Ergon Armor

Revision Number: 4.000
Issue Date: 01/13/2012

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: **PHENOLIC MORTAR POWDER - CARBON** **ID(s):** 19708

Product type: Powder component of two component resin based bonding mortar. **Region:** United States

Company address:
Ergon Armor
Corrosion Engineering
P.O. Box 1639
Jackson, MS 39215-1639

Contact information:
Telephone: 601.933.3540
Emergency: Call CHEMTREC at 800.424.9300
Internet: www.Ergon.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Physical state: Powder
Color: Black
Odor: Mild

HMIS:

HEALTH:	2
FLAMMABILITY:	1
PHYSICAL HAZARD:	0
Personal Protection:	See MSDS section 8

0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe
* = Chronic Health Hazard

WARNING! CAUSES EYE, SKIN AND RESPIRATORY TRACT IRRITATION. MAY BE HARMFUL IF SWALLOWED.E

Relevant routes of exposure: Inhalation and skin contact.

Potential Health Effects

Carbon

Inhalation and skin contact are expected to be the primary routes of occupational exposure to activated carbon. Based on its similarity to graphite, contact with skin and eyes to excessive dust levels may cause irritation from mechanical abrasion. Short-term overexposure to dusts may cause upper respiratory tract irritation. Chronic overexposure to graphite dusts in mining, milling, and electrode production operations has caused pneumoconiosis, characterized by increased lung fibrosis, shortness of breath, cough, and abnormal breathing.

Coke (petroleum)

Inhalation and skin contact are expected to be the primary routes of occupational exposure to this material. Dust may be severely irritating to eyes and respiratory tract. Medical conditions aggravated by exposure to this material include lung disease or limited respiratory capacity.

p-Toluene sulfonic acid Inhalation and skin contact are expected to be the primary routes of occupational exposure to this material. Based on single exposure animal tests, it is considered to be slightly toxic if swallowed, severely irritating to eyes and corrosive to skin. Vapor may cause respiratory tract irritation including coughing, tightness in chest, dizziness and, at very high levels, lung edema (accumulation of fluid in the lungs) which may be delayed for several hours. If swallowed, this material may cause mild to severe burns to the mouth, throat and digestive tract.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	CAS-No.	%
Carbon	7440-44-0	60 - 80
Coke (petroleum)	64741-79-3	10 - 30
p-Toluene sulfonic acid	104-15-4	1 - 5

4. FIRST AID MEASURES

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Skin contact: Immediately flush with plenty of water. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye contact: Immediately flush with plenty of water. Get medical attention if irritation persists.

Ingestion: Induce vomiting as directed by medical personnel. Get medical attention. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

5. FIRE FIGHTING MEASURES

Flash point: NA

Autoignition temperature: NA

Flammable/Explosive limits - lower: NA

Flammable/Explosive limits - upper: NA

Extinguishing media: Use water spray, water fog, carbon dioxide or dry chemical.

Special firefighting procedures: *Fire fighters and others who may be exposed to products of combustion should wear full fire fighting turn out gear (full Bunker Gear) and self-contained breathing apparatus (pressure demand NIOSH approved or equivalent). Fire fighting equipment should be thoroughly decontaminated after use.*

Fire and Explosion hazards: Avoid breathing fumes from fire-exposed material. Carbon fillers may intensify fire.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Spill or Leak: Avoid creating dust in handling, transfer or clean up. Contain spill. Sweep or scoop up and remove to suitable container.

Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

7. HANDLING AND STORAGE

Handling: Do not breathe dust. Keep container closed. Use only with adequate ventilation. Do not get in eyes, on skin or clothing. Wash thoroughly after handling.

Storage: Store in a cool, dry place. Avoid excessive heat. Store out of direct sunlight in a cool, well-ventilated place.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Carbon	NE	15 mg/m3 TWA	NL	NE
Coke (petroleum)	NE	NE	NE	NE
p-Toluene sulfonic acid	NE	NE	NE	NE

Engineering controls: Investigate engineering techniques to reduce exposures below airborne exposure limits. Provide ventilation if necessary to control exposure levels below airborne exposure limits (listed above). If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

Respiratory protection: Avoid breathing dust. When airborne exposure limits are exceeded (see above), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where exposure limit may be significantly exceeded, use an approved full face positive-pressure, self contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29 CFR § 1910.134.

Eye/face protection: Where there is potential for eye contact, wear chemical goggles and have eye flushing equipment available.

Skin protection: Wear appropriate chemical resistant protective clothing and chemical resistant gloves to prevent skin contact. Consult glove manufacturer to determine appropriate type glove material for given application. Rinse contaminated skin promptly. Wash contaminated clothing and clean protective equipment before reuse. Wash skin thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Powder
Color:	Black
Odor:	Mild
Odor threshold:	NE
pH:	NA
Vapor pressure:	Nil
Boiling point/range:	NA

Melting point/ range:	NA
Specific gravity:	NA
Vapor density:	NA
Flash point:	NA
Flammable/Explosive limits - lower:	NA
Flammable/Explosive limits - upper:	NA
Autoignition temperature:	NA
Evaporation rate:	NA
Solubility in water:	Insoluble
Partition coefficient (n-octanol/water):	NA
VOC content:	None

10. STABILITY AND REACTIVITY

Stability:	This material is chemically stable under normal and anticipated storage and handling conditions.
Hazardous polymerization:	Hazardous polymerization is not known to occur.
Hazardous decomposition products:	Oxides of carbon and sulfur.
Incompatibility:	Strong acids, strong alkalis and strong oxidizers, contact with these materials may result in an exothermic reaction characterized by heat and splattering of the chemicals. Avoid heat and fumes.

11. TOXICOLOGICAL INFORMATION

Toxicological Information
Data available for this material and/or its components are summarized below:

General Product Information:
No information available for the product.

Component Data:

Coke (petroleum)
LD50/LC50:
Calcined Petroleum Coke - Single exposure (acute) studies indicate that this material is practically non-toxic to rats if swallowed (LD50 >6,000 mg/kg) and practically non-irritating to eyes and skin. Acute overexposure has resulted in mechanical irritation of the eyes and skin.

CHRONIC:
Workplace experience indicates that excessive long-term overexposure may cause a decrease in lung function. No skin allergy was observed following repeated exposure. Following repeated inhalation, only lung irritation was observed in rats and monkeys.

MUTAGENICITY:
No genetic changes were observed in standard tests using bacteria, animal cells or whole animals.

CARCINOGENICITY (see cancer lists below):
No increased incidence of tumors was observed in mice following a lifetime skin painting study.

p-Toluene sulfonic acid
LD50/LC50:
Single exposure (acute) studies indicate that this material is slightly toxic if swallowed (rat LD50 1,410-2,480 mg/kg), severely irritating to rabbit eyes and corrosive to rabbit skin.

Cancer Lists

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen
Carbon	No	No	No
Coke (petroleum)	No	No	No
p-Toluene sulfonic acid	No	No	No

Health Effects

Hazardous components	Health Effects / Target Organs
p-Toluene sulfonic acid	Moderately toxic skin irritant

12. ECOLOGICAL INFORMATION

Ecotoxicological Information
Data available for this material and/or its components are summarized below:

General Product Information:
No information available for the product.

Component Data:
Not available

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of in an approved landfill if allowed locally. Dispose of in a permitted waste management facility if landfill is not practical.

Recover, reclaim or recycle when practical. Dispose of in accordance with federal, state and local regulations. Empty containers retain product residue. Note: Chemical additions to, processing of, or otherwise altering this material may render information in this document to be incomplete, inaccurate or otherwise inappropriate for waste management purposes. Furthermore, state and local waste disposal requirements may be more restrictive or otherwise different from federal laws and regulations.

Disposal Regulatory No EPA Waste Numbers are applicable for this product's components.

It is the responsibility of the waste generator to determine if the waste meets the definition of a hazardous waste as promulgated at 40 CFR Part 261 subpart C.

14. TRANSPORT INFORMATION

U.S. Department of Transportation Ground (49 CFR)
Proper shipping name: Not regulated

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

SARA 311/312: Acute hazard

Applicable component data listed below:

TSCA 12(b) Export Notification None listed

CERCLA/SARA Section 302 EHS None listed

Section 304 EHS RQ None listed

CLCRA RQ None listed

Section 313 None listed

RCRA CODE None listed

CAA 1129(r) TQ None listed

State Regulations

State Lists (Components on one or more lists)	CA	NJ	PA	RI	NY	MA	MN
Carbon	No	No	No	Yes	No	No	No
p-Toluene sulfonic acid	No	Yes	Yes	No	No	Yes	No

California Proposition 65
This product contains the following chemicals known to the State of California to cause cancer or reproductive toxicity:

None Listed

Canada Regulatory Information

	WHMIS Status	Hazard class(s)
Carbon	Uncontrolled	
p-Toluene sulfonic acid	Disclosure (1.0%)	E

16. OTHER INFORMATION

Revision Information

Revision Date: 4/6/2011
Supersedes Revision Dated: 9/1/2009
Revision Number: 4.000
Revision Summary: New format, formula revision

Key: NE = Not Established, NA = Not Applicable

State Lists reviewed (Sec. 15):
CA Title 8, §339. The Hazardous Substances List
NJ Right to Know Hazardous Substance List
PA Chapter 323. Hazardous Substance List
RI Rhode Island Hazardous Substance List
NY Part 597: List of Hazardous Substances
MA Massachusetts Oil and Hazardous Material List
MN 5206.400 Hazardous Substances

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