

24-HOUR EMERGENCY TELEPHONE

SPRAGUE: 603-431-1000

CHEMTREC: 800-424-9300

SDS – SAFETY DATA SHEET

1. Identification

Product Identifier: PETROLEUM COKE Synonyms: None Chemical Family / Formula: Carbonaceous material resulting from high temperature treatment of heavy petroleum fractions (CAS 64741-79-3) Recommended Use of the Chemical and Restrictions On Use: Multi-use chemical / Fuel Manufacturer / Supplier: Sprague Operating Resources LLC 185 International Drive, Portsmouth, NH 03801 Emergency Phone Number: SPRAGUE: 603-431-1000; CHEMTREC: 800-424-9300

2. Hazard(s) Identification

Classification of the Substance or Mixture: Not classified

Risk Phrases: None

Label Elements:

Trade Name: PETROLEUM COKE

Signal Word: None

Pictogram: None

Hazard Statements: None

Precautionary Statements: None

3. Composition / Information on Ingredients

CAS Number: 64741-79-3 **EC Number:** 265-080-3

Ingredient	CAS Number	Percent	Hazardous	Chemical Characterization
Petroleum Coke	64741-79-3	100%	No	Substance

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First-aid Measures

Inhalation: Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention if symptoms appear.

Ingestion: DO NOT INDUCE VOMITING or give anything by mouth to an unconscious person. Get medical attention if symptoms appear.

Skin Contact: Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Eye Contact: Remove contact lenses if present and easy to do. Flush eyes immediately with large amounts of water, occasionally lifting upper and lower lids. If irritation develops, seek medical aid.

5. Fire-fighting Measures

Fire: Non-flammable

Explosion: Not considered to be an explosion hazard

Fire Extinguishing Media: Water fog, carbon dioxide, dry chemical

Special Information: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Use washdown and spread out method. Chemical fire fighting procedures should be used in consideration to hazards of other materials involved.

6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8.)

Environmental Precautions and Methods and Materials for Containment and Cleaning Up: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air.)

If properly trained, proceed with the following measures:

- 1. For small spills: Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- 2. For large spills: Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Observe local, state, and federal governmental regulations.

7. Handling and Storage

Precautions for Safe Handling and Conditions for Safe Storage, Including Any Incompatibilities: Store in accordance with local, state, and federal regulations.

8. Exposure Controls / Personal Protection

Airborne Exposure Limits:

For Petroleum Coke – limits based on coal tar pitch variables. OSHA PEL: TWA: 0.2 mg/m3 (benzene soluble fraction) ACGIH TLV: TWA: 0.2 mg/m3 (benzene soluble fraction) This material contains fused polycyclic hydrocarbons. The OSHA interpretation of coal tar pitch volatiles (Section 1910.1002) is as follows: "Coal tar pitch volatiles include the fused polycyclic hydrocarbons which volatize from the distillation residues of coal, petroleum, wood, and other organic matter."

Ventilation System: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved): MSHA/NIOSH approved dust respirator. Appropriate respirator depends upon type and magnitude of exposure.

Skin Protection: Work gloves should be worn when handling.

Eye Protection: Generally eye contact with solid material is unlikely. However, when handling in liquid form, chemical type goggles should be worn. Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Hygiene Measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

9. Physical and Chemical Properties

Appearance: Irregular, black chunks Odor: Slight hydrocarbon odor Odor Threshold: Not determined pH: No information found % Volatiles by volume @ 21C (70F): Not determined Melting Point: 6332F (3500C) Boiling Point / Boiling Range: Not determined Flash Point: Not determined Evaporation Rate (BuAC=1): Not determined Flammability: Not flammable Upper / Lower Flammability or Explosive Limits: Not determined Vapor Pressure (mm Hg): Not determined Vapor Density (Air=1): Less than 1 Relative Density: 0.8 g/mL Solubility: Below 0.1% Partition Coefficient: n-octanol / water: Not determined Auto-ignition Temperature: > 572fF (300C) Decomposition Temperature: Not determined Viscosity: Not determined

10. Stability and Reactivity

Reactivity and / or Chemical Stability: Stable.

Possibility of Hazardous Reactions and Conditions to Avoid: No specific data.

Incompatible Materials: No problems expected.

Hazardous Decomposition Products: Decomposition products may include the following materials: Sulphur oxides, metal oxides, Carbon Monoxide.

11. Toxicological Information

Emergency Overview: WARNING! MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION. Ash from furnaces where coke has been burned can contain high concentrations of metals such as nickel and vanadium, which, if inhaled in sufficient quantities, can be harmful. Incomplete burning can produce carbon monoxide and/or carbon dioxide and other harmful products.

Potential Health Effects:

Inhalation: No significant irritation expected other than possible mechanical irritation.

Ingestion: No significant health hazards expected if ingested.

Skin Contact: Can cause skin irritation on prolonged or repeated contact.

Eye Contact: No significant irritation expected other than possible mechanical irritation.

Chronic Exposure: No data available.

Carcinogenicity: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA, IARC, ACGIH, and NTP.

Reproductive Toxicity: No data available.

Specific Target Organ Toxicity - Single Exposure (Globally Harmonized System:) No data available.

Specific Target Organ Toxicity - Repeated Exposure (Globally Harmonized System:) No data available.

Aspiration Respiratory Organs Hazard: No data available.

Acute Toxicity: No data available.

12. Ecological Information

Ecotoxicity: No information available.

Persistence and Degradability: No information available.

Bioaccumulative Potential: No information available.

Mobility in Soil: No information available.

Other adverse effects: No information available.

13. Disposal Considerations

Product is suitable for burning in an enclosed, controlled burner for fuel valve or disposal by supervised incineration. Such burning may be limited pursuant to the Resource Conservation and Recovery Act. In addition, the product is suitable for processing by an approved recycling facility or can be disposed of at any government approved waste disposal facility. Use of these methods is subject to user compliance with applicable laws and regulations and consideration of product characteristics at time of disposal.

14. Transport Information

Land Transport ADR/RID and GGVS/GGVE (Cross Border / Domestic): Not regulated

Maritime Transport IMDG/GGVSea: Not regulated

Air Transport ICAO-TI and IATA-DGR: Not regulated

15. Regulatory Information

U.S. Federal Regulations:	United States inventory (TSCA 8b): All components are listed or exempted. SARA 302/304/311/312 extremely hazardous substances: No products listed. SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: No products were found. SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found. Clean Water Act (CWA) 307: No products were found. Clean Water Act (CWA) 311: No products were found. Clean Air Act (CAA) 112 accidental release prevention: No products were found. Clean Air Act (CAA) 112 regulated flammable substances: No products listed. Clean Air Act (CAA) 112 regulated toxic substances: No products were found.
State Regulations:	Connecticut Carcinogen Reporting: None of the components are listed. Connecticut Hazardous Material Survey: None of the components are listed. Florida substances: None of the components are listed. Illinois Chemical Safety Act: None of the components are listed. Illinois Toxic Substances Disclosure to Employee Act: None listed. Louisiana Reporting: None of the components are listed. Louisiana Spill: None of the components are listed. Massachusetts Spill: None of the components are listed. Massachusetts Substances: None of the components are listed. Michigan Critical Material: None of the components are listed. Minnesota Hazardous Substances: None of the components are listed. New Jersey RTK Hazardous Substances: None of the components are listed. New Jersey Spill: None of the components are listed. New York Acutely Hazardous Substances: None of the components are listed. New York Acutely Hazardous Substances: None of the components are listed. New York Toxic Chemical Release Reporting: None of the components are listed. Rhode Island Hazardous Substances: None of the components are listed.
California Prop. 65:	This product may contain detectable quantities of chemicals known to the State of California to cause cancer, birth defects or other reproductive harm, and which may be subject to the requirements of California Proposition 65. Nickel / Nickel Compounds Cancer 7440-02-0 Chromium, Hexavalent Compounds Cancer 18540-29-9 Lead Cancer 7439-92-1 Lead Developmental 7439-92-1 Polycyclic Aromatic Hydrocarbons including: Benzo(a)pyrene Cancer 50-32-8 Indeno(1,2,3-cd)pyrene Cancer 193-39-5
International Lists:	 Australia inventory (AICS): All components are listed or exempted. China inventory (IECSC): All components are listed or exempted. Japan inventory: Not determined. Korea inventory: All components are listed or exempted. New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted. Philippines inventory (PICCS): All components are listed or exempted. United States inventory (TSCA 8b): All components are listed or exempted. Europe inventory: All components are listed or exempted. Canada inventory: All components are listed or exempted.



Effective Date: 12/15/13 – Standardized for GHS and REACH *Previous Revisions:* 07/26/02, 10/12/00

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