

SAFETY DATA SHEET

Silver Sponge 99.99%

SECTION I: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product: Silver Catalyst sponge 99.99%	Company Name:	Gameron Petro Industry Complex
Product Code: AG-M-04-SPO	P. O. Box:	1516663137
CAS Number: 7440-22-4	Website:	www.gameron.ir
Relevant identified uses of the substance:	Telephone:	+98-021-88878254
Scientific research and development	Fax:	+98-021-88878152
	Emergency Phone:	+98-021-88785579
		+98-076-32560480

SECTION II: HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

The substance is not classified as hazardous to health or the environment according to the CLP regulation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC N/A

Information concerning particular hazards for human and environment	No data available
Hazards not otherwise classified	No data available

Label elements

Labelling according to Regulation (EC) No 1272/2008	N/A
Hazard pictograms	N/A
Signal word	N/A
Hazard statements	N/A
WHMIS classification	Not controlled

Classification system

HMIS ratings (scale 0-4) = 0
(Hazardous Materials Identification System)
HEALTH) = 0
FIRE REACTIVITY) = 0
Health (acute effects) = 0
Flammability = 0
Physical Hazard = 0

Other hazards

Results of PBT and vPvB assessment

PBT: N/A

vPvB: N/A

SECTION 3: Composition/information on ingredients

Substances

CAS No. / Substance Name: 7440-22-4 Silver

Identification number(s):

EC number: 231-131-3

SECTION 4: First aid measures

Description of first-aid measures

General advice

No special measures required.

If inhaled:

Seek medical treatment in case of complaints.

In case of skin contact

Generally the product does not irritate the skin.

In case of eye contact

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

If swallowed

If symptoms persist consult doctor.

Information for doctor

Most important symptoms and effects, both acute and delayed

No data available

Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents

Special powder for metal fires.

Do not use water.

For safety reasons unsuitable extinguishing agents

Water.

Special hazards arising from the substance or mixture

If this product is involved in a fire, the following can be released:

Silver oxides

Advice for firefighters

Protective equipment:

No special measures required.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Not required.

Environmental precautions

Do not allow material to be released to the environment without official permits.

Do not allow product to enter drains, sewage systems, or other water courses.

Do not allow material to penetrate the ground or soil.

Prevention of secondary hazards:

No special measures required.

Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

Handling

Precautions for safe handling

Keep container tightly sealed.

Store in cool, dry place in tightly closed containers.

Information about protection against explosions and fires:

No special measures required.

Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles:

No special requirements.

Information about storage in one common storage facility:

Do not store together with acids.

Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well-sealed containers.

Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

Additional information about design of technical systems:

No further data; see section 7.

Control parameters

Components with limit values that require monitoring at the workplace:

7440-22-4 Silver (100.0%)

PEL (USA) Long-term value: 0.01 mg/m³ metal and soluble compounds (as Ag)

REL (USA) Long-term value: 0.01 mg/m³

TLV (USA) Long-term value: 0.1 mg/m³ metal: dust and fume

EL (Canada) Short-term value: 0.03 mg/m³

Long-term value: 0.01 mg/m³ as Ag

EV (Canada) Long-term value: 0.1* 0.01** mg/m³

*metal;**water-soluble compounds (as silver)

Additional information: No data

Exposure controls

Personal protective equipment

Follow typical protective and hygienic practices for handling chemicals. Maintain an ergonomically appropriate working environment.

Breathing equipment:	Not required.
Protection of hands:	Not required.
Penetration time of glove material (in minutes) :	No data available
Eye protection:	Safety glasses
Body protection:	Protective work clothing.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

A)	Appearance	Solid in various forms
B)	Color	Silver-colored
C)	Odor	Characteristic
D)	Odor threshold	No data available
E)	pH	
F)	Melting point/Melting range	961.8 °C (1763 °F)
G)	Boiling point/Boiling range	2210 °C (4010 °F)
H)	Sublimation temperature / start	No data available
I)	Flammability (solid, gas)	No data available.
J)	Ignition temperature	No data available
K)	Decomposition temperature	No data available
L)	Auto ignition	No data available.
M)	Danger of explosion	No data available
N)	Explosion limits	
O)	Lower	No data available
P)	Upper	No data available
Q)	Vapor pressure	N/A
R)	Density at 20 °C (68 °F)	10.5 g/cm ³ (87.623 lbs/gal)
S)	Relative density	No data available
T)	Vapor density	N/A
U)	Evaporation rate	N/A
V)	Solubility in Water (H ₂ O)	No data available
W)	Partition coefficient (n-octanol/water)	No data available
X)	Viscosity	
Y)	Dynamic	N/A
Z)	Kinematic	N/A

Other information

No data available

SECTION 10: Stability and reactivity

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Thermal decomposition / conditions to be avoided:

Decomposition will not occur if used and stored according to specifications.

Possibility of hazardous reactions

No dangerous reactions known

Conditions to avoid

No data available

Incompatible materials:

Acids

Hazardous decomposition products:

Silver oxides

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity:

The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for this substance.

LD/LC50 values that are relevant for classification: No data

Skin corrosion/irritation

Powder: irritant effect

Eye irritation or corrosion:

Powder: irritant effect

Sensitization:

No sensitizing effects known.

Germ cell mutagenicity

No effects known.

Carcinogenicity:

EPA-D:

Not classifiable as to human carcinogenicity: inadequate human and animal evidence of carcinogenicity or no data are available.

The Registry of Toxic Effects of Chemical Substances (RTECS) contains tumorigenic and/or carcinogenic and/or neoplastic data for this substance.

Reproductive toxicity:

No data available

Specific target organ toxicity - single exposure

No effects known.

Specific target organ toxicity - repeated exposure

No effects known.

Aspiration hazard

No data available

Subacute to chronic toxicity

The Registry of Toxic Effects of Chemical Substances (RTECS) contains multiple dose toxicity data for this substance.

Additional Information

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known

SECTION 12: Ecological information

Toxicity

Aquatic toxicity:

No data available

Persistence and degradability

No data available

Bio accumulative potential

No data available

Mobility in soil

No data available

Additional ecological information

Do not allow material to be released to the environment without official permits.

Do not allow undiluted product or large quantities to reach groundwater, water courses, or sewage systems.

Avoid transfer into the environment.

Results of PBT and vPvB assessment

PBT: N/A

vPvB: N/A

Other adverse effects

No data available

SECTION 13: Disposal considerations

Waste treatment methods Recommendation

Consult official regulations to ensure proper disposal.

Uncleaned packaging's:

Recommendation:

Disposal must be made according to official regulations.

SECTION 14: Transport information

UN-Number	DOT, ADN, IMDG, IATA	N/A
UN proper shipping name	DOT, ADN, IMDG, IATA	N/A
Transport hazard class(es)	DOT, ADR, ADN, IMDG, IATA Class	N/A
Packing group	DOT, IMDG, IATA	N/A
Special precautions for user		N/A
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code		N/A
Transport/Additional information		DOT
Marine Pollutant (DOT)		No

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture National regulations

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.
 All components of this product are listed on the Canadian Domestic Substances List (DSL).

SARA Section 313 (specific toxic chemical listings)

7440-22-4 Silver
 California Proposition 65
 Prop 65 - Chemicals known to cause cancer
 Substance is not listed.
 Prop 65 - Developmental toxicity
 Substance is not listed.
 Prop 65 - Developmental toxicity, female
 Substance is not listed.
 Prop 65 - Developmental toxicity, male
 Substance is not listed.

Information about limitation of use:

For use only by technically qualified individuals.
 Other regulations, limitations and prohibitive regulations
 Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed.
 The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.
 Substance is not listed.
 Annex XIV of the REACH Regulations (requiring Authorisation for use)
 Substance is not listed.

SECTION 16: Other information