

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	Sulphasorb 2
	Product Code	S2
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	<p>Pure Air Filtration, LLC 6050 Peachtree Parkway Suite 240-187 Atlanta, GA 30092 USA</p> <p>PureAir Filtration BV Tijnmuiden 79 1046 AK Amsterdam, The Netherlands</p>
	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	<p>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)</p> <p><i>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.</i></p>
	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).

Mixture itself in solid form causes little irritation, but if crushed or handled extensively, dust may evolve which can cause irritation to eyes and respiratory tract. Adding water can cause irritation to skin.

If in a confined space, use appropriate safety precautions, as activated carbon can remove oxygen and cause hazard for workers in small space. Before entering space, check state and national guidelines for work in confined area.

2.2	
Label Element:	According to Regulation (EC) No. 1272/2008 (CLP)
Product Name:	Sulphasorb 2
Contains:	Aluminum oxide, activated carbon, sodium hydroxide

Hazard Pictograms(s)



Signal Word(s) Warning

Hazard Statements Eye Irrit. 2: H319 + H320
 Skin Irrit. 2: H315
 Resp. Irrit.: H335

Precautionary Statements

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P220: Keep away from clothing and other combustible materials.
 P235 + P410 - Keep cool. Protect from sunlight
 P260 - Do not breathe dust
 P264 - Wash face, hands and any exposed skin thoroughly after handling

P273: Avoid release to the environment.
 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.
 P310: Immediately call a doctor.
 P362: Take off contaminated clothing and wash before reuse.

Supplemental Information Not applicable
Other Hazards None

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. Adding water can cause irritation to skin.

If in a confined space, use appropriate safety precautions, as activated carbon can remove oxygen and cause hazard for workers in small space. Before entering space, check state and national guidelines for work in confined area.

Section 3: Composition/ Information on Ingredients

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

Chemical Name	%W/W	CAS No.	EC No.	REACH Registration No.	Hazard Statement(s)
Aluminum oxide	35-45	1344-28-1	215-691-6	01-2119529248-35-XXXX	Not Classified
Activated Carbon	35-45	7440-44-0	231-153-3	01-2119488716-22-XXXX	Not Classified
Sodium Hydroxide	2-7	1310-73-2	215-185-5	01-2119457892-27-xxxx	Skin and Eye Dam. 1A; H314 + 318

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. Ensure adequate ventilation.

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, move 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

Can cause skin and eye irritation. 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 jets may spread the fire.

Wet activated carbon depletes oxygen from the air. Materials allowed to smolder for long periods in enclosed spaces may produce amounts of carbon monoxide, which may reach the lower explosive limit for carbon monoxide of 12.5% in air.

5.2

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. Keep containers cool by spraying with water if exposed to fire. Do not allow run-off from firefighting to enter drains or water courses. All contaminated wastewater must be processed in an industrial or municipal wastewater treatment plant.

5.3

Special Hazards arising from the substance or mixture

May form explosive dust/air mixtures. May decompose if heated. Burning produces irritant fumes. Not flammable but will support combustion.

Activated carbons have a high surface area which may cause self-heating during oxidation. Activated carbon is difficult to ignite and tends to burn slowly (smolder) without producing smoke or flame.

Materials allowed to smolder for long periods in enclosed spaces may produce amounts of carbon monoxide, which may reach the lower explosive limit for carbon monoxide of 12.5% in air.

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.

6.2

Environmental precautions

Collect spillage. Inform authorities if spill cannot be contained.

6.3

Methods and material for containment and cleaning up

Small Spillages: Sweep up spilled substances and remove to safe place. Avoid dust generation.

Damp down to avoid dust generation.

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. If the spilled carbon contains dust or has the potential to create dust, use explosion-proof vacuums and/or cleaning systems suitable for combustible dusts. Dispose of unused material in a facility permitted for non-hazardous wastes. Spent (used) carbon should be disposed of in accordance with applicable laws.

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 Section 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.

7.2

Conditions for safe storage, including any incompatibilities.

Do not store near combustible materials. Do not mix with combustible material. Take precautionary measures against static discharge.

Keep container tightly closed. Store in a cool/low-temperature, well-ventilated (dry) place away from heat and ignition sources. Control dust formation. No smoking. Do not store together with strong oxidizing agents.

Storage Temperature

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

Incompatible materials

Protect from moisture. Keep away from strong oxidizing substances 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

Control Parameters Related to Substance – Carbon

OSHA PEL (TWA) (15 mg/m³ total dust; 5 mg/m³ respirable fraction)

Control Parameters Related to Substance – Sodium Hydroxide

ACGIH Ceiling (2 mg/m³)

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)

Individual protection measures, such as personal protective 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. For Small Quantities: Not Normally Required	Wear gloves to EN374 to protect against skin effects from powders. Wear suitable coveralls to prevent exposure to the skin.	Respiratory protective devices may be necessary if local exhaust ventilation is not adequate.

Section 9: Physical and Chemical Properties

9.1

Basic physical and chemical properties

Physical state:	Solid cylindrical and spherical pellets
Color:	Black and gray
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:	8-10.5
Kinematic viscosity:	N/A
Solubility:	Partially soluble in water
Partition coefficient n-octanol/water (log value):	N/A
Vapor pressure:	N/A
Density and/or Relative density:	~ 40 lbs./ft ³ , 640 kg/m ³
Relative vapor density:	N/A
Particle Characteristics:	Median Particle Diameter 4mm

9.2

Other Information

Oxidizing Properties: N/A

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 with strong acids or oxidizing agents.

10.4

Conditions to avoid

Dust formation. Eliminate sources of ignition. Protect from moisture and damage.

10.5

Incompatible materials

Strong acids. Strong oxidizing agents.

10.6

Hazardous decomposition products

May produce amounts of carbon monoxide which reach the lower explosive limit (LEL = 12.5% in air).

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 > 20 ml/l

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

Skin corrosion/irritation: Skin Irr. 2: H315

Serious eye damage/irritation: Eye Irrit. 2: H319 + H320

Respiratory or skin sensitization: Resp. Irrit.: H335

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT – single exposure: Based on available data, the classification criteria are not met.

STOT – repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Mixture; 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: Nontoxic. The substance is highly insoluble in water and the substance is unlikely to cross biological membranes. No adverse ecological effects are known.

12.2

Persistence and degradability: Not expected to degrade.

12.3

Bioaccumulation: Not expected due to physicochemical properties of the substance.

12.4

Mobility in soil: Not expected to migrate. Insoluble.

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

Unused product is not a hazardous material or hazardous waste. Dispose of waste in an approved waste disposal facility, according to local laws.

Spent (used) material may be classified as a non-hazardous or hazardous waste depending upon its use, the substance(s) adsorbed, and how it is ultimately managed. Follow applicable regulations for disposal.

Section 14: Transport Information

14.1 Transportation Information

	ADR/RID/DOT	IMDG	IATA/ICAO
UN Number or ID Number	None	None	None
UN Proper Shipping Name	None	None	None
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: N/A

Section 15: Regulatory Information

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

National Regulations

Clean Air Act, Section 112b Hazardous Air Pollutants (HAPs): No

TSCA (Toxic Substances Control Act): No.

CERCLA Section 304: Sodium Hydroxide RQ 1000 lbs (453.6 kg).

EPCRA Section 311/312 Hazards: Sodium Hydroxide: strong base and can cause severe burns to skins and eyes; corrosive.

EU Regulations

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

A chemical safety assessment is not required under REACH.

CoRAP Substance Evaluation

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

Listed on EEC Inventory EINECS

Possible Water Hazard, unclassified.

State Regulations

California Proposition 65 – Product does not contain known substances to cause cancer or reproductive harm.

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.

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

Skin and Eye Dam. 1A: Skin and Eye damage, Category 1A Skin Irrit. 2: Skin Irritant, Category 2 Eye Irrit. 2: Eye Irritant, Category 2 Resp Irrit: Respiratory Irritant	H314: Causes severe skin burns and eye damage. H315: Causes skin irritation. H318: Causes serious eye damage. H319+H320: Causes serious eye irritation. H335: May cause respiratory irritation.
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16.2

LEGEND for acronyms used in this SDS / MSDS

ADR CoRAP DNEL EC50 IATA ICAO IMDG LC50 LD50 LTEL OEL PBT PNEC REACH RID vPvB	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: International Air Transport Association 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: very Persistent and very Bioaccumulative.
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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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