable
			Self-ignition temperature	Flammable in the dry state: 460 ° C
			Decomposition temperature	Not applicable
			рН	Not applicable
			Kinematic viscosity	Not applicable
			Solubility	Insoluble in water
			Partition coefficient n-octanol /	water Not applicable
			(logarithmic value)	
			Vapor pressure	Not applicable
			Density and / or relative density	
			Relative vapor density	Not applicable
			Characteristics of the particles	Particle size $D_{10}$ : 6 $\mu$ m
				Particle size $D_{50}$ : 20 $\mu$ m
	0.7			Particle size $D_{90}$ : 80 $\mu$ m
	9.2			olubility, fat solubility, conductivity, redox potential,
10			radical formation potential and	pnotocatalytic properties)
10.	10.4		None	
	10.1		Reactivity	
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		Catalytic properties.	
	10.2	Chemical stability	
		This product does not exhibit reactivi	ty 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 com	pletely. Do not store together with oxidizing
		material.	
	10.5	Incompatible materials	
		Keep away from strong oxidizing ager	nts
	10.6	Hazardous decomposition products	
		CO, CO <sub>2</sub>	
11.		TOXICOLOGICAL INFORMATION	
	11.1	Information on the hazard classes de	fined in Regulation (EC) No. 1272/2008
		Acute toxicity	- Oral: acute toxicological
		-	classification method (OECD 423):
			LD50> 2000 mg / kg (rat)
			- Inhalation: standard acute
			classification method: LC50> 8.5
			mg / l
			- Skin: highly unlikely absorption.
			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
		Reproductive toxicity	Based on available data, the
			classification criteria are not met
		Tossicità specifica per gli organi bers	aglio Based on available data, the
		(STOT) esposizione singola	classification criteria are not met
		Tossicità specifica per gli organi bers	aglio Based on available data, the
		(STOT) esposizione ripetuta	classification criteria are not met
	11.2	Information on other hazards	
		None	
12.		ECOLOGICAL INFORMATION	
	12.1	Toxicity	Non toxic. The mixture is highly insoluble in
			water and is unlikely to cross biological

membranes.



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	12.2		Persistence and degradability	subje	ubstance is a refractory m ct to decomposition by ar	
	12.2		Discoursulation notontial		al chemical process hixture is not bioaccumula	
	12.3		Bioaccumulation potential			ative
	12.4		Mobility in soil		not relevant	
	12.5		Results of PBT and vPvB assessment	Not a	pplicable	
	12.6		Properties of interference with the	No kn	own effects	
			endocrine system			
	12.7		Other adverse effects	None		
13.			DISPOSAL CONSIDERATIONS			
	13.1		Waste treatment methods			
			Both the mixture and the packaging m	nust be	sent to plants authorized	d for the disposal
			of industrial waste			
14.			INFORMAZION ON TRASPORT			
	14.1		ONU Number or ID number		Not subject to ADR regul	ations. Steam-
					activated carbon is used	for the
					preparation of this mixtu	re and is
					therefore not classified a	
					good. Reference of speci	-
					646.	
	14.2		UN proper shipping name		Not applicable	
	14.3		Transport hazard class		Not applicable	
	14.4		Packing group		Not applicable	
	14.5		Environmental hazards		Not applicable	
	14.6		Special precautions for users		Not applicable	
	14.7		Bulk sea transport in accordance with		Not applicable	
			IMO acts	•		
15.			REGULATORY INFORMATION			
-0.		15.1	Health, safety and environme	ental le	gislation and	Applicability
			regulationsspecific to the su		•	
			Reg. (EC) 1907/2006 / EC Reach			YES
			Reg. (EC) 1272/2008 CLP and followir	ng chan	ges and additions	YES
			Reg. (CE) 2037/2000 "Substances tha			NO
			Reg. (EC) 850/2004 "Persistent organ	-	-	NO
			Reg. (EC) 689/2008 "export and impo	•		NO
			Substance listed in Annex I of Dir. 20		•	NO
			Legislative Decree 81/2008 Consolida			YES
			safety at work			0
			Directive 2014/103 / EU "Adr"			NO
		15.2	Chemical safety assessment			
			A chemical safety assessment was not	carrie	d out	
16.			OTHER INFORMATION			
			Changes compared to the previous e	dition		
			Regulatory adaptation			
			Key to abbreviations and acronyms			



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> ADR: European agreement concerning the international transport 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 **Main bibliographic references and data sources** ECHA database on registered substances and those under registration:

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

Indication, for mixtures, of which methods of evaluation of the information have been used for the purposes of classification Classification Classification procedure Non dangerous Test method Adequate training for workers to ensure the protection of human health and the environment

• Training on Chemical Risk pursuant to Legislative Decree 81/08 Title IX dangerous substances

• PPE training