SAFETY DATA SHEET

Revision Date 12/07/2020

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product Name : Trap Sorbent

Product Number : 225-22-02
Brand : SKC Inc.

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

Identified Uses : Impinger Traps

1.3 Details of the supplier of the safety data sheet

Company : SKC, Inc.
863 Valley View Rd.
Eighty Four, PA 15330
USA

Telephone : 724-941-9701; 800-752-8472 (Mon - Fri, 8:30 a.m. - 5:00 p.m. EST)
Fax : 724-941-1369 (Mon-Fri, 8:30 a.m. - 5:00 p.m. EST)

1.4 Emergency telephone number

Emergency Phone # : CHEMTREC at 800-424-9300 (U.S./Canada); 703-741-5970 (Global)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

The substance is not classified according to the Globally Harmonized System (GHS).

2.2 Label elements

- **GHS label elements:** None
- **Hazard pictograms:** None
- **Signal word:** None
- **Hazard statements:** None
- **Classification system:**
  NFPA ratings (scale 0 - 4)

Health = 1
Fire = 1
Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**

Health = 1
Fire = 1
Reactivity = 0

2.3 Other hazards

The product is very adsorbent and may have a drying effect on skin and eyes.
When exceeding the OEL (Occupational Exposure Limit) a mechanical overburdening of the respiratory system is possible.

EMERGENCY OVERVIEW: Contact may cause eye irritation. Dust may be slightly irritating to eyes and respiratory tract.
CAUTION! Wet activated carbon removes oxygen from air causing a severe hazard to workers inside carbon vessels and enclosed or confined spaces. Before entering such an area, sampling and work procedures for low oxygen levels should be taken to ensure ample oxygen availability, observing all local, state, and federal regulations.
POTENTIAL HEALTH EFFECTS:
Effects and Hazards of Eye Contact: The physical nature of the product may produce eye irritation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Hazardous components

Component	CAS-No	% by Weight
Amorphous silicon dioxide, chemically prepared	7631-86-9	50
Carbon	7440-44-0	50

4. FIRST AID MEASURES

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin. Wash with water.
- **After eye contact:** Flush opened eye with large quantities of running water for at least 30 minutes. If symptoms occur, consult a doctor.
- **After swallowing:** Seek medical attention. Do not induce vomiting.
- **Most important symptoms and effects, both acute and delayed:** No further relevant information available
- **Indication of any immediate medical attention and special treatment needed:** No further relevant information available

5. FIREFIGHTING MEASURES

5.1 Suitable extinguishing agents: Flood with plenty of water.

5.2 Hazardous combustion products: Contact with strong oxidizers such as ozone, liquid oxygen, chlorine, permaugauate, etc., may result in fire.

5.3 Protective equipment: Wear personal protective equipment.

5.4 Additional information: Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:
Wear protective clothing.

6.2 Environmental precautions:
Keep contaminated washing water and dispose of appropriately.
Damp down dust with water spray.

6.3 Methods and material for containment and cleaning up:
Vacuuming or wet sweeping may be used to avoid dust dispersal.

6.4 Reference to other sections: No dangerous substances are released.
Dispose of in accordance with local, state, and federal regulations.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:
Prevent formation of dust.
Keep receptacles tightly sealed.
Provide suction extractors if dust is formed.
Use appropriate industrial vacuum cleaners or central vacuum systems for dust removal.
Take precautionary measures against static discharges.

7.2 Precautions for Handling and Storage: CAUTION! Wet activated carbon removes oxygen from air causing a severe hazard to workers inside carbon vessels and enclosed or confined spaces. Before entering such an area, sampling and work procedures for low oxygen levels should be taken to ensure ample oxygen availability, observing all local, state, and federal or national regulations.

7.3 Other precautions: Wash thoroughly after handling. Exercise caution in the storage and handling of all chemical substances.

7.4 Information about protection against explosions and fires:
When transferring this material into flammable solvents, use proper grounding to avoid static electric sparks.
The product is flammable.

Conditions for safe storage, including any incompatibilities:

Storage:

Requirements to be met by storerooms and receptacles: No special requirements

Information about storage in one common storage facility: Store away from foodstuffs.

Further information about storage conditions:
Keep receptacle tightly sealed.
Store in dry conditions.
This product is hygroscopic.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Additional information about design of technical systems: No further data; see item 7

8.2 Components with limit values that require monitoring at the workplace

7631-86-9 amorphous silicon dioxide, chemically prepared	
IDLH	Short-term value: 3000 mg/m³ IDLH: Immediately Dangerous to Life or Health
PEL	Long-term value: 80/%SiO2 mg/m³ OSHA TWA for amorphous silica
REL	Long-term value: 6 mg/m³ NIOSH TWA
TLV	Long-term value: 10* 5** mg/m³ ACGIH TWA *Total dust **Respirable fraction

7440-44-0 carbon	
OSHA PEL*	5 mgiM3 (Respirable)
ACGIH TLV*	10 mgiM3 (Total)
**PELs and TLVs are 8-hour TWAs unless otherwise noted.*	

Respiratory protection: A NIOSH-approved particulate filter respirator is recommended if excessive dust is generated.
Ventilation: Local Exhaust Ventilation: Recommended
Mechanical ventilation: Recommended
Protective gloves: Recommended
Eye protection: Safety glasses or goggles recommended
Other protective equipment: Not required

8.3 Additional information: Valid lists at time of creation were used as basis.

8.4 Exposure controls:

Personal protective equipment:

General protective and hygienic measures:
The usual precautionary measures for handling chemicals should be followed.

Protection of hands:
Protective gloves
Wear gloves for the protection against mechanical hazards.
Check protective gloves prior to each use for their proper condition.
Check the permeability prior to each new use of the glove.
Selection of the glove material on consideration of the penetration times, rates of diffusion, and the degradation
Use gloves of stable material (e.g., nitrile)

Material of gloves:
Butyl rubber, BR
Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.11 mm

For the permanent contact in work areas without heightened risk of injury (e.g., laboratory), gloves made of the following material are suitable:
Butyl rubber, BR
Nitrile rubber, NBR

For the permanent contact, gloves made of the following materials are suitable:
Butyl rubber, BR
Nitrile rubber, NBR

Not suitable are gloves made of the following materials: Strong fabric gloves

Eye protection:
Safety glasses

Body protection:
Protective work clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

General Information

a) Appearance	Form: powder Color: black
b) Odor	Odorless
c) Odor Threshold	Not available
d) pH-value at 68 F (20 C)	Not available
e) Melting point/Melting range	Not available
f) Boiling point/Boiling range	Not available
g) Flash point	Not available
h) Flammability (solid, gaseous)	Product is flammable
i) Ignition temperature	Not available
j) Decomposition temperature	Not available
k) Auto igniting	Product is not self-igniting.
l) Danger of explosion	Product does not present an explosion hazard.
m) Explosion limits	Lower: Not determined Upper: Not determined
n) Vapor pressure at 68 F (20 C)	Not available
o) Density at 68 F (20 C)	Not available
p) Bulk density at 68 F (20 C)	Not available
q) Vapor density	Not applicable
r) Evaporation rate	Not applicable
s) Solubility in/miscibility with water	Not available
t) Coefficient of water/oil distribution	Not available
u) Viscosity: Dynamic at 68 F (20 C)	Not available

9.2 Other information:
No further relevant information available.

10. STABILITY AND REACTIVITY

10.1 Stability: STABLE

10.2 Conditions to avoid: None

10.3 Incompatibility (materials to avoid): Strong oxidizers such as ozone, liquid oxygen, chlorine, permanganate, etc.

10.4 Hazardous decomposition products: Carbon monoxide may be generated in the event of a fire.

10.5 Polymerizing conditions to avoid: NONE

11. TOXICOLOGICAL INFORMATION

11.1 Information on the likely routes of exposure:
Delayed and immediate effects and chronic effects from short or long term exposure

11.2 Information on toxicological effects:

Acute toxicity

LD/LC50 values that are relevant for classification:		
7631-86-9 amorphous silicon dioxide, chemically prepared		
Oral	LD50	> 5000 mg/kg (rat) (OECD 401)
Dermal	LD50	> 6000 mg/kg (rabbit) (no guidance available)
Inhalative	LC0	> 140 to > 2000 mg/m³/4h (rat) (OCED 403) Maximum attainable concentration, mortality does not appear

Primary irritant effect

On the skin:		
7631-86-9 amorphous silicon dioxide, chemically prepared		
Irritation of skin	IS	0 (rabbit) (OECD 404)

On the eye:		
7631-86-9 amorphous silicon dioxide, chemically prepared		
Irritation of eyes	IS	0 (rabbit) (OECD 405)

Respiratory sensitization: No further relevant information available.

Skin sensitization: No further relevant information available.

Additional toxicological information:

Carcinogenic categories:
- ***IARC (International Agency for Research on Cancer)***
  7631-86-9 amorphous silicon dioxide, chemically prepared 3
- ***NTP (National Toxicology Program):***
  Substance is not listed.
- ***OSHA-Ca (Occupational Safety & Health Administration):***
  Substance is not listed.

Repeated dose toxicity

7631-86-9 amorphous silicon dioxide, chemically prepared		
Oral	NOAEL (90 d)	9000 mg/kg bw/day (rat) (OECD 408)
Inhalative	NOAEC (90 d)	1 mg/m³ (rat) (OECD 413)

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction):
- ***Carcinogenicity*** *No further relevant information available.*
- ***Mutagenicity***

7631-86-9 amorphous silicon dioxide, chemically prepared
AMES Test > 5 mg/plate (in-vitro) (OECD 471) negative, with and without metabolic activation ECHA 2012

- ***Reproductive toxicity***

7631-86-9 amorphous silicon dioxide, chemically prepared		
Oral	NOAEL (maternal toxicity) NOAEL (teratogenicity)	1350 mg/kg bw/day (rat) (OECD 414) 1350 mg/kg bw/day (rat) (OECD 414)

Specific target organ toxicity (single exposure): No further relevant information available

Specific target organ toxicity (repeated exposure): No further relevant information available

Aspiration hazard: No further relevant information available

7440-44-0 Carbon
EMERGENCY OVERVIEW: Black particulate solid, pellet, or powder. Contact may cause eye irritation. Dust may be slightly irritating to eyes and respiratory tract.
CAUTION! Wet activated carbon removes oxygen from air causing a severe hazard to workers inside carbon vessels and enclosed or confined spaces. Before entering such an area, sampling and work procedures for low oxygen levels should be taken to ensure ample oxygen availability, observing all local, state, and federal regulations.

POTENTIAL HEALTH EFFECTS:
Effects and Hazards of Eye Contact: The physical nature of the product may produce eye irritation.
Effects and Hazards of Skin Contact: The product is not a primary skin irritant. The primary skin irritation index (Rabbit) is 0.
Effects and Hazards of Inhalation (Breathing): The product is practically non-toxic through inhalation. The acute inhalation LC50 (Rat) is > 64.4 mg/1 (nominal concentration) for activated carbon.
Effects and Hazards of Ingestion (Swallowing): The product is non-toxic through ingestion. The acute oral LD50 (RAT) is > 10 g/kg.
Primary Routes of Entry: Inhalation, ingestion, skin contact, eye contact
Chronic Effects: The effects of long-term, low-level exposures to this product have not been determined. Safe handling of this material on a long-term basis should emphasize the avoidance of all effects from repetitive acute exposures.
CARCINOGENICITY: NTP: N/A IARCO: N/A OSHA REGULATED: NO

12. ECOLOGICAL INFORMATION

12.1 Toxicity:

Aquatic toxicity

Fish toxicity	
7631-86-9 amorphous silicon dioxide, chemically prepared	
LC0 (96 h) (static)	10000 mg/l (zebra fish) (OECD 203)

Water flea toxicity	
7631-86-9 amorphous silicon dioxide, chemically prepared	
EC50 (24 h)	> 1000 mg/l (Daphnia magna) (OECD 202)

Algae toxicity	
7631-86-9 amorphous silicon dioxide, chemically prepared	
EC50 (72 h)	> 10000 mg/l (Scenedesmus subspicatus) (OECD 201) comparable substance

12.2 Persistence and degradability:
No further relevant information available

12.3 Other information: Amorphous silica dioxide is chemically and biologically inert.
By the insolubility in water there is a separation at every filtration and sedimentation process.

12.4 Bioaccumulative potential: Does not accumulate in organisms

12.5 Mobility in soil: No further relevant information available

12.6 Results of PBT and vPvB assessment:
PBT: Not applicable
vPvB: Not applicable

12.7 Other adverse effects: No further relevant information available

13. DISPOSAL CONSIDERATIONS

13.1 Recommendation:
Disposal must be made according to official regulations.

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use, or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state, and local requirements.

14. TRANSPORT INFORMATION

14.1 UN-Number - *DOT, ADR, ADN, IMDG, IATA:* None

UN proper shipping name - *DOT, ADR, ADN, IMDG, IATA:* None

Transport hazard class(es) - *DOT, ADR, ADN, IMDG, IATA Class:* None

Packing group - *DOT, ADR, IMDG, IATA:* None

Environmental hazards: Not applicable

Special precautions for user: Not applicable

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable

Transport/Additional information: Not dangerous according to the above specifications
GRACE recommendation for air transport: Cargo aircraft only

15. REGULATORY INFORMATION

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

7740-44-0 Carbon
SARA TITLE III: N/A

TSCA: The ingredients of this product are on the TSCA Inventory List.

OSHA: Non-hazardous according to definitions of health hazard and physical hazard provided in the Hazard Communication Standard (29 CFR 1910.1200)

CANADA WHMIS CLASSIFICATION: Not Classified

DSL#: 6798

EEC: Council Directives relating to the classification, packaging, and labeling of dangerous substances and preparations

Risk (R) and Safety (S) phrases: May be irritating to eyes (R36).

7631-86-9 amorphous silicon dioxide, chemically prepared
SARA 302/304:
Substance is not listed.

SARA 313:
Substance is not listed.

TSCA (Toxic Substances Control Act):
Substance is listed.

Proposition 65:
Chemicals known to cause cancer:
Substance is not listed.
Chemicals known to cause reproductive toxicity for females:
Substance is not listed.

Chemicals known to cause reproductive toxicity for males:
Substance is not listed.

Chemicals known to cause developmental toxicity:
Substance is not listed.

Carcinogenic categories:
EPA (Environmental Protection Agency):
Substance is not listed.

TLV (Threshold Limit Value established by ACGIH):
Substance is not listed.

NIOSH-Ca (National Institute for Occupational Safety and Health):
Substance is not listed.

Canadian DSL:
7631-86-9 amorphous silicon dioxide, chemically prepared

Canadian NDSL:
Substance is not listed.

European EINECS:
Substance is listed.

Philippines Inventory of Chemicals and Chemical Substances PICCS:
Substance is listed.

Inventory of the Existing Chemical Substances manufactured or imported in China IECSC:
Substance is listed.

Australian Inventory of Chemical Substances AICS:
Substance is listed.

Existing and New Chemical Substance List ENCS:
7631-86-9 amorphous silicon dioxide, chemically prepared 1-548

Korean Existing Chemical Inventory KECI:
7631-86-9 amorphous silicon dioxide, chemically prepared KE-31032

GHS label elements: None

Hazard pictograms: None

Signal word: None

Hazard statements: None

16. OTHER INFORMATION

HMIS Rating

Health Hazard:	1
Fire Hazard:	1
Reactivity Hazard:	0

NFPA Rating

Health Hazard:	1
Fire Hazard:	1
Reactivity Hazard:	0

Disclaimer
For approved uses only. Not for drug, household, or other uses.

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. SKC Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

Latest Change(s): Updated SDS to bring into compliance with the GHS

Last Update: December 2020