


# SAFETY DATA SHEET

## AF-xx-3302, AF-xx-3305, AF-xx-3310, AF-xx-3311-BB, AF-xx-3312, AF-xx-3312-BB, AF-xx-3314-BB

(Layered Cartridge of SlowPhos® and Coconut Shell Granular Activated Carbon)

Effective date 1 January 2021

SECTION 1: Identification	
<b>1A: Product Names</b>	AF-10-3302, AF-10-3305, AF-20-3310, AF-20-3312, AF-10-3311-BB, AF-10-3312-BB, AF-20-3312-BB, AF-20-3314-BB
<b>1B: Common Name</b>	Layered Cartridge of: SlowPhos® (Sodium Calcium polyphosphate, sodium polyphosphates, glassy) and Coconut Shell Granular Activated Carbon
<b>1C: Intended use</b>	Carbon- Chlorine and organics removal from water SlowPhos® - Water treatment, corrosion and scale control
<b>1D: Manufacturer Address</b>	<b>Carbon</b> ResinTech, Inc. 1801 Federal Street, Camden, NJ 08105 USA <b>SlowPhos®</b> Pacific Standard Specialties, Inc 4151 E Quartz Circle Mesa, AZ 85215 US
<b>Contact Information:</b>	<b>Carbon</b> 856-626-1550 info@ariesfilterworks.com <b>SlowPhos®</b> 623-277-5160

SECTION 2: Hazard Identification	
<b>2A: OSHA Hazard classification</b> 0 = Negligible 1 = Slight 2 = Moderate 3 = High 4 = Extreme	Not hazardous or dangerous Health - 0 (0 = Negligible) Fire - 1 (1 = Slight) Reactivity - 0 (0 = Negligible) Special - N/A
 <b>WARNING</b>	(contains granular activated carbon) H320: Causes eye irritation (Category 2B) H335: May cause respiratory irritation (Category 3)* * chronic risk from breathing dust

SECTION 2: Hazard Identification Continued	
<b>Precautionary Statements</b>	P261: Avoid breathing dust/fume/gas/mist/vapors/spray P264: Wash hands thoroughly after handling. P280: Wear protective gloves/protective clothing/eye protection/face protection P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. P333+313: If skin irritation or a rash occurs: Get medical advice/attention. P337+313: If eye irritation persists get medical advice/attention. P403+233: Store in a well-ventilated place. Keep container tightly closed.
<b>2B: Product description</b>	Carbon - Black irregular pieces with little or no odor. SlowPhos®- Slowly soluble glassy polyphosphate
<b>2C: Precautions for use</b>	Carbon- Safety glasses and gloves recommended. Wet carbon adsorbs oxygen from air and can cause a hazard in confined spaces. Avoid breathing dust when handling dry carbon. Dust mask or respirator recommended for poorly ventilated spaces. SlowPhos®- This product does not meet the regulatory definition of a hazardous substance. However, good industrial hygiene practices should be used in handling it.

## SECTION 2: Hazard Identification Continued

<b>Potential health effects</b>	Carbon- Will cause eye irritation. Ingestion is not likely to pose a health risk. Dust may be mildly irritating. SlowPhos®- Prolonged contact may cause drying of the skin. Handle with care as some sharp edges may cut. Inhalation of the dust may cause coughing and sneezing. No adverse health effects are expected if only small amounts are swallowed. Swallowing large amounts may cause abdominal discomfort and diarrhea.
<b>2D: Environmental effects</b>	Carbon- Little or none. SlowPhos®- This material is not expected to produce any significant adverse environmental effects when recommended use instructions are followed.

## SECTION 3: Composition/ Information on Ingredients

<b>3A: Chemical name</b>	Granular Activated carbon and Sodium Calcium polyphosphate, sodium polyphosphates, glassy
<b>3B: Ingredients: Water</b>	Carbon- CAS# 7732-18-5 (2 – 20%)
<b>Granular activated carbon</b>	CAS# 7440-44-0 (80 - 98%)
<b>Polyphosphoric acids, sodium salts</b>	Trade Secrets
<b>Phosphoric acids, sodium salt</b>	Trade Secrets

## SECTION 4: First Aid Measures

<b>4A: Inhalation</b>	Carbon - Dust may be mildly irritating to the upper respiratory tract. SlowPhos®- Not an expected route of entry. Avoid breathing dust. If inhaled, remove to fresh air. Inhalation of the dust may cause coughing and sneezing.
<b>4B: Skin</b>	Carbon- Wash with soap and water - seek medical attention if a rash develops. SlowPhos®- Avoid prolonged or repeated contact with skin. After handling, always wash hands thoroughly with soap and water. Get medical attention if irritation develops.

<b>SECTION 4: First Aid Measures</b>	
<b>4C: Eye contact</b>	<p>Carbon- Wash immediately with water - seek attention if discomfort continues.</p> <p>SlowPhos®- Rinse eyes immediately with plenty of water. Get medical attention if irritation occurs.</p>
<b>4D: Ingestion</b>	<p>Carbon- No adverse effects expected for small amounts, larger amounts can cause stomach irritation. Seek medical attention if discomfort occurs.</p> <p>SlowPhos®- Not an expected route of entry. Immediate first aid is not likely to be required. No significant health effects are expected if only a small amount (less than a mouthful) are swallowed. If large quantities of this material are swallowed, give 2-3 glasses of water to drink and call a physician immediately. Do not induce vomiting unless directed to do so by medical personnel. Do not give anything by mouth to an unconscious person.</p>

<b>SECTION 5: Fire Fighting Measures</b>	
<b>5A: Flammability</b>	NFPA Fire rating = 1
<b>5B: Extinguishing media</b>	Water, CO <sub>2</sub> , foam, dry powder
<b>5C: Fire fighting Procedures</b>	Follow general fire fighting procedures indicated in the work place.
<b>5D: Protective Equipment</b>	MSHA/NIOSH approved self-contained breathing gear, full protective clothing.
<b>5E: Combustion Products</b>	Carbon oxides and other toxic gasses and vapors.
<b>5F: Unusual Hazards</b>	Product is not combustible until moisture is removed. Resin begins to burn at approximately 230° C. Auto ignition can occur above 500° C.

<b>SECTION 6: Accidental Release Measures</b>	
<b>6A: Personal Precautions</b>	Wear gloves and safety glasses to minimize skin or eye contact. Spilled material may present slipping hazard.
<b>6B: Incompatible Chemicals</b>	Strong oxidants can create risk of combustion products similar to burning.
<b>6C: Environmental Precautions</b>	Keep out of public sewers and waterways.
<b>6D: Containment Materials</b>	Use plastic, paper, or metal containers.
<b>6E: Methods of Clean-up</b>	Sweep up material and transfer to containers.

<b>SECTION 7: Handling and Storage</b>	
<b>7A: Handling</b>	Avoid prolonged skin contact. Minimize dust generation and accumulation. Do not breathe dust. Avoid contact with skin and eyes. Handle with care as some sharp edges may cut. Wash thoroughly after handling. Keep product dry until use; product will hydrolyze when in contact with moisture.
<b>7B: Storage</b>	Store in a dry place (0° to 50° C) in the original shipping container. This product is not thermally sensitive. Freezing does not damage granular carbon. SlowPhos®- Store in a cool, dry place to maintain product performance. Keep containers tightly closed. Keep dry and protect product from moisture until use; product will hydrolyze when in contact with moisture. Do not store together with strong oxidizing agents, strong acids, or strong bases. Keep away from heat.
<b>7A: TSCA considerations</b>	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 measures.

## SECTION 8: Exposure Controls/Personal Protection

<p><b>8A: Control parameters</b></p>	<p>OSHA and ACGIH have not established specific exposure limits for this mixture. However, OSHA and ACGIH have established limits for particulates not otherwise regulated (PNOR) and particulates not otherwise classified (PNOC) which are the least stringent exposure limits applicable to dusts.</p>						
	<table border="1"> <thead> <tr> <th data-bbox="846 428 1162 478">ACGIH TLV</th> <th data-bbox="1162 428 1469 478">OSHA PEL</th> </tr> </thead> <tbody> <tr> <td data-bbox="846 478 1162 558">10 mg/m<sup>3</sup> nuisance dust -Inhalable particulate</td> <td data-bbox="1162 478 1469 558">15 mg/m<sup>3</sup> -total dust</td> </tr> <tr> <td data-bbox="846 558 1162 638">3 mg/m<sup>3</sup> nuisance dust -respirable particulate</td> <td data-bbox="1162 558 1469 638">5 mg/m<sup>3</sup> -nuisance dust respirable particulate</td> </tr> </tbody> </table>	ACGIH TLV	OSHA PEL	10 mg/m <sup>3</sup> nuisance dust -Inhalable particulate	15 mg/m <sup>3</sup> -total dust	3 mg/m <sup>3</sup> nuisance dust -respirable particulate	5 mg/m <sup>3</sup> -nuisance dust respirable particulate
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<p><b>8B: Exposure controls</b></p>	<p>Engineering Measures: Use process enclosures, local exhaust ventilation, or others engineering controls to keep airborne levels below recommend exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.</p>						
<p><b>Personal Protective Measures:</b></p>	<p>Eye Protection: This product does not present a significant eye irritation or eye toxicity requiring special protection. Use good industrial practice to avoid eye contact. Wearing protective glasses or goggles are recommended.</p> <p>Hand Protection: Although this product does not present a significant skin concern, minimize skin contamination by following good industrial practice. Material may have some sharp edges; wearing protective gloves is recommended. Wash hands and any other contact points after handling.</p> <p>Respiratory Protection: None required when product is used normally. Avoid breathing dusts. Use MSHA/OSHA approved respiratory protection equipment when airborne exposure limits are exceeded.</p>						
<p><b>Hygiene Measures:</b></p>	<p>Wear appropriate clothing and gloves to minimize skin contact. Do not eat, drink, or smoke in the work area. Clean skin thoroughly after work; apply skin cream.</p>						
<p><b>Environmental Exposure Controls:</b></p>	<p>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.</p>						

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<b>SECTION 9: Physical and Chemical Properties</b>	
<b>Appearance</b>	Carbon- Irregular black granular pieces. SlowPhos- Glassy beads or crystals
<b>Flammability or explosive limits</b>	Carbon- Flammable above 500° C
<b>Odor</b>	None
<b>Physical State</b>	Carbon- Solid
<b>Vapor pressure</b>	N/A
<b>Odor threshold</b>	N/A
<b>Vapor density</b>	N/A
<b>pH</b>	Carbon - Near neutral (6 to 8 typical) SlowPhos- 6.5 – 7.5 (1% Solution)
<b>Density</b>	Carbon- (Relative) Approx 400 grams/Liter SlowPhos- (Bulk) 1.67 g/mL (approx. 14 lb/gal, 104.25 lb/ft <sup>3</sup> as beads)
<b>Melting point/freezing point</b>	Does not melt, freezes at approx. 0 C
<b>Solubility</b>	Carbon- Insoluble in water and most solvents SlowPhos - Water Appreciable
<b>Boiling point</b>	Does not boil
<b>Flash point</b>	Approx 500° C
<b>Evaporation rate</b>	Does not evaporate
<b>Partition Coefficient (n-octanol/water)</b>	N/A
<b>Auto-ignition temperature</b>	Carbon - >220° C
<b>Decomposition temperature</b>	Carbon- Above 220° C
<b>Viscosity</b>	N/A

<b>SECTION 10: Stability and Reactivity</b>	
<b>10A: Stability</b>	Stable under normal conditions.
<b>10B: Conditions to Avoid</b>	Wet carbon adsorbs oxygen from air. Contact with strong oxidizing agents can cause rapid combustion. SlowPhos® – Dusting conditions; extreme humidity or moisture, excess heat
<b>10C: Hazardous by-products</b>	Carbon oxides, sulfur oxides, chlorinated hydrocarbons.
<b>10D: Incompatible materials</b>	Strong oxidizing agents (such as HNO <sub>3</sub> ), strong acids and strong bases

## SECTION 10: Stability and Reactivity

### 10E: Combustion Products

Carbon - Does not occur.

SlowPhos® - Oxides of phosphorous, sodium, calcium, and magnesium.

## SECTION 11: Toxicological Information

### 11A: Information on toxicological effects

No classification. This product does not meet the regulatory definition of a hazardous substance according to 29 CFR 1910. No toxicity studies have been conducted by the manufacturer. Information is based on Product Test Data, Ingredient Data, or Data Based on Testing of Similar Materials.

### Acute Toxicity:

Inhalation: May cause irritation to the respiratory tract. Symptoms may include coughing, sneezing, chest pain, runny nose and burning throat. Inhalation of product may aggravate existing chronic respiratory disease.

Ingestion: No adverse health effects are expected if only small amounts are swallowed. Swallowing large amounts may cause abdominal discomfort and diarrhea. Symptoms may include nausea, vomiting and diarrhea.

Skin contact: May cause mild irritation to skin. Symptoms may include redness and burning. Prolonged contact with the dry material may cause dryness or cracking of the skin.

Eyes contact: May cause irritation to eyes. Symptoms may include stinging, tearing, redness and swelling. Dust have a dehydrating effect.

Sensitization: Not expected to be a sensitizer.

Bisphenol A (BPA): BPA is not used in the production this material and is not intentionally added with any additives used in the manufacture of this material.



## SECTION 11: Toxicological Information

<b>Chronic toxicity:</b>	<p>Carcinogenicity: Classification for carcinogenicity is not warranted. This product does not contain any substances that are considered by IARC, NTP, OSHA, EU or ACGIH to be “probable” or “suspected” human carcinogens.</p> <p>Mutagenicity: Classification for mutagenicity is not warranted.</p> <p>Reproductive toxicity: Classification for reproductive toxicity is not warranted.</p> <p>Specific target organ toxicity (single exposure): Classification for specific target organ toxicity is not warranted.</p> <p>Specific target organ toxicity(repeated exposure): Classification for specific target organ toxicity is not warranted.</p> <p>Aspiration hazard: Based on available data, the classification criteria are not met.</p>
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## SECTION 12: Ecological information

<b>12A: Eco toxicity</b>	Not harmful to plant or animal life.
<b>12B: Mobility</b>	<p>Carbon - Insoluble.</p> <p>SlowPhos® - Soluble in water. Inorganic compounds in contact with the soil, sub-surface or surface waters may be taken up by plants and utilized as essential nutrients. Phosphates may also form precipitates, usually with calcium or magnesium. The resultant compounds are insoluble in water and become a part of the soil or sediment.</p>
<b>12C: Biodegradability</b>	<p>Carbon - Not biodegradable.</p> <p>SlowPhos® - Not applicable, since inorganic substance.</p> <p>Degradability in sewage works: Slow hydrolysis to orthophosphate form.</p>
<b>12D: Bioaccumulation</b>	Insignificant.
<b>12E: Other adverse effects</b>	Not Harmful to the environment.

<b>SECTION 13: Disposal Considerations</b>	
<b>13A: General considerations</b>	Material is non-hazardous.
<b>13B: Disposal Containers</b>	Most plastic and paper containers are suitable.
<b>13C: Disposal methods</b>	No specific method necessary.
<b>13D: Sewage Disposal</b>	Not recommended
<b>13E: Precautions for incineration</b>	May release organic amines and toxic vapors when burned.
<b>13F: Precautions for landfills</b>	Resins used to remove hazardous materials may then become hazardous mixtures.

<b>SECTION 14: Transportation Information</b>	
<b>14A: Transportation Class</b>	Not classified as a dangerous good for transport by land, sea, or air.
<b>14B: TDG</b>	Not regulated.
<b>14C: IATA</b>	Not regulated.
<b>14D: DOT (49 CFR 172.101)</b>	Not regulated.
<b>14E: IMDG</b>	Not regulated.

<b>SECTION 15: Regulatory Information</b>	
<b>15A: CERCLA</b>	Not regulated
<b>15B: SARA Title III</b>	Not regulated
<b>15C: Clean Air act</b>	Not regulated
<b>15D: Clean Water Act</b>	Not regulated
<b>15E: TSCA</b>	Not regulated
<b>15F: Canadian Regulations</b>	WHMIS - Not a controlled product TDG - Not regulated
<b>15G: Mexican Regulations</b>	Not Dangerous

<b>SECTION 16: Other Information</b>	
<p>This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features. Regulatory requirements are subject to change and may differ from one location to another. It is the buyer's responsibility to ensure that their activities comply with federal, state, and local laws.</p>	
<b>16A: Date of Revision</b>	1 January 2021