Safety Data Sheet

according to the federal final rule of hazard communication revised in 2012 (HazCom 2012)

SECTION 1. Identification of the substance or mixture and of the supplier			
SECTION 1: Identification of the substance or mixture and of the supplier			
1.1. Product identifier Trade name	: Odorkol [®] AM Media		
Product code	: PUR-014		
1.2. Relevant identified uses of the subs	stance or mixture and uses advised against		
Recommended use	: Dry granular medium for use in gas-phase air filtration		
Restrictions of use	: Only use for the intended purpose.		
	 The product is not intended to remove dangerous particulates or biological agents. The product is not intended to purify water. 		
	. The product is not intended to pully water.		
1.3. Details of the supplier of the safety	data sheet		
Manufacturer	: Purafil, Inc.		
	2654 Weaver Way		
	Doraville, Georgia 30340 USA Tel: +1-770-662-8545, +1-800-222-6367 (toll-free within the USA & Canada)		
	Fax: +1-770-263-6922		
	www.purafil.com		
1.4. Emergency telephone number CHEMTREC	: For Hazardous Materials [or Dangerous Goods] Incident		
CHEMINEC	Spill, Leak, Fire, Exposure, or Accident		
	Call CHEMTREC Day or Night		
	Within USA and Canada: 1-800-424-9300 CCN723586		
	Outside USA and Canada: +1-703-741-5970 (collect calls accepted)		
Purafil, Inc.	: +1-770-662-8545, +1-800-222-6367 (toll-free within the USA and Canada)		
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2.3. Other hazards

May cause respiratory irritation. Special danger of slipping by leaking/spilling product. The components in this mixture do not meet the criteria for classification as PBT or vPvB.

2.4. Unknown acute toxicity (GHS-US)

No data available.

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SECTION 3: Composition/information on ingredients			
Name	Product identifier	%	GHS-US classification
Carbon (C)	(CAS No) 7440-44-0	60 - 90	Not classified
Phosphoric acid (H3PO₄)	(CAS No) 7664-38-2	2 – 8	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318

SECT	ION 4: First aid measures		
4.1.	Description of first aid measures		
Genera		First aider: Pay attention to self-protection!	
After inl	halation	Provide fresh air. In case of respiratory tract irritation, consult a physician.	
After contact with skin :		After contact with skin, wash immediately with water and soap. Change contaminated clothing. If the product contacts the skin with water, it may leave a stain of insoluble products on the skin. This stain will be washed away/rubbed off over a period of time (hours to days). If skin irritation or rash occurs: Get medical advice/attention.	
After co	ntact with eyes :	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.	
After in	gestion :	If swallowed, rinse mouth with water (only if the person is conscious). Call a physician immediately.	
4.2.	Most important symptoms and effects		
		 Following inhalation: Coughing, asthmatic complaints. Repeated and prolonged contact may aggravate asthma and dermatitis. After skin contact: Irritation and reddening. Skin rashes. Following eye contact: Irritation and reddening. Causes serious eye irritation. After ingestion: May cause irritation of the gastrointestinal mucosa, abdominal pain, vomiting and diarrhea. 	
4.3.		ttention and special treatment needed	
		Treat symptomatically.	
SECT	ION 5: Firefighting measures		
5.1.	Extinguishing media		
		Coordinate firefighting measures to the fire surroundings.	
Unsuita	ble extinguishing media :	None known.	
5.2.	Special hazards arising from the subs	tance or mixture	
U.L.	:	 The material is not combustible. When involved in a fire, carbon monoxide, carbon dioxide, and hydrogen may be produced. Explosive dust-air mixtures may form. 	
5.3.	Advice for firefighters		
		Wear NIOSH approved self-contained breathing apparatus and chemical protective clothing.	
5.4.	Additional information		
	:	 Suppress gases/vapors/mists with water spray jet. Contaminated firefighting water must be collected separately. Do not allow to enter into surface water or drains. 	
SECT	ION 6: Accidental release measu	ires	
6.1.	Personal precautions, protective equi		
		Provide adequate ventilation. Avoid generation of dust. Do not breathe dust. Avoid contact with skin, eyes and clothes. Wear personal protection equipment.	
6.2.	Environmental precautions		
	:	Do not allow to enter into surface water or drains. If contacted by water, the leachate may be corrosive (pH >9).	
6.3.	Methods and material for containment		
		prescribed in section 13 on waste disposal.	

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6.4.	Reference to other sections	
		: Protection measures in accordance with section 8.
		: Disposal in accordance with section 13.
SECTI	ON 7: Handling and storage	
7.1.	Precautions for safe handling	
Advice o	n safe handling	: Avoid generation of dust. Use air conveying (vacuum) for bulk removal. If manual handling is used for transfer (from vessel, slingbags, boxes, or pails), use mechanical ventilation or other measures to remove airborne dust.
7.2.	Conditions for safe storage, includin	g any incompatibilities
Requirer	nents for storage rooms and vessels	 Store only in original container. Keep container tightly closed in a cool, well-ventilated place. Protect from water and exposure to contaminated air (gaseous, particulate, and aerosol contaminated), otherwise the product may be rendered useless.
Further in	nformation on storage conditions	 Recommended packaging materials: Corrugated double wall boxes with plastic liners. Injection molded polystyrene pails and lids including a neoprene seal.
7.3.	Specific end use(s)	

: Dry granular medium for use in gas-phase air filtration.

SECTION 8: Exposure controls/personal protection

3.1.	Control parameters			
Phosp	horic acid (7664-38-2)			
ACGIH ACGIH TWA (mg/m ³)		ACGIH TWA (mg/m ³)	1 mg/m ³	
ACGIH	l	ACGIH STEL (mg/m³)	3 mg/m ³	
OSHA OSHA PEL (TWA) (mg/m³)		OSHA PEL (TWA) (mg/m³)	1 mg/m ³	
0.0				
8.2.	Exposure controls			
Appropri	propriate engineering controls : If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not		ents with local exhaust ventilation have to be used. Do not	

	breathe dust.
Protective and hygiene measures	Remove contaminated, saturated clothing immediately. After work, wash hands and face.When using, do not eat or drink.
Eye and face protection	: Tightly fitting safety glasses with side shields.
Hand protection	 Protect skin by using skin protective cream. Wear suitable gloves. Suitable material: NR (natural rubber (India rubber, caoutchouc), natural latex). Thickness of glove material: >= 0.1 mm Penetration time (maximum wearing period): >480 Min. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.
Skin protection	: Full cover clothing covering arms and legs.
Respiratory protection	: In exceptional situations (e.g., accidental release of substances, occupational exposure limit is exceeded) the wearing of respiratory protection is required. Observe the wear time limits.

Dust mask: NIOSH			and a share share the state	
Dust mask. NOOL	11333, 100	Fillincau		

9.1. Information on basic physical and chemical properties		
Physical state (appearance)	: Solid extruded pellets or granules, ¹ / ₁₆ - ¹ / ₄ " (1.6 - 6.4 mm)) in diameter
Color	: Dark gray to black	
Odor	: No specific odor	
Odor threshold	: No data available	
рН	: ca. 3.0	
Changes in the physical state		
Melting point/freezing point	: No data available	
Initial boiling point and boiling range	: No data available	
Flash point : No data available		
Evaporation rate	: No data available	
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Flammability	
Solid	: Not flammable under normal use conditions
Upper/lower flammability	: No data available
Explosive properties	
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Ignition temperature	: No data available
Auto-ignition temperature	
Solid	: No data available
Decomposition temperature	: No data available
Vapor pressure	: No data available
Vapor density	: No data available
Relative density	: ca. 40 lb/ft ³ , 0.6410 g/cc, 641 kg/m ³
Water Solubility	: Partially soluble
Solubility in other solvents	: No data available
Soluble in	: Concentrated acids
Partition coefficient	
n-octanol/water	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
9.2 Other information	

9.2. Other information

: No data available.

SECT	ON 10: Stability and reactivity	
10.1.	Reactivity	
		: No dangerous reactivity under normal conditions.
10.2.	Chemical stability	
		: The product is stable under normal conditions.
10.3.	Possibility of hazardous reactions	
		: May occur in contact with: acids, strong oxidizing agents.
10.4.	Conditions to avoid	
		: Liquid water, moisture. Heat sources, open flames and other ignition sources.
10.5.	Incompatible materials	
		: Acids, strong oxidizing agents.
10.6.	Hazardous decomposition products	
		: Carbon monoxide, carbon dioxide, and hydrogen may be generated during combustion of this material. Corrosive fumes may be liberated if involved in a fire.
SECT	ON 11: Toxicological informati	on

11.1. Information on toxicological eff	ects		
Carbon (7440-44-0)			
LD ₅₀ oral rat	> 10,000 mg/kg		
Phosphoric acid (7664-38-2)			
LD ₅₀ oral rat	1,530 mg/kg		
LD ₅₀ dermal rabbit	2,740 mg/kg		
ATE US (oral)	1,530.000 mg/kg bodyweight	1,530.000 mg/kg bodyweight	
ATE US (dermal)	2,740.000 mg/kg bodyweight	2,740.000 mg/kg bodyweight	
Acute toxicity	: Based on available data, the clas	ssification criteria are not met.	
Irritation and corrosivity: Causes serious eye irritation (GHS: Skin Irrit. 2).: Causes skin irritation (GHS: Eye Irrit. 2A).			
Sensitizing effects	: Based on available data, the classification criteria are not met.		
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STOT-single exposure	: Based on available data, the classification criteria are not met.
Severe effects after repeated or prolonged exposure	: Based on available data, the classification criteria are not met.
Carcinogenic/mutagenic/toxic effects for reproduction	: Based on available data, the classification criteria are not met.
Aspiration hazard	: Based on available data, the classification criteria are not met.

SECT	SECTION 12: Ecological information		
12.1.	Toxicity		
Acute D	Paphnia toxicity	: No data available.	
Algae to	oxicity	: No data available.	
12.2. Persistence and degradability			
		: No data available.	
12.3.	Bioaccumulative potential		
		: No data available.	
12.4.	Mobility in soil		
		: No data available.	
12.5.	Results of PBT and vPvB assessmen	t	
		: The components in this mixture do not meet the criteria for classification as PBT or vPvB.	
12.6.	Other adverse effects		
		: No data available.	
SECTION 13: Disposal considerations			
13.1.	Waste treatment methods		
Advice	on disposal	: Waste disposal should be in accordance with existing federal, state, and local environmental control regulations. Spent media that has removed toxic chemicals should be examined for specific hazards. Spilled product may be recovered for use if it has not come in contact with liquid, changed color, or been exposed to significant amounts of gaseous contaminants.	

Disposal of residues/unused products	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to an approved waste disposal plant. Avoid release to the environment.
Dispassi of poskaging	. Dispass in a sofe menner in assortance with least/actional regulations. Dispass of

Disposal of packaging	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to an approved waste disposal plant. Avoid release to the environment.
SECTION 14: Transport information	
14.1.Land transport (DOT)UN numberUN proper shipping nameTransport hazard classesPacking groupMarine pollutant	 None on finished product. Not regulated. None on finished product. None on finished product. No
14.2.Water transport (IMDG / IMO)UN numberUN proper shipping nameTransport hazard classesPacking groupMarine pollutant	 None on finished product. Not regulated. None on finished product. None on finished product. No
14.3. Air transport (IATA / ICAO) UN number UN proper shipping name Transport hazard classes Packing group Marine pollutant	 None on finished product. Not regulated. None on finished product. None on finished product. No
14.4.Environmental hazardsEnvironmentally hazardous	: No

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SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Phosphoric acid (7664-38-2)

RQ (Reportable quantity, section 304 of EPA's List of Lists) 5,000 lb

15.2. International regulations

CANADA

Carbon (7440-44-0)

Listed on the Canadian DSL (Domestic Substances List)

Uncontrolled product according to WHMIS classification criteria

Phosphoric acid (7664-38-2)

		-	
Listed on the	Canadian DS	SL (Domestic Substances Lis	st)
WHMIS Clas	sification		

Class E - Corrosive Material

EU-Regulations

Carbon (7440-44-0)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Phosphoric acid (7664-38-2)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

15.2.2. National regulations

Carbon (7440-44-0)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Phosphoric acid (7664-38-2)

Listed on the AICS (Australian Inventory of Chemical Substances) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory Listed on the Korean ECL (Existing Chemicals List) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the Canadian IDL (Ingredient Disclosure List)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm. SECTION 16: Other information

Abbreviations and acronyms:

 $\begin{array}{l} \textbf{ACGIH:} \mbox{ American Conference Of Governmental Industrial Hygienists} \\ \textbf{ATE:} acute toxicity estimate} \\ \textbf{CAS:} \mbox{ Chemical Abstracts Service} \\ \textbf{CLP:} \mbox{ Classification, Labeling, Packaging} \\ \textbf{DOT:} \mbox{ United States Department of Transportation} \\ \textbf{DNEL:} \mbox{ Derived No Effect Level} \\ \textbf{EC}_{50}: \mbox{ median effective concentration for immobilization} \\ \textbf{ErC}_{50}: \mbox{ effective concentration of a substance that causes 50% reduction in growth rate} \\ \textbf{GHS:} \mbox{ Globally Harmonized System of Classification and Labeling of Chemicals} \\ \textbf{IATA:} \mbox{ International Air Transport Association} \\ \textbf{ICAO:} \mbox{ International Maritime Code for Dangerous Goods} \\ \textbf{IMO:} \mbox{ International Maritime Organization} \\ \end{tabular}$

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LC₅₀: Lethal concentration, 50% of test population OECD: Organization for Economic Co-operation and Development LD₅₀: Lethal dose, 50% of test population PNEC: Predicted No Effect Concentration STOT: Specific Target Organ Toxicity TLV: Threshold Limiting Value TWA-TLV: Threshold Limit Value for the Time Weighted Average 8 hour day (ACGIH Standard)

Full text of H-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.