SAFETY DATA SHEET

Revision Date 12/20/2023

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product Names : Carbograph™-1; Carbograph-2

Product Numbers : 12860, 12620, 12610
Brand : SKC Inc.

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

Identified Uses : Air Sampling

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

GHS08 Health hazard

Carc. 2 H351	Suspected of causing cancer.
Combustible Dust	May form combustible dust concentrations in air.

2.2 Label elements

- **GHS label elements:** These substances are classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**

GHS08

- **Signal word:** Warning
- **Hazard-determining components of labeling:** Carbon black
- **Hazard statements**
  Suspected of causing cancer.
  May form combustible dust concentrations in air.
- **Precautionary statements**
  Wear protective gloves/protective clothing/eye protection/face protection.
  Obtain special instructions before use.
  Do not handle until all safety precautions have been read and understood.
  IF exposed or concerned: Get medical advice/attention.
  Store locked up.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

• **Classification system:**
NFPA ratings (scale 0 - 4)
Health = 1
Fire = 1
Reactivity = 0

• **HMIS-ratings (scale 0 - 4)**
Health = *1
Fire = 1
Reactivity = 0

** Products presents long-term adverse effects.*

2.3 Hazard not otherwise classified
WARNING. Contains a substance known to the State of California to cause cancer.
WARNING: Product dust together with air may develop ignitable and explosive mixtures

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Chemical characterization: Substances

List of Dangerous Components			
1333-86-4	Carbon black	Carc. 2, H351; Combustible Dust	100%

4. FIRST AID MEASURES

4.1 Description of first aid measures

• **General information:** Take affected persons out into the fresh air.
• **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult physician if symptoms persist.
In case of unconsciousness place patient stably in the recovery position for transportation.
• **After skin contact:**
Wash with water.
If skin irritation occur, consult a doctor.
• **After eye contact:**
Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Then consult a doctor.
• **After swallowing:**
Rinse out mouth and then drink plenty of water.
Seek medical attention. Do not induce vomiting.

4.2 Information for doctor:
• **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: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 For safety reasons unsuitable extinguishing agents: Water with full jet

5.3 Hazardous combustion products: Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

5.4 Protective equipment: Do not inhale explosion gases or combustion gases.
Wear personal protective equipment.
Wear respiratory protective device.

5.5 Additional information:
Collect contaminated fire fighting water separately. It must not enter the sewage system.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
WARNING: Product dust together with air may develop ignitable and explosive mixtures

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:
Remove persons from danger area.
Wear respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
Prevent formation of dust.
WARNING: Product dust together with air may develop ignitable and explosive mixtures

6.2 Environmental precautions:
Do not allow to enter sewers/ surface or ground water.
Inform respective authorities in case of seepage into water course or sewage system.

6.3 Methods and material for containment and cleaning up:
Vacuuming or wet sweeping may be used to avoid dust dispersal.
Dispose of the collected material according to regulations.
Ensure adequate ventilation.

6.4 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.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Store in cool, dry place in tightly closed receptacles.
Prevent formation of dust.
Control equipment is recommended if dust is formed
Use appropriate industrial vacuum cleaners or central vacuum systems for dust removal.

7.2 Information about protection against explosions and fires:
The product is flammable.
Keep ignition sources away.
Protect from heat.
Protect against electrostatic charges.
WARNING: Product dust together with air may develop ignitable and explosive mixtures
When transferring this material, use proper grounding to avoid static electric sparks.

7.3 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.
Store away from oxidizing agents.

Further information about storage conditions:
Keep receptacle tightly sealed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Additional information about design of technical systems: No further data; see item7

8.2 Components with limit values that require monitoring at the workplace: 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:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Prevent contact with the eyes and skin.

Breathing equipment:
As appropriate for the employee exposure, use a NIOSH approved respirator and cartridge.
In case of brief exposure use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air. As appropriate for the employee exposure, use a NIOSH approved respirator and cartridge.

Protection of hands:
Protective gloves
Check protective gloves prior to each use for their proper condition.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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

Recommended thickness of the material: ≥ 0.11 mm
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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

Not suitable are gloves made of the following materials:
Strong fabric gloves
Leather 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 (50 g/l) at 20 C (68 F)	4-11
e) Change in condition	
Melting point/Melting range	Not available.
Boiling point/Boiling range	4200 °C (7592 °F) (OECD 103)
f) Conditions of flammability	Flash point: Not applicable.
g) Flammability (solid, gaseous)	Contact with combustible material may cause fire.
h) Ignition temperature	Not available.
i) Decomposition temperature	Not available.
j) Auto igniting	> 140 °C (transport)

k) Danger of explosion	Danger of dust explosion.
l) Explosion limits	Lower: 60 g/m³
	Upper: -
m) Vapor pressure	Not applicable.
n) Density at 20 °C (68 °F)	1.7-1.9 g/cm³ (14.187-15.85 lbs/gal)
o) Bulk density at 20 °C (68 °F)	20-550 kg/m³
p) Specific Gravity	Not available
q) Vapour density	Not applicable.
r) Evaporation rate	Not applicable.
s) Solubility in/Miscibility with Water	Insoluble.
t) Coefficient of water/oil distribution	Not available.
u) Viscosity	-

9.2 Other information:
No further relevant information available.

10. STABILITY AND REACTIVITY

10.1 Reactivity: No further relevant information available.

10.2 Chemical stability: No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions: No dangerous reactions known.

10.4 Conditions to avoid: In case of thermal decomposition caused by smouldering and incomplete combustion toxic fumes may be developed.

10.5 Incompatible materials: Protect from contamination.

10.6 Hazardous decomposition products: Sulfur dioxide

11. TOXICOLOGICAL INFORMATION

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

Acute toxicity

LD/LC50 values that are relevant for classification:		
1333-86-4 Carbon black		
Oral	LD50	>8000 mg/kg (rat) (OECD 401) ECHA 2012
Inhalative	LC50	(4 h) >4.6 mg/m³ (rat) ECHA 2012

Primary irritant effect

On the skin:		
1333-86-4 Carbon black		
Irritation of skin	IS	0 (rabbit) (OECD 404) not irritating ECHA 2012

On the eye:		
1333-86-4 Carbon black		
Irritation of eyes	IS	0 (rabbit) (OECD 405) not irritating ECHA 2012

Skin sensitization:		
1333-86-4 Carbon black		
Sensitization	SI	0 (guinea pig) (OECD 406) not sensitising ECHA 2012

Additional toxicological information:

Carcinogenic categories:
- ***IARC (International Agency for Research on Cancer)***
  1333-86-4 Carbon black 2B
- ***NTP (National Toxicology Program):***
  Substance is not listed.
- ***OSHA-Ca (Occupational Safety & Health Administration):***
  Substance is not listed.

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction):
Carc. 2
- ***Carcinogenicity*** *No further relevant information available.*
- ***Mutagenicity***

1333-86-4 Carbon black	
AMES Test	33.3-5000 mg/plate (Salmonella typhimurium) (OECD 471) ambiguous without metabolic activation negative with metabolic activation ECHA 2012

Reproductive toxicity: No further relevant information available.

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

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

12. ECOLOGICAL INFORMATION

12.1 Toxicity:

Aquatic toxicity: No further relevant information available.

Water flea toxicity	
1333-86-4 Carbon black	
LC0 (96h)	1000 mg/l (Brachydanio rerio) (OECD 203) ECHA 2012

Algae toxicity	
1333-86-4 Carbon black	
EC50 (72 h)	>10000 mg/l (Desmodesmus subspicatus) (OECD 201) ECHA 2012

Bacterial toxicity	
1333-86-4 Carbon black	
EC0 (3 h)	>800 mg/l (sludge) (DEV L3 - TTC Test) ECHA 2012

12.2 Persistence and degradability:
No further relevant information available

12.3 Behavior in environmental systems:

Bioaccumulative potential: Not worth-mentioning accumulating in organisms

Mobility in soil: No further relevant information available

12.4 Additional ecological information:

General notes: Do not allow product to reach ground water, water course or sewage system.

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

12.5 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/provincial and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state/provincial 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:
IATA
Recommends CARGO AIRCRAFT only.

15. REGULATORY INFORMATION

15.1 SARA

SARA 302/304
Substance is not listed.

SARA 313
Substance is not listed.

SARA 311/312
Delayed (Chronic) Health Hazard.

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

Proposition 65

Chemicals known to cause cancer:
Substance is 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 listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)
Substance is listed.

Canadian DSL
1333-86-4 Carbon black

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
1333-86-4 Carbon black

Korean Existing Chemical Inventory KECI
1333-86-4 Carbon black KE-04682

GHS label elements
The substance is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

GHS08

Signal word: Warning

Hazard-determining components of labeling: Carbon black

Hazard statements
Suspected of causing cancer.
May form combustible dust concentrations in air.

Precautionary statements
Wear protective gloves/protective clothing/eye protection/face protection.
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IF exposed or concerned: Get medical advice/attention.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

16. OTHER INFORMATION

Relevant phrases
H351 Suspected of causing cancer.

Abbreviations and acronyms:
ADR: *Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*
IMDG: *International Maritime Code for Dangerous Goods*
DOT: *US Department of Transportation*
IATA: *International Air Transport Association*
ACGIH: *American Conference of Governmental Industrial Hygienists*
EINECS: *European Inventory of Existing Commercial Chemical Substances*
ELINCS: *European List of Notified Chemical Substances*
CAS: *Chemical Abstracts Service (division of the American Chemical Society)*
NFPA: *National Fire Protection Association (USA)*

HMIS: *Hazardous Materials Identification System (USA)*
LC50: *Lethal concentration, 50 percent*
LD50: *Lethal dose, 50 percent*
PBT: *Persistent, Bioaccumulative and Toxic*
vPvB: *very Persistent and very Bioaccumulative*
Carc. 2: *Carcinogenicity, Hazard Category 2*

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 2023