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MSDS SHEET - COAL SLAG - LAWRENCEBURG, IN

I. Product Identification

Trade Name as Labeled: Chemical Name and Formula:

e and Formula:

Coal Slag, Black Lightning Coal Slag

Plant Location:

Tanner's Creek P.O. Box 253

Lawrenceburg, IN 47025

Emergency & Information Telephone #:

800-252-7848

II. Hazardous Ingredients Iron Oxide: 1-60% Amorphous Silica: 1-55% Crystalline Silica: < 1% Titanium Dioxide: 0-5% Magnesium Oxide: 0-6% Sulfur Trioxide: 0-15% Phosphorus Pentoxide: 0-1% Aluminum Oxide: 15-40% Calcium Oxide: 0-30% Sodium Oxide: 0-2%

Potassium Oxide: 0-5%

NOTE: The PEL and the TLV for this component do not currently exist.

III. Physical Properties

Vapor Density: N/A Boiling Point: N/A Evaporation Rate: N/A Specific Gravity: 2-3
Solubility in Water: Moderate
Vapor Pressure: N/A

Fly Ash: Consists primarily of minute, separate glass spheres with crystalline matter and varying amounts of unburned carbon. Glass spheres range in size from approximately .007 mm (medium silt) to .2 mm (fine sand) or 7 to 20 microns. Colors range from light tan or light gray to almost black depending on the proportions of carbon and iron.

Bottom Ash: Consists of a granular material with similar upper and lower particle size limits to fine concrete aggregate (concrete sand). Basic particle shape is angular. Colors range from a medium brown or medium gray to almost black.

Boiler Slag: Consists of a granular material. Basic particle shape is angular. Color is consistently shiny and black resembling crushed coal or black glass.

IV. Fire & Explosion

Flammable: No

Explosive: No

Unusual Fire Hazards: N/A

Unusual Explosion Hazards: N/A

Flammable Limits: N/A

Flash Point: N/A

Extinguishing Media: N/A

Special Fire Fighting Procedures: N/A

V. Health Hazard Information Symptoms of Overexposure:

Inhaled: Irritation to the respiratory tract. Immediately remove affected person to fresh air from source. If unusual coughing, tightness in chest, or shortness of breath occurs after exposure, immediately contact physician or medical personnel.

Contact with Eyes or Skin: Irritation to skin and eyes. For eyes: flush thoroughly with water. For skin: wash skin with soap and water if irritation occurs.

Swallowed: Rinse mouth out with water

First Aid: Emergency procedures

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VI. Reactivity Data

Stability: Stable

Hazardous Polymerization: None

Incompatibility (Materials to Avoid): None Hazardous Decomposition Products: None

VII. Spill, Leak and Disposal Procedures

Spill Response Procedures (including employee protection measures): Clean up using water and other methods to reduce airborne dust.

Waste Disposal: Material may be disposed of as an inert solid in an appropriate solid waste landfill. See applicable Federal, State, and Local Regulations.

VIII. Special Handling Information

Ventilation and Engineering Controls: Use in unconfined areas with adequate ventilation.

Respiratory Protection (Type): Use NIOSH or MSHA approved respirators. If you are unsure as to the type of respirator to be used, please consult your employer.

Eye Protection (Type): Safety glasses or goggles.

Gloves (Specify Material): Use safety gloves to avoid skin irritation.

Other Protective Clothing & Equipment: Wear appropriate personal protective equipment.

Work Practices, Hygienic Practices: Clean up spills promptly. Do not engage in activities that will generate airborne dust particles.

Other Handling & Storage Requirements: Avoid generating dust. No special storage requirements. Train all exposed persons in all sections of this MSDS and the proper handling of coal slag before they work with this product.

See OSHA Hazard Communication Rule CRF 1910.1200, 1915.99, 1917.28, and 1928.21, state, local worker, or community "Right to Know" laws and regulations. We recommend that smoking be prohibited in all areas where respirators must be used. Warn your employees (and your customers in case of resale) by posting and other means of the hazard and OSHA precautions to be used. Provide training about the OSHA precautions.

IX. Silicosis Warning

Breathing dust containing silica will cause silicosis, a fatal lung disease. Breathing dust during blasting operations will cause asbestosis, lead poisoning and/or other serious or fatal diseases. A NIOSH-approved, well-maintained, supplied-air abrasive blasting respirator must be used by anyone blasting, anyone handling or using the abrasive and anyone in the area of the dust. Harmful dust containing toxic material from abrasives or surfaces being blasted can remain suspended in the air for long periods of time after blasting has ceased. Failure to avoid the above danger will result in death or serious injury.

You must comply with all OSHA, local, City, State, Province, Country and jurisdiction regulations, ordinances and standards, related to your particular work area and environment. Keep unprotected individuals out of the work area. Failure to avoid the above danger will result in death or serious injury.

DISCLAIMER: The information in this MSDS was obtained from sources, which we believe are reliable. However, the information is provided without any representation or warranty, expressed or implied, regarding accuracy. These 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 the handling, storage, use or disposal of the product. Customers/users of silica must comply with all applicable health and safety laws, regulations and orders, including the OSHA Hazardous Communication Standard.



For more information call:

800-BLAST-IT

Phone: 800-252-7848
Fax: 563-324-6258
e-mail: sales@marcousa.com
www.marcousa.com





Coal Slag Abrasives

- Quality Abrasives
- Knowledgeable Staff
- Competitive Pricing
- ► Accurate Invoicing
- Marco Logistic Services

Let Marco[®] Work for You!

REMOVE COATINGS & PREPARE SURFACES

Marco's coal slag will blast off the toughest coatings so you can prepare surfaces right the first time. Achieve the consistent, high quality performance that you demand in a coal slag abrasive. Marco coal slag provides the foundation for coatings that last.

Coal slag is a tough, clean and economical abrasive with less than 1% free silica. It's unique, angular shape and hardness quickly cut away exisiting coatings. Use coal slag on buildings, tanks, castings, ships, bridges, railroad equipment, structural steel, exposed aggregate and more.

COAL SLAG FEATURES:

- Economical
- Less than 1% free silica
- Does not react with coatings
- Reduces coating failure

- Does not attract moisture
- Allows fast and easy clean up
- Angular shape to cut through coatings
- PREVENT dust suppressant available out of most locations.

SIZE INFORMATION

 GRADE:
 MIL PROFILE

 1040 (coarse)
 4.0 + mils

 1240 (medium)
 3.5 - 4.0 mils

 2040 (fine)
 2.0 -2.5 mils

 3060 (extra fine)
 1.5 - 2.0 mils

TYPICAL APPLICATIONS

Very Heavy Duty: railcars, ships, tanks Heavy Duty: rust & paint coatings, ships, barges, tanks General Duty: rust & paint coatings, mill scale Light Duty: rust & paint coatings, mill scale, frames, trucks

COAL SLAG SCREEN ANALYSIS:

US Sieve	40/80	30/60	20/40	12/40	12/30
8				Trace	Trace
12			0-1%	1-6%	2-12%
16			25-35	30-40	33-43
20		2-8%	30-40	30-38	30-40
30	0-2%	22-32	20-30	16-26	6-16
40	15-25	25-35	4-14	2-12	1-7
50	43-53	6-16	0-6	0-6	0-6
60	4-14	3-9	0-2	1-4	
70	0-10	0-3			
80	2-12				
100	0-6				
140	0-6				
Pan	0-2	0-2	0-2	0-2	0-2

PLANTS 2 DISTRIBUTION CENTERS: At Marco we continually strive to Midwest Distribution Center stock and deliver the abrasive products Davenport, Iowa and brands you desire, with our multiple Distribution Centers throughout the United States. Marco can supply you with the abrasives you demand. We can ship directly to your factory or jobsite, by the bag, drum or pallet. Marco coal slag comes from 6 plants: 1) Woodbury, MN 2) Baldwin, IL 3) Coffeen, IL 4) Lawrenceburg, IN **Gulf Coast Distribution Center** 5) Galveston, TX

PLACE YOUR ORDER WITH THE MARCO ABRASIVES TEAM

Rely on our experienced Customer Service Team to assist with placing your order and technical information, as well as arranging your on-time delivery with Marco Logistics Services. With Marco's multiple distribution points and the largest on-site inventories in North America, you can rely on us to accurately deliver the products you demand.

▼ Marco[®] is your Abrasives Source!

ORDERING

6) Harvey, LA

Phone: 1-800-BLAST-IT (1-800-252-7848) In Canada: 800-225-0225

Fax: 563-324-6258 24 hours a day

Web: www.marcousa.com E-mail: sales@marcousa.com

SHIPPING

Houston, Texas

Same Day Shipping:

In-stock equipment ordered by 5:00 p.m. CST will ship via same-day UPS.

Freight Shipments:

In-stock materials ordered by 2:00 p.m. CST will ship via LTL.

Express Service:

By request, orders can be delivered via UPS 3-day Select, 2-day Air, Overnight or Overnight Saturday.



MARCO LOGISTIC SERVICES DELIVER

▼ Utilize Marco's Logistic Services for pickup & delivery!

Freight can often be 30-80% of landed abrasive costs. At Marco, we have partnered with thousands of carriers nationwide to make logistic services easier for you.

BENEFITS OF USING MARCO LOGISTIC SERVICES

- · Time Saving one call for product & freight
- · Cost Savings Marco's buying power
- · Quicker Turnaround we work with your schedule
- Experience Marco knows Logistic Services
- · We Take Care of You from our dock to your door

Save time and money by choosing the experts at Marco Logistics!

Marco Carries a Full Line of Quality Abrasives and Additives:

Steel Shot & Grit

White Aluminum Oxide Garnet

Walnut Shell

Starblast

Glass Bead

Aluminum Oxide

Coal Slag

Blastox

Corn Cob

and much more... Call 800-BLAST-IT for a Marco Representative.



For more information call:

800-BLAST-IT

Phone: 800-252-7848 Fax: 563-324-6258 e-mail: sales@marcousa.com www.marcousa.com