

Safety Data Sheet

K&E Black Coal Slag

Note: Nickel Slag is a Silica Free Product

Section 1- Product Information

General Use: Sandblasting, non-slip surfaces, coatings, abrasives, roofing products and other aggregate uses.

Product Name / Chemical Name: Black Coal Slag

Chemical Family: Mineral Slag

Product Code: 2040 Black

Product Formulation Name: Abrasive

Formula: Ca Mg Al. Silicate mineral similar to amorphous glass.

Canadian Supplier:

K&E Sand and Gravel, 4359 London Line, PO Box 369, Wyoming, ON N0N 1T0

Emergency Telephone Number: (519) 845-3396

Section 2-Hazardous Identification

Ingredient: Coal Slag

Approximate Concentration: 100%

LD50: No available

LC50: Not available

GHS Classifications

Health: Not classified

Environmental: Not classified

Physical: Not classified

Emergency Overview

Physical Appearance: Solid

Immediate Concerns: 2040 Black is not flammable, combustible or explosive; and poses no unusual hazard in an unused condition. During use for abrasive blasting, dust may irritate the respiratory tract, skin and eyes; and may cause inflammation and pulmonary fibrosis.

Section 3- Composition/Information on Ingredients

Chemical Name	Wt.%	CAS
Silica, Amorphous	40 - 53	60676-86-0
Aluminum Oxide	17 - 25	1344-28-1
Iron Oxide	5 - 31	1309-37-1
Calcium Oxide	3 - 20	1305-78-8
Magnesium Oxide	0.1 - 7	1309-48-4
Potassium Oxide	0.1 - 3	12136-45-7

Titanium Dioxide	0.1 - 2	13463-67-7
Silica, Crystalline	<0.1	14808-60-7
Manganese	0.01 - 0.05	7439-96-5
Beryllium	0 - 0.001	7440-41-7
Cadmium	0 - 0.001	7440-43-9

Section 4- First-Aid Measures

Eyes: DO not rub eyes. Remove contact lenses. Flush eyes thoroughly with water, taking care to rinse under eyelids. If irritation continues, continue flushing for 15 minutes, rinsing from time to time under the eyelids. If discomfort continues, consult a physician.

Skin: Wash with soap and water. Get medical attention if irritation develops or persists.

Ingestion: Rinse mouth thoroughly if ingested. Do not induce vomiting. If discomfort continues, consult a physician.

Inhalation: Move to fresh air. If discomfort continues, consult a physician.

Notes to Physician: Treat symptomatically.

Comments: Show this Safety Data Sheet to physician in attendance.

Section 5- Fire-Fighting Measures

Flammable Class: This product is non-combustible

General Hazard: None known

Extinguishing Media: Use fire-extinguishing media appropriate for surrounding materials

Fire Fighting Procedures: Move product containers from fire area if it can be done without risk. Cool containers by flooding with water until the heat is dissipated.

Hazardous Decomposition Products: None known

Section 6- Accidental Release Measures

Spill Procedure: Clean-up in a manner to control airborne dust. Whenever possible, wet down area with water to control dust.

Large Spill: Avoid runoff into storm sewers and ditches that lead to waterways. Collect spillage using a vacuum equipped with a HEPA filter. If not possible, gently moisten before collecting with shovel and broom. Dispose of collected materials in accordance with Federal, Provincial, State and local regulations.

General Procedures: Never return spillage and clean-up materials to original product containers.

Release Notes: In the unused form, the material is non-hazardous as defined in provincial and federal regulations.

Comments: Ensure clean-up is conducted by trained personnel wearing appropriate respiratory protection. Avoid inhalation of dust and contact with skin and eyes. Ventilate area if there is excessive airborne dust.

Section 7 – Handling and Storage

General Procedures: Handle and store material in manner to control dust. Avoid inhalation of dust and contact with skin and eyes. Use only with adequate ventilation. Use work methods that minimize dust production. Keep workplace clean. Observe good hygiene practices.

Handling: Follow Safety Data Sheet and label precautions.

Storage: Keep container tightly closed. Store away from incompatible materials.

Section 8 – Exposure Controls / Personal Protection

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
		Exposure Limits					
		OSHA PEL		ACGIH TLV		Supplier OEL	
Chemical Name		ppm	Mg/m ³	ppm	Mg/m ³	ppm	Mg/m ³
Silica, Amorphous	TWA	20 mpp	80				
Aluminum Oxide	TWA		15 T,				
	STEL			10			
Calcium Oxide	TWA		5		2		
Titanium Dioxide	TWA		15 T		10	NL	NL
	STEL					NL	NL
Silica, Crystalline	TWA	250 mpp	10		0.025	NL	NL
	STEL					NL	NL
Manganese	TWA				0.2		

Engineering Controls: Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits.

Personal Protective Equipment

Eyes and Face: Wear safety glasses with side shields. Use tight fitting goggles if dust is generated.

Skin: Use protective gloves. Wear suitable protective clothing.

Respiratory: Selection and use of respiratory protective equipment should be in accordance with CSA Standard Z94.4; or in USA with OSHA General Industry Standard 29 CFR 1910.134.

Work Hygienic Practices: Wash hands after handling. Routinely wash work clothing and protective equipment to remove contaminants. Handle in accordance with good industrial hygiene and safety practice.

Comments: Proper and safe use of the material is solely the purchaser's responsibility. The manufacturer extends no warranties and makes no representations as to the suitability of the product for the purchaser's intended purpose or the consequences of the purchaser's actions.

Section 9 – Physical and Chemical Properties

Odor: None

Appearance: Black, granular solid

Colour: Black

pH: 8.2

Flash Point and Method: Not available

Flammable Limits: Not available

Vapour Pressure: Not available

Vapour Density: Not available

Boiling Point: >2300 °F / 1260 °C

Freezing Point: Not available

Melting Point: Not available

Solubility in Water: None expected

Specific Gravity: 2.6 - 2.8

Viscosity: Not available

Comments: For additional information contact manufacturer.

Section 10 – Stability and Reactivity

Stability: This product is stable and non-reactive under normal conditions of use, storage and transport.

Conditions to Avoid: None known.

Possibility of Hazardous Reactions: None

Hazardous Decomposition Products: None known

Incompatible Materials: Hydrofluoric acid

Section 11 – Toxicological Information

Acute

NOTES: Abrasive blasting agents may cause inflammation and pulmonary fibrosis. Ingestion of dusts generated during working operations may cause nausea and vomiting.

Eye Effects: May cause eye irritation.

Skin Effects: May cause skin irritation.

Inhalation: Low health risk.

Chronic: Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.

Carcinogenicity

IARC: Coal-fired boiler is not listed by IARC.

NTP: Coal-fired boiler slag is not listed by the National Toxicology Program in their Annual Report.

OSHA: Coal-fired boiler slag is not listed by NIOSH on their Occupational Cancer List.

NOTES:

ACGIH Carcinogens

- Aluminum oxide (CAS 1344-28-1) A4 Not classifiable as a human carcinogen.
- Beryllium (CAS 7440-41-7) A1 Confirmed human carcinogen.
- Cadmium (CAS 7440-43-9) A2 Suspected human carcinogen.
- Calcium oxide (CAS 1305-78-8) No designation listed.
- Iron oxide (CAS 1309-37-1) A4 Not classified as a human carcinogen.
- Magnesium oxide (CAS 1309-48-4) A4 Not classified as a human carcinogen.
- Manganese (CAS 7439-96-5) A4 Not classified as a human carcinogen.
- Potassium oxide (CAS 12136-45-7) No designation listed.
- Silica, amorphous (CAS 7631-86-9) No designation listed.
- Titanium dioxide (CAS 13463-67-7) A4 Not classified as a human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

- Aluminum oxide (CAS 1344-28-1) Not listed.
- Beryllium (CAS 7440-41-7) Group 1. Monographs 58 and 100C (2012).
- Cadmium (CAS 7440-43-9) Group 1. Monographs 58 and 100C (2012).
- Calcium oxide (CAS 1305-78-8) Not listed.
- Iron oxide (CAS 1309-37-1) Not listed.
- Magnesium oxide (CAS 1309-48-4) Not listed.
- Manganese (CAS 7439-96-5) Not listed.
- Potassium oxide (CAS 12136-45-7) Not listed.
- Silica, amorphous (CAS 7631-86-9) Not listed.
- Titanium dioxide (CAS 13463-67-7) Group 2B. Monographs 47 and 93 (2010).

US NTP Report on Carcinogens

- Beryllium (CAS 7440-41-7) Known to be a human carcinogen.
- Cadmium (CAS 7440-43-9) Known to be a human carcinogen.

Corrosivity: None known
Sensitization: Not a skin or respiratory sensitizer
Neurotoxicity: None known
Genetic Effects: None known
Reproductive Effects: None known
Target Organs: Irritation of nose and throat. Irritation of eyes and mucous membranes. May cause respiratory tract irritation. Shortness of breath.
Teratogenic Effects: None known
Mutagenicity: None known
Comments: Although supplier has taken reasonable care in the preparation of this Safety Data Sheet, no warranties are made. Supplier makes no representations and assumes no responsibility as to the accuracy or suitability of the Safety Data Sheet for the applications intended by the purchaser.

Section 12 – Ecological Information

Environmental Data: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Ecotoxicological Information: This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Bioaccumulation/Accumulation: This product is not bio-accumulating.
Distribution: Not available.
Aquatic Toxicity (Acute): None known.
Chemical Fate Information: Not available.

Section 13 - Disposal Consideration

Waste Disposal: Can be disposed of in a solid waste landfill.
Disposal Method: Review current regulations and dispose in accordance with all applicable regulations.
General Comments: TCLP testing of unused product indicates that it is not hazardous waste by characteristic.

Section 14 - Transport Information

DOT (Department of Transportation)
Other Shipping Information: Unused product is not regulated as a hazardous material by DOT.
Comments: Unused product is not regulated as dangerous goods by IATA, IMDG or TDG.

Section 15 - Regulatory Information

CANADA

WHMIS Hazard Symbol and Classification: Not controlled.

WHMIS: Not controlled.

WHMIS Class: This product has been classified in accordance with the hazard criteria of the CPR and the Safety Data Sheet contains all of the information required by the CPR.

Domestic Substance List (Inventory): Listed on Inventory.

UNITED STATES

SARA Title III (Superfund Amendments and Reauthorization Act)

311/312 Hazard Categories: Hazardous Chemical

Fire: No

Pressure Generating: No

Reactivity: No

Acute: No

Chronic: Yes

313 Reportable Ingredients: Aluminum oxide (CAS 1344-28-1)

EPCRA Section 313 Supplier Notification

Chemical Name	Wt. %	CAS
Aluminum Oxide	17-25	1344-28-1

302-304 Emergency Planning

Emergency Planning: None

CERCLA (Comprehensive Environmental Response, Compensation and Liability Act)

Chemical Name	Wt. %	CERCLA RQ
Beryllium	0 - 0.001	10

CERCLA RQ: None

TSCA (Toxic Substance Control Act)

Chemical Name	CAS
Silica, Amorphous	60676-86-0
Aluminum Oxide	1344-28-1
Iron Oxide	1309-37-1
Calcium Oxide	1305-78-8
Magnesium Oxide	1309-48-4
Potassium Oxide	12136-45-7
Titanium Dioxide	13463-67-7
Silica, Crystalline	14808-60-7
Manganese	7439-96-5
Beryllium	7440-41-7

Clean Air Act

40 CFR Part 68-Risk Management for Chemical Accident Release Prevention: None

OSHA (Occupational Safety and Health Administration)

29 CFR 1910.119-Process Safety Management of Highly Hazardous Chemicals: None

California Proposition 65: WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

RCRA Status: Not regulated

OSHA Hazard Comm. Rule: Regulated

Clean Water Act: Not covered by any water quality criteria under Section 304.

Carcinogen: Boiler slag is not listed by IARC, NIOSH or the NTP as a known or suspected carcinogen. However based upon the presence of beryllium and cadmium, the product would be classified as a Category 2 Carcinogen pursuant to the GHS Classification System.

MEXICO

This Safety Data Sheet has been prepared in accordance with the Official Mexican Standard (NOM-018-STPS-2000).

Section 16 - Other Information

Date Revised: November 9, 2018

Revision Summary: This SDS replaces the MSDS February 1, 2018

HMIS Rating		
Health		1
Flammability		0
Physical Hazard		0
Personal Protection		A

NFPA Codes



Note: K&E Black Coal Slag is a Silica Free Product

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