

SECTION 1: Identification of the substance or mixture and of the supplier

1.1. Product identifier

Trade name : Purakol® HG Media
Product code : PUR-038

1.2. Relevant identified uses of the substance 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.

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
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)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin Irrit. 2 H316
Eye Irrit. 2A H319
Respiratory Irrit. 3 H335

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



GHS07

Signal word (GHS-US) : Warning
Hazard statements (GHS-US) : H316 - Causes mild skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
Precautionary statements (GHS-US) : P261 - Avoid Breathing: dust/fume/gas/mist/vapor/spray
P264 - Wash hands thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear eye protection, protective clothing, protective gloves
P302+P352 - If on skin: Wash with plenty of water
P304+P340 - If inhaled/Remove to fresh air
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313 - If eye irritation persists: get medical advice/attention
P403+P233 - Store in well ventilated place. Keep container tightly closed
P405 - Store locked up
P501 - Dispose container to appropriate receptacle

2.3. Other hazards

High airborne dust concentrations may pose an explosion hazard.
Entering containers or media vessels/tanks for inspection, maintenance, etc. that contain activated carbon may constitute a confined space entry. Activated carbon may remove oxygen from the air causing severe hazards for workers entering such spaces. Before and during the entrance of a confined space all local, state, and federal regulations should be followed.
May cause respiratory irritation.
Special danger of slipping on spilled 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.

SECTION 3: Composition/information on ingredients

Name	Product identifier	%	GHS-US classification
Carbon (C)	(CAS No) 7440-44-0	≥85	Not classified
Sulfur (S)	(CAS No) 7704-33-9	≤15	Not classified

SECTION 4: First aid measures**4.1. Description of first aid measures**

- General information : First aider: Pay attention to self-protection!
- After inhalation : Provide fresh air. In case of respiratory tract irritation, consult a physician.
- After contact with skin : After contact with skin, wash with water and soap. Change contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
- After contact 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 ingestion : If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. Get medical advice/attention..

4.2. Most important symptoms and effects, both acute and delayed

- : 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. Indication of any immediate medical attention and special treatment needed

- : Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable extinguishing media : If involved in a fire, flood with plenty of water. Coordinate firefighting measures to the fire surroundings.

Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

- : The material is combustible. When involved in a fire, carbon monoxide, carbon dioxide, sulfur oxides, and other sulfur gases 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.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

- : 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

- : None known.

6.3. Methods and material for containment and cleaning up

- : Pick up dry. Take up mechanically. Avoid generation of dust. Treat the recovered material as prescribed in section 13 on waste disposal.

6.4. Reference to other sections

- : Protection measures in accordance with section 8.
- : Disposal in accordance with section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling : Avoid generation of dust and prolonged contact with eyes and skin. 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, including any incompatibilities

Requirements 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 information 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

8.1. Control parameters

Carbon (7440-44-0)

OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)
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8.2. Exposure controls

Appropriate engineering controls : If handled uncovered, arrangements with local exhaust ventilation have to be used. Avoid breathing 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 : Dust mask: NIOSH N95; identification color: white. Observe the wear time limits.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state (appearance) : Solid, extruded cylindrical pellets or granules, 1/16 - 1/4" (1.6 – 6.4 mm) in diameter

Color : Black
Odor : No specific odor
Odor threshold : No data available
pH : No data available

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

Flammability

Solid : Combustible
Upper/lower flammability : No data available

Explosive properties

Lower explosion limit	: No danger of explosion under normal conditions, high concentrations of carbon dust in the air
Upper explosion limit	can form an explosive dust/air mixture.
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	: 28-33 lb/ft ³ , 0.4485-0.5286 g/cc, 449-529 kg/m ³
Water Solubility	: Partially soluble
Solubility in other solvents	: No data available
Soluble in	: Insoluble
Partition coefficient	
n-octanol/water	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available

9.2. Other information : No data available.

SECTION 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 : Fire may occur in contact with strong oxidizing agents.

10.4. Conditions to avoid : Liquid water, moisture. Heat sources, open flames and other ignition sources.

10.5. Incompatible materials : Strong oxidizing agents.

10.6. Hazardous decomposition products : Carbon monoxide, carbon dioxide, sulfur oxides, and other sulfur gases may be generated during combustion of this material.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Carbon (7440-44-0)	
LD ₅₀ oral rat	> 10,000 mg/kg

Acute toxicity	: Based on available data, the classification criteria are not met.
Irritation and corrosivity	: Based on available data, the classification criteria are not met.
Sensitizing effects	: Based on available data, the classification criteria are not met.
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.

SECTION 12: Ecological information**12.1. Toxicity**

Acute Daphnia toxicity : No data available.

Algae toxicity : 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 assessment

: 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 liquids 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.

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 number : None on finished product.

UN proper shipping name : Not regulated.

Transport hazard classes : None on finished product.

Packing group : None on finished product.

Marine pollutant : No

14.2. Water transport (IMDG / IMO)

UN number : None on finished product.

UN proper shipping name : Not regulated.

Transport hazard classes : None on finished product.

Packing group : None on finished product.

Marine pollutant : No

14.3. Air transport (IATA / ICAO)

UN number : None on finished product.

UN proper shipping name : Not regulated.

Transport hazard classes : None on finished product.

Packing group : None on finished product.

Marine pollutant : No

14.4. Environmental hazards

Environmentally hazardous : No

14.5. Special precautions for user

: No special precautions known.

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.

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations**CANADA****Carbon (7440-44-0)**

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification

Uncontrolled product according to WHMIS classification criteria

EU-Regulations**Carbon (7440-44-0)**

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)

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:

ACGIH: American Conference Of Governmental Industrial Hygienists
ATE: acute toxicity estimate
CAS: Chemical Abstracts Service
CLP: Classification, Labeling, Packaging
DOT: United States Department of Transportation
DNEL: Derived No Effect Level
EC₅₀: median effective concentration for immobilization
ErC₅₀: effective concentration of a substance that causes 50% reduction in growth rate
GHS: Globally Harmonized System of Classification and Labeling of Chemicals

IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
IMDG: International Maritime Code for Dangerous Goods
IMO: International Maritime Organization
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:

Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Skin Irrit. 2	Skin corrosion/irritation Category 2
Respiratory Irrit. 3	May cause respiratory irritation
H316	Causes mild skin irritation
H319	Causes serious eye irritation
H335	Respiratory irritant Category 3

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.