freepoint	SAFETY DATA SHEET	Page: Page 1 of 15 Revision edition: 0
Commodities		Date: 5/18/2015
Coal		Supersedes: MSDS 0000002
		SDS-0002

WHMIS	Personal Protection Equipment	TDG (Ground)
		N/A

1 Identification of the substance/mixture and of the company/undertaking

Product identifier Trade name:	Coal
SDS Nr: Chemical description:	SDS-0002 Petroleum Hydrocarbon
CAS No: EC No:	N/A N/A
Registration-No: Use:	Registration deadline not expired. Fuel oil for heating and power generation.
Company identification:	Freepoint Commodities, LLC 58 Commerce Road Stamford, Ct. 06902
E-Mail address (compete	ent person): Lou Santore
	Lou Santore [LSantore@freepoint.com]
Emergency telephone nu	umber: Within the U.S. or Canada: 1 800 424 9300 Outside the U.S. and Canada: +1 703 527 3

300 703 527 3887 Canada: +1 tside the and (collect calls accepted)

MSDS prepared by: Paule Patterson, ENERCON Services, Inc.

freepoint	SAFETY DATA SHEET	Page: Page 2 of 15 Revision edition: 0
L commodities		Date: 5/18/2015
Coal		Supersedes: MSDS 0000002
		SDS-0002

# 2 Hazards identification

## GHS Classification:

Single Target Organ Toxicity Repeated Exposure (Category2): Target Organ - Lungs Eye Irritation – Category 2B Aspiration Hazard – Category 1

# **GHS LABEL ELEMENTS**

Symbol(s)



Signal Word

Warning

# CLP Hazard Statements :

#### **HEALTH HAZARDS:**

H320: Causes eye irritation.

H373: May cause damage to organs or organ systems through prolonged or repeated exposure.

#### **ENVIRONMENTAL HAZARDS:**

H441: Toxic to aquatic life with long lasting effects.

# **CLP Precautionary statements**

**Prevention :** P260: Do not breath dust. P285: In case of inadequate ventilation wear respiratory protection.

· · ·		Page: Page 3 of 15
Att treepoint	SAFETY DATA SHEET	Revision edition: 0
Commodities		Date: 5/18/2015
Coal		Supersedes: MSDS 0000002
		SDS-0002

## Disposal:

P501: Dispose of contents and container to appropriate waste site or reclaimer in accordance with local, state, and national regulations.

## **EC Classification:**

Highly flammable. Toxic. Carcinogenic, category 1. Mutagenic, category 2.

## EC Risk Phrases:

R33: Danger of cumulative effects.R36: Irritating to eyes.R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation.

#### **3** Composition/information on ingredients

CAS Number: Not Applicable / Naturally Occurring Mineral EC Number: Not Applicable / Naturally Occurring Mineral Molecular Weight: Not applicable to mixtures

Component	CAS Number	Percent
Ash	68131-74-8	4 – 20
Carbon (Fixed)	N/A	50 – 72
Moisture	N/A	1 – 10
Hydrogen	1333-74-0	4.8 - 5.3
Nitrogen	7727-37-9	1.2 – 1.6
Chlorine	7782-50-5	0.05 – 0.19
Silica (Quartz)	14808-60-7	0.1 – 1.0

4 First aid measures

#### First Aid: Eyes

In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 min. Hold eyelids open to ensure adequate flushing. Seek medical attention.

freepoint	SAFETY DATA SHEET	Page: Page 4 of 15 Revision edition: 0
Commodities		Date: 5/18/2015
Coal		Supersedes: MSDS 0000002
		SDS-0002

## First Aid: Skin

Remove contaminated clothing. Flush contaminated areas for at least 15 minutes. Wash contaminated areas thoroughly with soap and water or waterless hand cleanser. Obtain medical attention if irritation or redness develops.

## First Aid: Ingestion

**DO NOT INDUCE VOMITING.** Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Monitor for breathing difficulties. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.

#### First Aid: Inhalation

Keep victim calm. Remove person to fresh air. If person is not breathing, provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

#### **5** Fire-fighting measures

#### **General Fire Hazards**

See Section 9 for Flammability Properties.

Use self-contained breathing apparatus in enclosed areas. For massive fires, use unmanned hose holders or monitor nozzles. If this is impossible, withdraw from area and let fire burn. Always stay away from tanks engulfed in fire.

#### **Unusual Fire or Explosion Hazards**

Susceptible to spontaneous combustion. Highly combustible and/or explosive when in dust or powder form. Coal dust may react slowly with oxygen at room temperature. Heat accelerates the process, which could lead to spontaneous ignition in piles of coal dust.

#### Hazardous Combustion Products

Fumes, smoke, carbon monoxide, sulfur oxides, aldehydes and other decomposition products, in the case of incomplete combustion.

freepoint	SAFETY DATA SHEET	Page: Page 5 of 15 Revision edition: 0 Date: 5/18/2015
Coal		Supersedes: MSDS 0000002 SDS-0002

## Extinguishing Media

SMALL FIRES: Any extinguisher suitable for Class B fires, Foam, Carbon Dioxide, Dry Chemical, Halon, and Water Fog. Do not flush down public sewers. The use of self- contained breathing apparatus and protective clothing is recommended for fire fighters. Avoid inhalation of vapors.

LARGE FIRES: Foam, Carbon Dioxide, Dry Chemical, Halon, and Water Fog. Water may be ineffective for fighting the fire, but may be used to cool fireexposed containers. Do not flush down public sewers. The use of self- contained breathing apparatus and protective clothing is recommended for fire fighters. Avoid inhalation of vapors.

## Fire Fighting Equipment/Instructions

Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other firefighting equipment. Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full face piece and full protective clothing. Isolate area around container involved in fire.

Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied firefighting foam.

#### 6 Accidental release measures

#### **Recovery and Neutralization**

Prevent entry into waterways, sewers, and confined areas. Carefully contain and stop the source of the spill, if safe to do so.

freepoint freepoint	SAFETY DATA SHEET	Page: Page 6 of 15 Revision edition: 0 Date: 5/18/2015
Coal		Supersedes: MSDS 0000002 SDS-0002

## Materials and Methods for Clean-Up

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. In order to minimize dust, spills should be removed by vacuuming, or by lightly spraying with water and sweeping the mixture into a suitable container. Do not dry sweep. Observe local, state, and federal governmental regulations.

#### **Personal Precautions and Protective Equipment**

Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

#### **Environmental Precautions**

Protect bodies of water by diking, absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material.

#### **Prevention of Secondary Hazards**

None

## 7 Handling and storage

#### Handling Procedures

Comply with all applicable EPA, OSHA, NFPA and consistent state and local requirements. Use appropriate grounding and bonding practices.

Handle as a flammable liquid. Keep away from heat, sparks, and open flame! Store in a cool, dry, well-ventilated location, away from any area where the fire hazard may be acute that complies with NFPA 30 "Flammable and Combustible Liquid Code."

Do not store near foodstuffs. Freepoint Commodities, LLC 58 Commerce Road Stamford, Ct. 06902

		Page: Page 7 of 15
treepoint	SAFETY DATA SHEET	Revision edition: 0
Commodities		Date: 5/18/2015
Coal		Supersedes: MSDS 0000002
		SDS-0002

Store in properly closed containers that are appropriately labeled and in a cool well-ventilated area.

Do not cut, drill, grind or weld on empty containers since they may contain explosive residues.

## WORK/HYGIENIC PRACTICES

Emergency eye wash capability should be available in the vicinity of any potential splash exposure.

Use good personal hygiene practices. Avoid repeated and/or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Do not eat, drink or smoke in areas of use or storage.

Do not use gasoline or solvents (naphtha, kerosene, etc) for washing this product from exposed skin areas. Waterless hand cleansers are effective.

Promptly remove contaminated clothing and launder before reuse. Consider the need to discard contaminated leather shoes and gloves.

Avoid skin contact. Exercise good personal hygiene including removal of soiled clothing and prompt washing with soap and water.

#### Incompatibilities

Keep away from strong oxidizers and heat sources.

#### 8 Exposure controls/personal protection

#### Component Exposure Limits

Ingredient Name	CAS #	Exposure Limit	
		OSHA PEL	ACGIH TLV
Sulfur (Total)	7446-09-5 (S02)	5.0 ppm as SO2	2.00 ppm as SO2
Ash	68131-74-8	N/A	N/A
Carbon (Fixed)	N/A	N/A	N/A

freepoint	SAFETY DATA SHEET	Page: Page 8 of 15 Revision edition: 0 Date: 5/18/2015
Coal		Supersedes: MSDS 0000002 SDS-0002

Hydrogen	1333-74-0	N/A	N/A
Nitrogen	7727-37-9	N/A	N/A
Chlorine Coal Dust	7782-50-5 N/A	1.0 ppm 2.4 mg/ m <sup>3</sup> respirable fraction, < 5% SiO2 10 mg/ $m_3^3$ > 5% SiO2	1.0 ppm 2.4 mg/ m <sup>3</sup> respirable fraction, < 5% SiO2 10 mg/ m <sup>3</sup> > 5% SiO2
Silica	14808-60-7	$10 \text{ mg/m}^3$	0.05 mg/ m <sup>3</sup>

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." The OSHA PEL and ACGIH TLV for coal tar pitch volatiles is 0.2 mg/m3 (basis one soluble fraction.)

## **Personal Protective Equipment: Respiratory**

MSHA/NIOSH approved dust respirator. Appropriate respirator depends upon type and magnitude of exposure.

A NIOSH/ MSHA-approved air-purifying respirator may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation.

Skin Protection: Neoprene, PVC should be worn when handling.

Eye Protection: Use chemical safety goggles and / or a full face shield. Hygiene Measures: Wear appropriate impervious clothing and equipment to prevent repeated or prolonged skin contact with this substance.

#### Personal Protective Equipment: Skin and Body

Chemical protective clothing such as of E.I. DuPont TyChem®, Saranex® or equivalent recommended based on degree of exposure. Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for further information.

#### Hygiene Measures

Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure. Use good personal hygiene practices. Avoid repeated and/or prolonged skin exposure. Wash hands before eating, drinking,

		Page: Page 9 of 15
Att treepoint	SAFETY DATA SHEET	Revision edition: 0
Commodities		Date: 5/18/2015
	Coal	Supersedes: MSDS 0000002
		SDS-0002

smoking, or using toilet facilities. Do not use as a cleaning solvent on the skin. Do not use gasoline or solvents (naphtha, kerosene, etc.) for washing this product from exposed skin areas. Waterless hand cleaners are effective.

Promptly remove contaminated clothing and launder before reuse. Use care when laundering to prevent the formation of flammable vapors which could ignite via washer or dryer. Consider the need to discard contaminated leather shoes and gloves.

# ENGINEERING CONTROLS

Use adequate explosion-proof ventilation and process enclosures, local exhaust ventilation or other engineering controls to keep vapor and mist concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces. Use explosion-proof equipment and lighting in classified/controlled areas.

Refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

## 9 Physical and chemical properties

Appearance:	Irregular, rectangular-shaped	Odor:	Characteristic hydrocarbon odor
	chunks or particles, dense,		
	grayish-black to black color		
Physical	Solid	pH:	ND
State:		-	
Vapor	ND	Vapor	ND
Pressure:		Density:	
Boiling	ND	Melting	750 °F (399 °C)
Point:		Point:	
Solubility	Insoluble	Specific	ND
(H2O):		Gravity:	
Evaporation	ND	VOC:	ND
Rate:			
Octanol/H2O	ND	Flash Point:	260 °F (127 °C)
Coeff.:			
Flash Point	TCC	Upper	ND
Method:		Flammability	
		Limit (UFL):	
Lower	ND	Burning	ND
Flammability		Rate:	
Limit (LFL):			
Auto Ignition:	260 °F to 365 °F (127 °C - 185	°Ċ)	·

freepoint	SAFETY DATA SHEET	Page: Page 10 of 15 Revision edition: 0
	Coal	Date: 5/18/2015 Supersedes: MSDS 0000002 SDS-0002

#### 10 Stability and reactivity

#### **Chemical Stability**

This is a stable material under normal conditions of use and at normal temperatures and pressures.

#### Hazardous Reaction Potential

Hazardous Polymerization will not occur.

## Conditions to Avoid

Do not allowing coal to stand in water or store coal on loose or porous ground. Do not pile coal around upright steel or wooden posts, crane supports, underground drains, steam or hot water lines or areas where there is refuse such as wood, straw, growing vegetation or other organic material.

Do not store in closed hampers, bins, receptacles, etc. without positive ventilation.

#### Incompatible Products

Keep away from strong oxidizers.

#### Hazardous Decomposition Products

Thermal decomposition is highly dependent on conditions. May liberate hydrogen, methane, carbon monoxide, oxides of sulfur and hydrogen, coal tar pitch volatiles upon thermal decomposition.

#### **11 Toxicological information**

#### **Emergency Overview:**

Coal may release small quantities of methane gas over a period of time. Progression of tuberculosis is greatly increased in pneumoconiosis but susceptibility is apparently not increased.

freepoint	SAFETY DATA SHEET	Page: Page 11 of 15 Revision edition: 0
T commodities		Date: 5/18/2015
Coal		Supersedes: MSDS 0000002
		SDS-0002

# Acute Toxicity

# A: General Product Information

Potential short-term effects of exposure are: irritation eyes, skin, nose, mucous membrane, and respiratory system.

## B: Component Analysis - LD50/LC50

High Sulfur Diesel Oil (68476-34-6) Inhalation LD50/4 hr >4.1 mg/l, 4 hours (Rat)

Oral (n-Hexane) LD50 Rat >28710 mg/kg (Rat)

## Potential Health Effects: Skin Contact Property

Skin irritation.

## Potential Health Effects: Eye Contact Properties

Eye irritation.

#### Potential Health Effects: Ingestion

Ingestion may cause irritation.

#### Potential Health Effects: Inhalation

The principal health hazard associated with coal occurs during its mining and transport. Coal workers' pneumoconiosis (CWP) can occur in miners after as little as 15 years of excessive inhalation of respirable coalmine dust.

Respirable quartz particles and free silica may be co-implicated. Coal dust is deposited in the lungs where its site of action is the lung parenchyma, lymph nodes and hila. The severity of the disease is directly related to the amount of coal dust in the lungs. In the simple stages, the disease is detectable by x-ray as round, irregular "macules" of 1-5 mm. This stage typically does not change lung function or shorten life.

freepoint	SAFETY DATA SHEET	Page: Page 12 of 15 Revision edition: 0
		Date: 5/18/2015
Coal		Supersedes: MSDS 0000002
		SDS-0002

#### Carcinogenicity A: General Product Information

The chronic stage of CWP involves massive pulmonary fibrosis that does impair pulmonary function and shorten life. Chronic Bronchitis (lung inflammation, coughing attacks, difficult breathing, etc.) and emphysema can result from excessive coal dust inhalation. Rheumatoid arthritis can be exacerbated by pneumonias leading to rapidly developing lung damage (Caplan's Syndrome.) Carcinogenicity: Coal may liberate various polycyclic aromatic hydrocarbons (PAH's) upon thermal decomposition. There is no clear evidence that coal is carcinogenic to man or experimental animals because of their polycyclic aromatic hydrocarbon content. However, there is evidence that these PAH's may play an active role in the generation of lung cancer seen in cigarette smokers or tarroofing workers.

## **Reproductive toxicity:**

This product is not reported to have any reproductive toxicity effects.

Mutagenicity: This product is not reported to have any reproductive toxicity effects.

**Teratogenicity** The components of this product are not reported to cause teratogenic effects in humans. Based on best current information, there is no known teratogenicity associated with this product.

Specific Target Organ Toxicity - Single Exposure: No data available. Specific Target Organ Toxicity - Repeated Exposure: No data available.

## **12 Ecological information**

#### Ecotoxicity:

Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products. Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).

freepoint	SAFETY DATA SHEET	Page: Page 13 of 15 Revision edition: 0 Date: 5/18/2015
	Coal	Supersedes: MSDS 0000002 SDS-0002

Persistence and Degradability: Major constituents are inherently biodegradable.

Bioaccumulative Potential: No information available.

Mobility in Soil: No information available.

Other adverse effects: No information available.

#### Additional ecological information:

No information available.

#### **13 Disposal considerations**

#### Waste Disposal Instructions

**Cleanup Considerations:** This product as produced is not specifically listed as an EPA RCRA hazardous waste according to federal regulations (40 CFR 261). However, when discarded or disposed of, it may meet the criteria of an "characteristic" hazardous waste.

#### **Disposal of Contaminated Containers or Packaging**

Dispose of contents/container in accordance with local, state, and federal regulations. Recover or reuse if possible. Do not dispose into the environment, in drains or in water courses.

# Disposal Regulatory Requirements:

Refer to latest EPA or state regulations regarding proper 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

freepoint	SAFETY DATA SHEET	Page: Page 14 of 15 Revision edition: 0
I commodities		Date: 5/18/2015
Coal		Supersedes: MSDS 0000002
		SDS-0002

**15 Regulatory information** 

## US federal regulations:

**EPA Superfund Amendment & Reauthorization Act (SARA): SARA Section 311/312:** Acute: N/A Chronic: N/A Fire: N/A Pressure: N/A Reactive: N/A

EPA Sara Title III Information: Non-Hazardous

TSCA & DSL Inventories: This product is listed as a naturally occurring substance

## 16 Other information

**Additional Information:** The pronounced and easily-recognized rotten egg odor of hydrogen sulfide gas (H2S) can be detected at concentrations as low as 0.003-0.13 ppm. Since higher H2S concentrations (100-200 ppm) cause olfactory fatigue and other hydrocarbon odors can "mask" H2S, the sense of smell cannot be used as a reliable indicator of H2S exposure.

NFPA HAZARD RATING	HEALTH: 3 High
	FIRE: 3 High
	REACTIVITY: 0 Negligible

**References:** ANSI Z400.1, MSDS Standard, 2004. - Manufacturer's Material Safety Data Sheet. 29CFR Part1910.1200 OSHA MSDS Requirements. 49CFR Table List of Hazardous Materials UN#, Proper Shipping Names, PG. - Canada Gazette Part II, Vol. 122, No. 2.

Registration SOR/88-64, 31 December 1987. Hazardous Products Act "Ingredient Disclosure

List" Canadian Transport of Dangerous Goods, Regulations and Schedules, Clear Language version 2005.

**DISCLAIMER OF LIABILITY**: Before using this product in any new process or experiment, a thorough material compatibility and safety study should be carried out.

This document is generated for the purpose of distributing health, safety, and environmental data.

freepoint	SAFETY DATA SHEET	Page: Page 15 of 15 Revision edition: 0
Commodities		Date: 5/18/2015
Coal		Supersedes: MSDS 0000002
		SDS-0002

Information is correct to the best of our knowledge at the date of the SDS publication. It is not a specification sheet nor should any displayed data be construed as a specification.

The information on this was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this MSDS information may not be applicable.