



Revision: July 18, 2024

1 - Identification

Product identifier

· Trade name: Carbo Force F

· CAS Number: mixture

- Recommended use: Fuel, inorganic source of carbon, filler, thermal additive, re-carburizer, casting powders, drilling fluids, plastic additive, rubber additive, tint/pigment, chemically resistant additive, general inert filler / additive, friction modification.
- · Restrictions on use: For industrial use only, not for food, drug, or cosmetic applications.

Details of the supplier of the Safety Data Sheet

Manufacturer/Supplier:

Asbury Carbons, Inc. PO Box 144, 405 Old Main Street Asbury, NJ 08802 USA +1 908-537-2155

· Emergency telephone number:

ChemTel 800-255-3924 (North America)

+1 (813) 248-0585 (International)

2 - Hazards Identification

Classification of the substance or mixture

Combustible Dust - May form combustible dust concentrations in air

Label Elements

GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms: none required

· Signal word: Warning

 \cdot Hazard statements: May form combustible dust concentrations in air.

· Precautionary statements: none

Additional information:

Read the label and safety data sheet before use. Prevent dust accumulations to minimize explosion hazard. Keep away from all ignition sources including heat, sparks and flame.

Other hazards: May form explosible dust-air mixture if dispersed.

3 - Composition/Information on Ingredients

Chemical characterization: Substances

Description	CAS No.	Hazard Codes	Weight %
Green petroleum coke	64741-79-3	none	80-100%





Revision: July 18, 2024

4 - First Aid Measures

Description of first aid measures

· After inhalation:

Remove patient to particulate-free environment. Wear approved dust mask to avoid breathing dust. Seek medical attention if irritation persists.

- After skin contact:

Wash with mild soap and warm water. Calcined petroleum coke is non-staining to skin and is not a chemical irritant.

· After eye contact:

Rinse with tepid water until eyes are clear of particulates. Seek medical attention if irritation persists.

· After swallowing:

Get immediate medical attention. Do not induce vomiting unless directed by medical personnel. Green petroleum coke is not known to be toxic by ingestion. However, ingestion may cause digestive system blockage.

•Most important symptoms and effects, both acute and delayed: No relevant information available.

·Indication of any immediate medical attention and special treatment needed:

If patient exhibits shortness of breath, choking, powder inundated eyes or mouth; immediate medical attention may be required.

5 - Fire Fighting Measures

Extinguishing media

- · Suitable extinguishing agents: Dry chemical extinguisher, water, sand, limestone powder
- · For safety reasons unsuitable extinguishing agents: No relevant information available.
- · Special hazards arising from the substance or mixture

This substance will burn but is not easily ignited.

At temperatures above 1500 C, this material reacts with substances containing oxygen, including water and carbon dioxide. In case of intensely hot fire events, use sand to cover and isolate exposed product.

Advice for firefighters

• Protective equipment: Use self-contained air pack, gloves, safety goggles

6 – Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Wear approved dust mask, safety goggles, and conventional work gloves.

· Environmental precautions

This material is inert and insoluble and will not pose any soluble ion hazards to the environment. However, good housekeeping practices should be followed and spilled material should be cleaned up, and disposed of in an appropriate manner.

· Methods and material for containment and cleaning up

No special containment needed other than conventional vacuuming and waste containment. Avoid creating dust. This material is electrically conductive and any cleanup methods should avoid contacting this product with electrical circuitry.

· Reference to other sections Not needed

7 - Handling and Storage

· Precautions for safe handling:

Use conventional methods, but avoid dusting conditions. Keep powder from contacting eyes. This material can conduct electricity. Avoid contact between product and electrical circuitry.

Information about protection against explosions and fires:

Very finely divided calcined petroleum coke powder poses a very slight risk of dust explosion hazard: Dust class ST1, MIE greater that 10 J (very low hazard of spark ignition)





Revision: July 18, 2024

Conditions for safe storage, including any incompatibilities

Store all carbonaceous materials in a dry location. This product is incompatible with oxidizing agents.

8 - Exposure Controls/ Personal Protection

Control parameters

· Components with limit values that require monitoring at the workplace:

Component	CAS No	%	ACGIH TWA	Control Reference
Green petroleum	64741-79-3	100	3.0 mg/m ³ respirable particles	2014 ACGIH TLV Handbook: Low
coke			10.0 mg/m³ inhalable dust	toxicity / insoluble or poorly
				soluble - not otherwise specified

Exposure controls

- General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work.

· Engineering controls:

Use adequate dust collection to maintain dust levels below the control or recommended values.

- Breathing equipment: Approved dust mask, type N95 recommended.
- · Skin Protection: Conventional work gloves and clothing.
- Eye protection: Conventional safety glasses or goggles.
- · Environmental exposure controls:

This material is inert and insoluble. To the best of our knowledge, product will not present any environmental hazards. No special environmental exposure controls, other than standard practices for dust and spill control, are required

9 - Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance:

Form: Solid, granulate, powder

Color: Grey to black Odor: Odorless

pH-value: Not applicable.

Melting point/Melting range: Sublimates at 3652 deg °C

Boiling point/Boiling range: Not determined

Flash point: Not determined

Flammability (solid, gaseous): not flammable Auto-ignition temperature: Above 500 deg C Decomposition temperature: Oxidizes above 450 °C

% Volatile: 8-15% Danger of explosion:

When exposed to extremely high energy ignition sources very finely divided calcined petroleum coke powder can form explosive mixtures with air. Avoid contact between calcined petroleum coke dust clouds and high energy ignition sources. Classified as combustible but not flammable.

ST1=KST>150-200 bar m/s. Minimum Ignition Energy (MIE) greater than 500 milliJoules.

Explosion limits

Lower: Not determined
Upper: Not determined
Oxidizing properties: Non-oxidizing

Vapor pressure: Not determined Relative density: 1.7-2.0 Vapor density: Not applicable





Revision: July 18, 2024

Evaporation rate: Not applicable.

Solubility in / Miscibility with Water: Insoluble Partition coefficient (n-octanol/water): Not determined

10 - Stability and Reactivity

Reactivity: Inert under ambient conditions.

Chemical stability:

Stable under normal temperatures and pressures. Will not polymerize or self-react spontaneously.

Thermal decomposition / conditions to be avoided:

Avoid contact with oxidizing agents. Will begin to oxidize at temperatures above 450 deg C in oxygen atmosshere.

Possibility of hazardous reactions:

When exposed to extremely high energy ignition sources, very finely-divided green petroleum coke powder can form explosive mixtures with air. (Minimum Ignition Energy (MIE) greater than 500 milliJoules.) Avoid contact between green petroleum coke dust clouds and high energy ignition sources. Classified as combustible but not flammable.

Incompatible materials: Oxidizers

Hazardous decomposition products: Carbon monoxide, carbon dioxide, sulfur oxides (SOx)

11 - Toxicological Information

Information on toxicological effects

Acute toxicity: Based on available data, the classification criteria are not met.

LD/LC50 values that are relevant for classification: None.

Primary irritant effect:

- · On the skin: Based on available data, the classification criteria are not met.
- On the eye: Based on available data, the classification criteria are not met.
- · Sensitization: Based on available data, the classification criteria are not met.

IARC (International Agency for Research on Cancer): None of the ingredients are listed.

NTP (National Toxicology Program): None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration): None of the ingredients are listed.

Probable route(s) of exposure:

Ingestion, Inhalation, Eye contact, Skin contact

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.

Aspiration hazard: Based on available data, the classification criteria are not met.

12 - Ecological Information

Toxicity:

This material is inert and insoluble. To the best of our knowledge, this product does not present any significant environmental hazards. Carbon is the principal constituent of this product, and is not expected to pose a toxic hazard to aquatic organisms.

Aquatic toxicity:

Data not available. This material is not water soluble and does not present a soluble-ion hazard. Fine particles suspended in natural water bodies may be harmful to organisms sensitive to suspended solids.





Revision: July 18, 2024

Persistence and degradability:

This product is a reduced form of carbon and will not degrade further under normal conditions. This form of carbon is stable, unreactive in water under ambient conditions, and is insoluble.

Bioaccumulative potential: There is no evidence indicating that product is bioaccumulative.

Mobility in soil: Not expected - insoluble, inorganic substance. **Other adverse effects:** No relevant information available.

13 - Disposal Considerations

Waste treatment methods

Recommendation:

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Do not dispose in sewers or waterways.

Uncleaned packagings

Recommendation: Disposal must be made according to official regulations.

14 - Transport Information

UN-Number: DOT, ADR/RID/ADN, IMDG, IATA: Not regulated. UN proper shipping name: DOT, ADR/RID/ADN, IMDG, IATA: Not regulated. Transport hazard class(es): DOT, ADR/RID/ADN, IMDG, IATA: Not regulated. Packing group: DOT, ADR/RID/ADN, IMDG, IATA: Not regulated.

Environmental hazards: None known

Marine pollutant: No

Special precautions for user: Not applicable.

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

15 – Regulatory Information

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

United States (USA)

SARA Section 302 (extremely hazardous substances): None of the ingredients are listed. **SARA Section 313** (Specific toxic chemical listings): None of the ingredients are listed. **TSCA (Toxic Substances Control Act):** All components have the value ACTIVE or EXEMPT.

Proposition 65 (California)

Chemicals known to cause cancer: None of the ingredients are listed.

Chemicals known to cause developmental toxicity for females: None of the ingredients are listed. Chemicals known to cause developmental toxicity for males: None of the ingredients are listed.

Chemicals known to cause developmental toxicity: None of the ingredients are listed.

EPA (Environmental Protection Agency): None of the ingredients are listed.

IARC (International Agency for Research on Cancer): None of the ingredients are listed.

Canadian Domestic Substances List (DSL): All ingredients are listed or exempt.

16 - Other Information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Abbreviations and acronyms:





Revision: July 18, 2024

ADR: 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

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

OSHA: Occupational Safety & Health Administration

Carc. 1A: Carcinogenicity - Category 1A

STOT RE 1: Specific target organ toxicity (repeated exposure) - Category 1

Sources

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services

(ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org) Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN:

978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

For other local and industry-specific regulatory declarations, please visit https://asbury.com/resources/asbury-carbons-regulatory-statements/