Bognar and Company, Inc. SAFETY DATA SHEET

Section 1. Identification

GHS product identifier: Pitch Coke

Other means

Of identification: Calcined Pitch Coke

Product type: Solid

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

Identified uses:ManufacturingUses advised against:None known

Supplier: Bognar and Company, Inc.

733 Washington Rd. Pittsburgh, PA 15228 Phone: 412-344-9900 FAX: 412-344-9909 www.ejbognar.com

Emergency telephone

Number: 412-344-9900 (24 hours)

Section 2. Hazards Identification

OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard

(29 CFR 1910.1200).

Classification of the substance or mixture:

COMBUSTIBLE DUSTS

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 0%

GHS label elements

Hazard pictograms: None

Signal word: Warning

Hazard statements: May form combustible dust concentrations in air

Precautionary statements

Prevention: None

Response: None

Storage: None

Disposal: None

Supplemental Label

Elements:

Keep container tightly closed. Keep away from heat, sparks, open flames and hot

surfaces. No smoking. Prevent dust accumulation

Hazards not otherwise

Classified None known

Revision Date: May 29, 2015 Page 1 of 10

Section 3. Composition/Information on Ingredients

Substance or mixture: Substance

Other means of: Calcined Pitch Coke

identification

CAS number/other identifiers

CAS number: 65996-77-2 Product code: None

Ingredient name	CAS number	%
Pitch Coke	65996-77-2	100

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First Aid Measures

Description of necessary first aid measures

Eye contact: If in eyes, rinse cautiously for 15 minutes.

Remove contact lenses if present and easy to do.

Skin contact: If on skin or in hair, remove contaminated clothing.

Rinse with water

Inhalation:

If exposed, concerned, or feel unwell: Get medical advice/attention.

Immediately call a POISON CENTER or physician.

Ingestion If swallowed, rinse mouth.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Inhalation: Exposure to high concentrations of dust may cause irritation to the eyes, skin, and

mucous membranes of the upper respiratory tract.

Ingestion: May cause nausea or vomiting.

Skin contact: Skin contact may cause irritation and/or dermatitis.

Eye contact: May cause irritation to the eyes.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:

Pain Watering Redness

Inhalation: May cause irritation to the eyes, skin, and mucous membranes of the upper respiratory

tract.

Skin contact: Adverse symptoms may include the following:

Pain or irritation

Redness Dermatitis

Ingestion: Adverse symptoms may include the following:

Revision Date: May, 29, 2015 Page 2 of 10

Accidental Release Measures

Stomach pains Nausea Vomiting

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: Individuals with chronic respiratory disorders (asthma, bronchitis, emphysema, etc.) may

be adversely affected by any airborne particulate exposure.

Persons with pre-existing skin disorders may be more susceptible to dermatitis.

Specific treatments: Treat symptomatically.

Protection ofNo action shall be taken involving any personal risk or without suitable training **first-aiders:**If dust or fumes are present, the rescuer should wear an appropriate mask or self-

contained breathing apparatus.

Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Section 5. Firefighting Measures

Suitable Extinguishing

Media

Water Fog, CO2, Foam, Dry Chemical, or Sand.

Specific hazards arising

from the chemical: When burned, toxic smoke and vapor may be emitted.

Hazardous thermal

decomposition products Decomposition products may include the following materials:

- Carbon dioxide
- Carbon monoxide
- Sulfur oxides.
- Nitrogen oxides
- Emits toxic fumes when heated.

If small particles are generated, they may form a combustible dust concentration in the air.

Special protective actions

for firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if

there is a fire.

No action shall be taken involving any personal risk or without suitable training.

Direct water stream may scatter and spread flames.

Contain runoff from fire; do not allow into sewers or waterways.

Special protective

Section 6.

equipment for fire-fighters Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Personal precautions, protective equipment and emergency procedures

For non-emergency

Personnel No action shall be taken involving any personal risk or without suitable training.

Evacuate surrounding areas.

Keep unnecessary and unprotected personnel from entering.

Revision Date: May, 29, 2015 Page 3 of 10

For emergency

responders If specialized clothing is required to deal with the spillage, take note of any information

in Section 8 on suitable and unsuitable materials. See also the information in "For non-

emergency personnel".

Environmental

precautions Avoid dispersion of 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)

Methods and materials for containment and cleaning up

Small or Large spill Stop leak if without risk.

If dusts are present, clean up personnel should have proper eye and skin protection. Fine, dry material should be removed using vacuuming or wet sweeping to avoid dust

generation.

Avoid using compressed air.

Dispose of via a licensed waste disposal contractor.

Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and Storage

Protective measures for safe handling

Protective Measures: Put on appropriate personal protective equipment (see Section 8).

Do not get in eyes or on skin or clothing.

Do not breathe vapor or mist.

Do not ingest.

If during normal use the material presents a respiratory hazard, use only with adequate

ventilation or wear appropriate respirator.

Advice on general occupational hygiene

occupational hygiene Eating, drinking and smoking should be prohibited in areas where this material is

handled, stored and processed. Workers should wash hands and face before eating,

drinking and smoking.

Remove contaminated clothing and protective equipment before entering eating areas.

See also Section 8 for additional information on hygiene measures.

Conditions for safe storage,

including any

incompatibilities Where feasible, store locked up.

Section 8.

Exposure Controls/Personal Protection

Control parameters

Occupational exposure limits:

US Occupational Safety and Health Administration Permissible Exposure Limit (OSHA PEL):

Nuisance Dust 15 mg/m³ (total dust)

5 mg/m³ (respirable fraction)

(See 29 CFR 1910.1000 Table Z-3)

Revision Date: May, 29, 2015 Page 4 of 10

American Conference of Governmental and Industrial Hygienists Threshold Limit Value (ACGIH TLV®):

Particles Not Otherwise: 10 mg/m³ (inhalable fraction) Specified (PNOS) 3 mg/m³ (respirable fraction)

Note: TLV^{\otimes} and PEL values are for eight hour exposures, unless noted.

Appropriate

Engineering controls: If user operations generate dust use process enclosures, local exhaust ventilation or other

engineering controls to keep worker exposure to airborne contaminants below any

recommended or statutory limits and dust below explosive limits.

Environmental

Exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they

comply with the requirements of environmental protection legislation.

In some cases, fume scrubbers, filters or engineering modifications to the process

equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

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.

Eye/Face Protection: Safety eyewear complying with an approved standard should be used when a risk

assessment indicates this is necessary to avoid exposure.

Contact lenses should not be worn.

Skin Protection

Hand Protection: Wear protective gloves.

Body Protection: Personal protective equipment for the body should be selected based on the task being

performed and the risks involved and should be approved by a specialist before handling

this product

Other Skin Protection: Appropriate footwear and any additional skin protection measures should be selected

based on the task being performed and the risks involved and should be approved by a

specialist before handling this product.

Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator

regulations (29 CFR 1910.134) and, if necessary, use only a NIOSH - approved

respirator.

Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen.

Section 9. Physical and Chemical Properties

Appearance

Physical State Solid

ColorGray to blackOdorNo distinct odorOdor ThresholdNot applicable

Revision Date: May, 29, 2015 Page 5 of 10

pН Not applicable **Melting Point** Not applicable **Boiling Point** Not applicable **Flash Point** Not applicable **Evaporation Rate** Not available Flammability (solid, gas) May ignite Lower Explosive (flammable) Limit Not available **Upper Explosive (flammable) Limit** Not available Vapor Pressure Not available **Vapor Density** Not applicable **Specific Gravity** Not available **Solubility** Insoluble in water Partition coefficient: n-octanol/water Not available **Auto-ignition Temperature** Not available Not available **Decomposition Temperature SADT** Not available Viscosity Not available **Bulk Density** 1800 kg/m^3

Section 10. Stability and Reactivity

Reactivity: No specific test data is available related to reactivity available for this product or its

ingredients.

Chemical stability: The product is stable under normal conditions of handling and use.

Possibility of

Hazardous Reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Under normal conditions of storage and use, hazardous polymerization will not occur.

Conditions to Avoid: Avoid generation of dust as combustible dust explosion or fire may occur.

Incompatible

Materials: Reactive or incompatible with the following materials:

Strong Acids, Strong Bases.

Hazardous Decomposition

Products Oxides of carbon, sulfur, nitrogen oxides, sulfur oxides, and other toxic vapors may be

released at elevated temperatures.

Additional Information: Under standard test conditions (ISO 6184/1) to ascertain explosivity, the dust is not

explosive.

Section 11. Toxicological Information

Information on toxicological effects

Acute toxicity Not available

Irritation/Corrosion: Prolonged or repeated contact with dust may be abrasive and mildly irritating to the skin.

Sensitization Not expected to be a sensitizer.

Mutagenicity Not available

Revision Date: May, 29, 2015 Page 6 of 10

Carcinogenicity Not available

Reproductive toxicity Not available

Teratogenicity Not available

Specific target organ toxicity

(single exposure) Not available

Specific target organ toxicity

(repeated exposure) Not expected to cause organ effects from repeated exposure. Low concentrations of

airborne respiratory coke fibers may be present in calcined coke. The fibers are amorphous and generally irregularly shaped, rather than having the crystalline

appearance of carbon fibers. Coke fibers have not been studied, but recent laboratory animal studies have shown that carbon fibers are biopersistent in the lung. These studies also demonstrated a lower inflammatory response in the lung and less proliferation of the alveolar cells than fibers that are known to cause fibrosis and lung cancer. Repeated exposure of rats to 10 and 30 mg/m³ petroleum coke dust for two years resulted in signs of lung injury including fibrosis (scarring of lung tissue). Similar exposures in monkeys

caused no significant lung effects.

Aspiration hazard Not available

Information on the likely

routes of exposure Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact: Causes eye irritation.

Inhalation: May give off gas, vapor or dust that is very irritating or corrosive to the

respiratory system. Exposure to decomposition products may cause a health

hazard.

Skin contact: May cause skin irritation or dermatitis.

Ingestion: Harmful if swallowed. May cause vomiting.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following:

Pain Watering Redness

Inhalation: May cause irritation to the eyes, skin, and mucous membranes of the upper respiratory

tract.

Skin contact: Adverse symptoms may include the following:

Pain or irritation Redness

Dermatitis

Ingestion: Adverse symptoms may include the following:

Stomach pains Nausea Vomiting

Revision Date: May, 29, 2015 Page 7 of 10

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate

effects: May cause skin and eye irritation.

Potential delayed

effects: None known.

Long term exposure

Potential immediate effects: Not available.

Potential delayed

effects: None known.

General: No known significant effects or critical hazards.

Carcinogenicity: None known.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental: No known significant effects or critical hazards. **Fertility effects:** No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological Information

Toxicity: Acute toxicity studies on samples of (petroleum) coke show that acute aquatic toxicity values

are greater than 1000 mg/L for invertebrates, algae and fish. Elemental carbon, which is the principal constituent of (petroleum) cokes, poses no risk to aquatic organisms. Residual hydrocarbon concentrations are very low and have a high molecular weight. Such hydrocarbons are too water insoluble to cause acute aquatic toxicity. Therefore (petroleum) coke is unlikely to

pose a long-term hazard to the environment

pose a long-term nazard to the environment

Persistence and (Petroleum) cokes are not expected to meet the criteria for ready degradability.

Degradability: Elemental carbon and hence, (petroleum) coke is a persistent material. Also, any associated very

high molecular weight hydrocarbons would only be very slowly biodegraded

Bioaccumulative Elemental carbon is not known to bioaccumulate. The very high molecular weight

Potential: of any associated hydrocarbons, combined with their very low water solubilities, indicate that

they are not likely to bioaccumulate. The trace hydrocarbon components of (petroleum) cokes

have values for log Kow greater than 6.

Mobility in soil The hydrocarbon components of (petroleum) cokes have negligible vapor pressures at ambient

temperature and volatility is not a significant fate process for these substance

Other adverse effects: No known significant effects or critical hazards

Section 13. Disposal Considerations

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of

this product, solutions and any by-products should at all times comply with the

Revision Date: May, 29, 2015 Page 8 of 10

requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

This material and its container must be disposed of in a safe way.

Care should be taken when handling emptied containers that have not been cleaned or rinsed out

Empty containers or liners may retain some product residues.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport Information						
	DOT	TDG	IMDG	IATA		
	Classification	Classification				
	Not Regulated	Not Regulated	Not Regulated	Not Regulated		

Special precautions for user:

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage

Section 15. Regulatory Information

U.S. Federal regulations

TSCA 8(a) CDR Exempt/Partial exemption: Not determined United States inventory (TSCA 8b): This material is listed.

SARA 302/304

Composition/information on ingredients: No products were found.

SARA 304 RQ: Not applicable.

SARA 311/312

Classification: Fire Hazard

Section 313 listed: No

Listed material/compound: Not Applicable

State regulations

New Jersey: None of the components are listed.
Pennsylvania: None of the components are listed.

California Prop. 65: Contains components known to the State of California to Cause cancer.

International Lists

DSL (Canada) All ingredients are listed, or exempt from inclusion, on the Canadian Domestic

Substances List (DSL).

Canada inventory (WHMIS): Not Listed.

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

Revision Date: May, 29, 2015 Page 9 of 10

Section 16.	Other Information
Section 10.	Other information

Hazardous Material Information System (U.S.A.)

Health	0
Flammability	1
Physical Hazards	0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

Date of issue/Date of revision: May 29, 2015

Date of previous issue:

Version:

None

Prepared by: T Square Associates, Inc. www.tsquare.us

This information contained herein has been compiled from sources believed to be reliable and to represent the best current opinion on the subject. No warranty, guarantee, or representation is made by us as to the absolute correctness or sufficiency of any representation contained in this and other Safety Data Sheets, and we do not assume any responsibility in connection therewith; nor can it be assumed than all acceptable safety measures are contained in this and other Safety Data Sheets, or that other or additional measures may not be required under particular or exceptional conditions or circumstances.

Revision Date: May, 29, 2015 Page 10 of 10