Revision XI of 22.11.2022
Replaces revision n X of 11.05.2022

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

1.1 Product identifier

Commercial name	Silver carbonate
Product code	07
C.A.S Registry Number	534-16-7
EC number	208-590-03
Molecolar name	275,75
Brut Formula	Ag_2CO_3
Registration number	A REACH registration number is not available for this substance as the annual quantity produced or imported is less than one tonne.

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

Intended uses	Industrial use
Advised against uses	See 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)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture according to Regulation (EC) No. 1272/2008

Hazard classes	Category codes	Hazard statements
Eye dam.	1	H318
Aquatic acute	1	H400
Aquatic chronic	1	H410

2.2 Label elements

Pictograms

Signal words	**DANGER**	
Hazard statements	H318	Causes serious eye damage
	H410	Very toxic to aquatic life with long lasting effects
Precautionary statements	P273	Avoid release to the environment
	P391	Collect spillage
	P501	Dispose of the product / container in accordance with

local / regional / national / international 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 Substances

CAS Number 534-16-7
EC Number 208-590-03
INDEX Number Not available
ATE: not applicable
M Factor Acute Toxicity: 1000
M Factor Chronic Toxicity: 100

4. FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation	Bring to a well ventilated area, in case of problems consult a doctor.
Ingestion	Give a glass of water to drink. Contact a doctor immediately. Do not give anything if the person is not conscious. If pain persists, consult a doctor
Skin contact	Generally the product is not irritating to the skin.
Eye contact	Wash with running water for several minutes holding the eyelids wide open and consult your doctor. Contact a physician

Reccomendation :

Need to see a doctor immediately	**YES**
Possibility of delayed effects following exposure	**YES**
Move the exposed individual from the place of exposure to open air	**YES**
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

In case of inhalation or ingestion: sore throat, cough, burning sensation. Shortness of breath, difficulty in breathing. Lips and nails and blue skin. Vertigo, headache, nausea. Confusional state, convulsions, unconsciousness. Symptoms can be delayed. Abdominal pain, burning sensation. Shock or collapse.

In case of eye contact: Redness, pain. Severe deep burns. Loss of vision

4.3 Indication of any immediate medical attention and special treatment needed

Consult a physician immediately. It is of the utmost importance to clean the entire contaminated area of the body, including the scalp and nails.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media	CO_2, powder or water spray extinguishers. Extinguish large fires with water spray or alcohol-resistant foam.
Unsuitable extinguishing media	None

5.2 Special hazards arising from the substance or mixture

No other information are available

5.3 Advice for firefighters

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

None in particular

6.1.2. For emergency responders

Use gloves and glasses

6.2 Environmental precautions

Prevent the cleaning water from the spill from entering water drains, sewers, groundwater.

6.3 Methods and material for containment and cleaning up

6.3.1. Advice in order to contain a spill

None

6.3.2. Advice in order to clean-up a spill

Collect by mechanical means.

6.4 Reference to other sections

None

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

7.1.1. Recommendations 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

No special measures are required. Avoid the formation of dust.

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 for 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

No particular measures are required.

7.2.2. Control of weather conditions, ambient pressure, temperature, sunlight, humidity and vibration

Store in closed and labeled containers away from sunlight.

7.2.3. Conditions to maintain the integrity of the substance or mixture

Close the containers immediately after use.

7.2.4. Advice regarding the ventilation, specific design for storage rooms or vessels, quantity limits under storage conditions, packaging compatibilities

The storage rooms must be ventilated and closed and free of manholes / sewers

7.3. Specific end use(s)

Industrial use

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Silver carbonate MAK (Germany) 0.01 E mg / m3

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Periodically carry out personal environmental sampling and clinical examinations.

8.2.2. Individual protection measures, such as personal protective equipment

Eye/face protection	Splash goggles compliant with Directive 89/686 / EEC and standard EN166: 2001
Skin protection (hands)	Latex gloves compliant with EN455 EN374 standards
Skin protection (body)	Not necessary
Respiratory protection	Not necessary
Thermal hazards	None

8.2.3. Environmental exposure controls

Keep all environments where silver carbonate is used in suction, using localized collection systems and ambient air exchange. Convey the aspirated volumes to an abatement system and then into the atmosphere. Do not use air recirculation 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 solid
Colour	Yellow
Odour	Not applicable
Melting point/freezing point	Not applicable

Boiling point or initial boiling point and boiling range	Not applicable
Flammability	Not inflammable
Lower and upper explosion limit	Not applicable
Flash point	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	220 ° C
pH	Not applicable
Kinematic viscosity	Not applicable
Solubility	63 mg / L in water at 20 ° C
Partition coefficient n-octanol/water (log value)	Not applicable
Vapour pressure	Not applicable
Density and/or relative density	6.08 g / cm3
Relative vapour density	Not applicable
Particle characteristics	D10 = approx. 2.5 µm D50= approx-7.5 µm D90=approx 25.5 µm

9.2. Other information

None

10. STABILITY AND REACTIVITY

10.1 Reactivity

No relevant information

10.2 Chemical stability

The product is stable if used according to the norm.

10.3 Possibility of hazardous reactions

None

10.4 Conditions to avoid

No other information available

10.5 Incompatible materials

None

10.6 Hazardous decomposition products

Under normal conditions of use and storage, hazardous decomposition products should not be formed

11. TOXICOLOGICAL INFORMATION

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

Acute toxicity	Oral Rat : LD50 > 2000 mg/kg
Skin corrosion/irritation	Based on available data, the classification criteria are not met

Serious eye damage/irritation	Strong irritation with the risk of serious eye damage.
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
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**	PNEC fresh water: 0.04 µg / l PNEC sea water: 0.86 µg / l PNEC sediments: 483.13 mg / kg sediment dw M FACTOR (acute): 1000 M FACTOR (chronic): 100
12.2	**Persistence and degradability**	Not biodegradable
12.3	**Bioaccumulative potential**	Bioaccumulation after 30 days (Carp): 70 BCF
12.4	**Mobility in soil**	Log Kd 4.05 (sediments)
12.5	**Results of PBT and vPvB assessment**	Not PBT nor vPvB
12.6	**Endocrine disrupting properties**	No known effects
12.7	**Other adverse effects**	No known effects

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Classify as special hazardous waste. If possible, allocate both the substance and the packaging to plants authorized for the recovery of precious metal

14. TRANSPORT INFORMATION

14.1	**UN number or ID number**	**ONU 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**	n.a.

	14.7	**Maritime transport in bulk according to IMO instruments**	n.a.
15.		**REGULATORY INFORMATION**	
	15.1	**Safety, health and environmental regulations/legislation specific for the substance or mixture**	**Applicability**
		Reg. (CE) 1907/2006/CE 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 safety at work	YES
		Directive 2014/103 / EU "Adr"	YES
		Reg. (CE) 1907/2006/CE Reach art. 59 – Candidate List of Substances of Very High Concern (SVHC)	NO
		Reg. (CE) 1907/2006/CE Reach - Annex XIV – Authorisation List	NO
		Reg. (CE) 1907/2006/CE Reach - Annex XVII – Restriction List https://echa.europa.eu/it/substances-restricted-under-reach	Limited use Item 75 (check link)
	15.2	**Chemical safety assessment**	
		A chemical safety assessment was not carried out	

16. OTHER INFORMATION

Changes compared to the previous edition

Regulatory adaptation

Acronim and abbreviation legend

ADR : Agreement concerning the International Carriage of Dangerous Goods by Road
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: 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 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