

# **SAFETY DATA SHEET**

Version: 3.0 Date: April 2024

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878,

and United States Regulation 29 CFR 1910

	Section 1: Identification					
1.1	Product Identifier Product Name	PureAir 4, PureAir 8, PureAir 12				
	Product Code	PA 4, PA 8, PA 12				
1.2	Relevant identified uses of the substance or mixture and uses advised against					
	Identified Use(s)	Gas-phase air filtration				
	Uses Advised Against	Do not use for applications other than those specified.				
1.3	Company Identification Details of the supplier of the safety data sheet	Pure Air Filtration, LLC 6050 Peachtree Parkway Suite 240-187 Atlanta, GA 30092 USA  PureAir Filtration BV Tijnmuiden 79 1046 AK Amsterdam, The Netherlands				
	Telephone	+1 (678) 935-1431; Office Hours are Monday through Friday, 8:00AM to 5:00PM Eastern Standard Time				
	Fax	+1 (678) 935-0648				
	E-Mail	info@pureairfiltration.com				
1.4	Emergency telephone number	VelocityEHS 1-800-255-3924 (United States, Canada, Puerto Rico, U.S. Virgin Islands) +1-813-248-0585 (International, collect calls are accepted) 1-300-954-583 (Australia) 0-800-591-6042 (Brazil) 400-120-0751 (China) 000-800-100-4086 (India) 800-099-0731 (Mexico)  The line is available 24 hours; in the event of a medical enquiry involving this product, please contact your doctor or local hospital accident and emergency department.				
	Language(s) spoken:	English				



# Section 2: Hazard(s) Identification

2 1

Classification of the substance or mixture GHS-US and Regulation (EC) No. 1272/2008 (CLP) and most important hazards

This media is classified as not hazardous according to regulation (EC) 1272/2008 (CLP).

2.2

Label Element: According to Regulation (EC) No. 1272/2008 (CLP)	
Product Name: PureAir 4, PureAir 8, PureAir 12	
Contains: Aluminum Oxide, Potassium Permanganate proprietary blend	

## Hazard Pictogram(s)



Signal Word(s) Warning

Hazard Statements H315: Causes skin irritation; H319: Causes eye irritation.

Precautionary Statements P264: Wash hands thoroughly after handling

P280: Wear protective gloves and eye/face protection.

P303+P361+P353: IF ON SKIN or hair: Take off immediately all contaminated

clothing. Rinse skin with water.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. P332+P313: If skin irritation occurs: Immediately call a doctor. P337+P313: If eye irritation occurs: Immediately call a doctor. P362: Take off contaminated clothing and wash before reuse.

Supplemental Information

Other Hazards May

Not applicable

May cause respiratory irritation.

2.3

# Hazards not otherwise classified (HNOC) or not covered by GHS

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII. If crushed or handled extensively, dust may evolve which can cause irritation to eyes and respiratory tract.

Section 3: Composition/ Information on Ingredients									
Chemical Name	%W/W	CAS No.	EC No.	REACH Registration No.	Hazard Statement(s)				
Aluminum oxide	66-70	1344-28-1	215-691-6	01-2119529248-35-xxxx	Not Classified				
Potassium permanganate	4-12	7722-64-7	231-760-3	01-2119480139-34-xxxx	Ox. Sol. 2; H272 Acute Tox. 4; H302 Skin Corr. 1C; H314 Eye Dam. 1; H318 Repr. 2; H361d Aquatic Acute 1: H400 Aquatic Chronic 1; H410				

Note: For full text of H phrases see Section 16.



# Section 4: First-Aid Measures

#### 4.1

#### Description of first aid measures

**Self-protection of the first aider:** Use personal protective equipment as required. Wear suitable protective clothing and gloves. Avoid contact with skin, eyes, or clothing. Do not breathe dust. Do not ingest. Take off contaminated clothing and wash before reuse.

**IF ON SKIN (or hair):** Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Gently wash with plenty of soap and water. Call a doctor and/or poison control center.

**IF IN EYES:** Flush eyes with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. After rinsing affected eyes must be seen by an ophthalmologist. Call doctor and/or poison control center.

**IF INHALED:** If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a doctor and/or poison control center.

**IF SWALLOWED:** Do NOT induce vomiting. Do not give anything by mouth to an unconscious person. Immediately call a doctor and poison control center.

#### 4.2

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

Causes skin rashes and eye irritation and reddening. See Section 11 for additional Toxicological information.

#### 4.3

### Indication of any immediate medical attention and special treatment needed.

Notes to a physician: Treat symptomatically. IF IN EYES: Obtain prompt consultation, preferably from an ophthalmologist.

# **Section 5: Fire-Fighting Measures**

#### 5.1

## Suitable extinguishing media

As appropriate for surrounding fire. Extinguish with carbon dioxide, dry chemical, foam, or water spray. Alcohol resistant foams (ATC type) are preferred.

#### Unsuitable extinguishing media

Do not use water jets. Direct water jet may spread the fire.

#### 5.2

### Special Hazards arising from the substance or mixture

The material is not combustible. May form explosive dust/air mixtures. May decompose if heated. Not flammable but dust may support combustion.

#### Oxidizer characteristics

Contains an oxidizing substance (potassium permanganate). Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing and other combustible materials. In case of fire use water spray or fog, alcohol resistant foam, dry chemical or carbon dioxide.

#### 5.3

### Special protective equipment for firefighters

Fight fire with normal precautions from a reasonable distance. Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Do not allow run-off from fire-fighting to enter drains or water courses. All contaminated wastewater must be processed in an industrial or municipal wastewater treatment plant that incorporates both primary and secondary treatments.

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## Section 6: Accidental Release

#### 6.1

## Personal precautions, Protective Equipment, and Emergency Procedures

Ensure operatives are trained to minimize exposure. Ensure suitable personal protection during removal of spillages. Use personal protective equipment as required. See Section 8. Wear suitable protective clothing, gloves and eye/face protection. Avoid all contact. Avoid dust formation. Take off contaminated clothing and wash before reuse. Ensure adequate ventilation. Do not breathe dust. Do not ingest. If swallowed, then seek immediate medical assistance. In case of leakage, eliminate all ignition sources. Keep away from heat, hot surfaces, sparks, open flame and other ignition sources. No smoking.

### Small spillages

Avoid exposure. Clean up spill immediately.

### Oxidizer characteristics

Contains an oxidizing substance (potassium permanganate). Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing and other combustible materials. In case of fire use water spray or fog, alcohol resistant foam, dry chemical, or carbon dioxide.

#### 6.2

### **Environmental precautions**

Collect spillage. Avoid release to the environment. Do not allow to enter drains, sewers, or watercourses.

#### 6.3

### Methods and material for containment and cleaning up

Do not mix with combustible material. Provided it is safe to do so, isolate the source of the leak. Dry sweeping is not recommended. If necessary, light water spray will reduce dust for dry sweeping, but over-wetting may produce very slippery walking surfaces. Transfer to a container for disposal. Use vacuum equipment for collecting spilt materials, where practicable.

## **Small Spillages**

Sweep up spilled substance and remove to safe place. Do not use saw dust. Avoid dust generation. Damp down to avoid dust generation.

#### 6.4

#### Reference to other sections

See also Section 8, 13

# **Section 7: Handling and Storage**

#### 7.1

## Precautions for safe handling

Ensure operators are trained to minimize exposures. Use personal protective equipment as required.

See Sectio 8. Wear suitable protective clothing, gloves, and eye/face protection. Avoid all contact. Ensure adequate ventilation. In case of inadequate ventilation wear respiratory protection. Do not eat, drink, or smoke when using this product. Wash hands before breaks and after work.

### Oxidizer characteristics

Contains an oxidizing substance (potassium permanganate). Do not store near combustible materials. Do not mix with combustible material. Take precautionary measures against static discharge.

#### 7.2

## Conditions for safe storage, including any incompatibilities.

Do not store near combustible materials. Do not mix with combustible material.

Keep container tightly closed. Store in a cool/low-temperature, well-ventilated (dry) place away from heat and ignition sources.

#### Storage temperature

Keep only in the original container/package in a cool well-ventilated place away from heat and ignition sources. Should be stored inside, away from rainwater, etc.

#### Incompatible materials

Protect from moisture. Keep away from acid, reducing agents, and combustible materials.

#### 7.3

## Specific end use(s)

See Section 1.2.



# Section 8: Exposure Controls / Personal Protection

#### 8.1

#### Control Parameters Related to Substance - Aluminum oxide

OSHA PEL: 15 mg/ m³ (8hr TWA) as Total dust; 5 mg/ m³ (8hr TWA) as Respirable dust

Ireland HAS (Code of Practice) recommends 10 mg/ m³ (8hr TWA) total inhalable dust; 4 mg/ m³ (8hr TWA) total respirable dust.

#### **Occupational Exposure Limits**

### Dust, or Particulates, Substance Not Otherwise Specified:

Austria MAK: 10 mg/m³, STEL 2x30 min, Inhalable dust; 5 mg/m³, TWA, Inhalable dust

Belgium: 10 mg/m³, TWA Inhalable; 3 mg/m³, TWA Respirable

Canada (Saskatchewan): 10 mg/m³, TWA Inhalable; 3 mg/m³, TWA, Respirable

China: 8 mg/m³, TWA; 10 mg/m³, STEL

France: 10 mg/m³ TWA Inhalable dust; 5 mg/m³, TWA Respirable dust

Germany - TRGS 900: 10 mg/m³, TWA, Inhalable; 3 mg/m³, Respirable fraction

Hong Kong: 10 mg/m³, TWA

Ireland PELs: 10 mg/m³, TWA Total inhalable; 4 mg/m³, TWA Respirable

Italy: 10 mg/m³, TWA Inhalable; 3 mg/m³, TWA Respirable

Japan: 3 mg/m3 TWA Respirable

Malaysia: 10 mg/m³, TWA Inhalable; 3 mg/m³, TWA Respirable

The Netherlands: 3.5 mg/m³, Inhalable

Spain: 10 mg/m³, VLA, Inhalable; 3 mg/m³, VLA, Respirable Sweden: 10 mg/m³, NGV, Total inhalable; 5 mg/m³, NGV, Respirable

United Kingdom - WEL: 10 mg/m³, TWA, Total Inhalable dust; 4 mg/m³, TWA, Respirable dust

US ACGIH - PNOS: 10 mg/m³, TWA Inhalable; 3 mg/m³, TWA Respirable US OSHA - PEL: 15 mg/m³, TWA Total dust; 5 mg/m³, TWA Respirable

### **Biological Limit Value:**

None Known

# **PNECs and DNELs**

Not Applicable

#### 8.2

### **Exposure Controls**

## **Appropriate Engineering Controls**

Ensure operators are trained to minimize exposures. Ensure adequate ventilation. In case of inadequate ventilation wear respiratory protection. Good hygiene practices and housekeeping measures. A washing facility/water for eye and skin cleaning purposes should be present. Preferably use engineering controls to keep exposures below the OEL or DNEL.

#### 8.3

#### **Environmental Exposure Controls**

Prevent release to the environment.

#### 8.4

## **Personal Protection Equipment (PPE)**

Use personal protective equipment as required. Wear suitable protective clothing, gloves, and eye/face protection. Keep good industrial hygiene. Do not breathe dust. Avoid all contact. Wash hands before breaks and after work. Keep work clothes separately. Take off contaminated clothing and wash before reuse. Do not eat, drink, or smoke at the workplace.

Protective clothing should be selected specifically for the working place, depending on the concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Eye / Face Protection	Hand & Skin Protection	Respiratory Protection
Use eye protection according to EN 166, designed to protect against dust.	Wear gloves to EN374 to protect against skin effects from powders.	Respiratory protective devices may be necessary if local exhaust ventilation is not adequate.
For Small Quantities: Not Normally Required	Wear suitable coveralls to prevent exposure to the skin.	

#### Thermal hazards

Exothermic reaction with acids, reducing agent. Wear a Heat Protective Suit



# Section 9: Physical and Chemical Properties

9.1

Basic physical and chemical properties

 Physical state:
 Solid pellets

 Color:
 Purple

 Odor:
 No odor

 Melting point/melting range:
 N/A

 Boiling point/boiling range:
 N/A

Flammability: Not flammable Lower and upper explosion limits: Not explosive.

Flash point: N/A
Auto ignition temperature: N/A
Decomposition temperature: N/A
pH: N/A
Kinematic viscosity: N/A

**Solubility:** Partially soluble in water

Partition coefficient n-octanol/water (log value): N/A Vapor pressure: N/A

**Bulk Density:** 45-60 lbs./ft3, 720-960 kg/m3

Relative vapor density: N/A

Particle Characteristics: Median Particle Diameter 4mm

9.2

Other Information

Oxidizing Properties: Contains an oxidizing substance (potassium permanganate)

# **Section 10: Stability and Reactivity**

#### 10.1

## Reactivity

Stable under normal conditions.

#### 10.2

#### Chemical stability

Stable under normal conditions.

#### 10.3

#### Possibility of hazardous reactions

May occur in contact with acids, strong oxidizing agents, reducing agents.

#### 10.4

### Conditions to avoid

Protect from moisture, heat sources, open flames, and other ignition sources.

### 10.5

## Incompatible materials

Acids. Strong reducing and oxidizing agents. Combustible materials.

#### 10.6

## Hazardous decomposition products

Potassium Oxide, Manganese, oxides of manganese.

# **Section 11: Toxicological Information**

#### 11.1

Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity – Ingestion: Based on available data, the classification criteria are not met.

Acute Toxicity Estimate Mixture Calculation: LD50 > 2000 mg/kg bw/day.

Acute toxicity - Inhalation: Based on available data, the classification criteria are not met.

Acute Toxicity Estimate Mixture Calculation: LC50 >20ml/l

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Acute toxicity - Skin contact: Based on available data, the classification criteria are not met.

Acute Toxicity Estimate Mixture Calculation: LD50 > 2000 mg/Kg bw/day.

Skin corrosion/irritation: Skin Irrit. H315
Serious eye damage/irritation: Eye Irrit. H319

Respiratory or skin sensitization:
Germ cell mutagenicity:
Carcinogenicity:
Based on available data, the classification criteria are not met.
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Based on available data, the classification criteria are not met.

Aspiration hazard: Not relevant -solid mixture

11.2

Information on other hazards

Endocrine disrupting properties: No substances identified as having endocrine-disrupting properties.

Other information: No data available.

# **Section 12: Ecological Information**

### 12.1

#### **Toxicity**

Contains potassium permanganate toxic to aquatic life.

Aquatic Chronic 1; H410: Very toxic to aquatic life with long lasting effects.

Estimated LC50 (Mixture):

Short Term (acute)  $> 0.1 - \le 1$  mg/L Long term (chronic)  $> 0.1 - \le 1$  mg/L

EC50(48h) 0.06 mg/L (Daphnia magna) (EU Method C.2)

EbC50: (72h) 0.43 mg/L (Algae)(EU Method C.3)

Aquatic Chronic 1; H410: Very toxic to aquatic life with long lasting effects.

Harmonized Classification M-factor: 10.

No data is available for the mixture.

#### 12.2

Persistence and degradability: No data is available for the mixture. Potassium permanganate Testing can be waived because the substance is an inorganic compound.

#### 12.3

**Bioaccumulation:** No data is available for the mixture. Potassium permanganate Testing can be waived because the substance is an inorganic compound.

#### 12.4

**Mobility in soil:** No data is available for the mixture. Potassium permanganate Testing can be waived because the substance is an inorganic compound.

#### 12.5

Results of PBT and vPvB Assessment: The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

#### 12.6

Endocrine Disrupting Properties: No substances identified as having endocrine-disrupting properties.

#### 12.7

Other Adverse Effects: None Known.

# **Section 13: Disposal Considerations**

## 13.1

# **Waste Disposal Methods**

Waste disposal should be in accordance with existing federal, state, and local environmental control regulations. Avoid release to the environment.

Note: This is for unused product. Used product is a nonhazardous salt.



# **Section 14: Transport Information**

#### 14.1

## **Transportation Information**

•	ADR/RID/DOT	IMDG	IATA/ICAO
UN Number or ID Number	Not regulated	Not regulated	Not regulated
UN Proper Shipping Name	Not assigned	Not assigned	Not assigned
Transport Hazard Class(es)	None	None	None
Packing Group	None	None	None
Environmental Hazards	No	No	No
Special Precautions for User	None Known	None Known	None Known

#### 14.2

## Maritime transport in bulk according to IMO instruments

No information available.

#### 14.3

Additional information: Not applicable

# **Section 15: Regulatory Information**

#### 15 1

Safety, health and environmental regulations/legislation specific for the substance or mixture

### **National Regulations**

National Inventory TSCA- All components are listed under the TSCA 8 b inventory as active or exempted. No components are listed under TSCA 12 b

CERCLA Section 304: Potassium Permanganate reportable quantity (RQ) 100 lbs (45.4 kg).

EPCRA Section 311/312 Hazards: Potassium permanganate: fire hazard, immediate (acuté) health hazard, delayed health hazard.

EPCRA Section 313 Toxic Release inventory: Potassium Permanganate

OSHA 29 CFR 19.10

Germany: Water hazard class 3 (potassium permanganate)

# **US State Regulations**

Air Act Section 112b

Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, California)- this product cannot expose you to products know to California to cause cancer or reproductive harm.

# **EU Regulations**

# Authorizations and/or Restrictions on Use

Not restricted for the intended use(s) of the product.

# **CoRAP Substance Evaluation**

Substance identified for evaluation in 2017 evaluating Member State has concluded that no additional information is required

#### 15.2

# **Chemical Safety Assessment**

A chemical safety assessment is not required under REACH.

# **Section 16: Other Information**

The following sections contain revisions or new statements: Updated substance / mixture classification. New SDS Regulation 2020/878 format, all sections have been updated to include new information. Please review SDS with care.

**References:** Existing Safety Data Sheet (SDS) Substance with harmonized classification and labelling according to Regulation (EC) No. 1272/2008, Annex VI. Existing ECHA registration for Potassium permanganate (CAS No. 7722-64-7)

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EU Classification: This Safety Data Sheet was prepared in accordance with EC Regulation (EC) 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878.

#### 16.1

#### **Full list of Hazard Classification and Hazard Statements**

Ox. Sol. 2; Oxidizing solid, Category 2

Acute Tox. 4; Acute Toxicity, Category 4

H272: May intensify fire; oxidizer.

H302: Harmful if swallowed.

Skin Corr. 1C; Skin corrosion /irritant, Category 1C H314: Causes severe skin burns and eye damage.

Skin Irrit. 2; Skin irritant, Category 2

Eye Irrit. 2; Eye irritant, Category 2

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

Eye Dam. 1; Eye damage, category 1

H318: Causes serious eye damage.

Repr. 2; Reproductive toxicity, Category 2 H361d: Suspected of damaging the unborn child.

STOT RE 2; Specific target organ toxicity

— repeated exposure, Category 2 H373: May cause damage to organs through prolonged or

repeated exposure.

Aquatic Acute 1; Hazardous to the aquatic

environment, acute, Category 1 H400: Very toxic to aquatic life.

Aquatic Chronic 1; Hazardous to the aquatic

environment, Chronic, Category 1 H410: Very toxic to aquatic life with long lasting effects.

#### 16.2

#### LEGEND for acronyms used in this SDS / MSDS

ADR ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road CLP

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

CoRAP Community Rolling Action Plan (CoRAP)

DNEL Derived no effect level

EC50 Half maximal effective concentration
IATA IATA: International Air Transport Association
ICAO ICAO: International Civil Aviation Organization
IMDG: International Maritime Dangerous Goods

**LC50** Lethal concentration at which 50% of the population is killed

**LD50** Lethal dose at which 50% of the population is killed

LTEL Long term exposure limit
OEL Occupational exposure limits

PBT: Persistent. Bio accumulative and Toxic

PNEC Predicted No Effect Concentration

**REACH** Registration, Evaluation, Authorization and Restriction of Chemicals

RID: Regulations concerning the international railway transport of dangerous goods STEL Short term exposure

limit

vPvB vPvB: very Persistent and very Bioaccumulative.

#### Training advice:

Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

#### Disclaimers

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