Sulphasorb Fe

Revision Date: 01/21/2020

SAFETY DATA SHEET

1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Product Identification: Sulphasorb Fe

Product Synonyms: Micronized Iron Oxide

Use of the preparation: This product is intended for use in gas-phase air filtration

Company Identification:
Pure Air Filtration
6050 Peachtree Parkway
Suite 240-187
Norcross, GA 30092

Company Contact Numbers:
Telephone: (678) 935-1431
Facsimile: (678) 935-0648

2. HAZARD(S) IDENTIFICATION

Irritant, Category 2

GHS Hazard Codes: H315: Causes Skin Irritation

GHS Precaution Codes: P264: Wash hands thoroughly after handling.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

GHS Response Codes: P302+352: IF ON SKIN: wash with plenty of soap and water.
P332+313: IF SKIN irritation occurs: Get medical advice/attention.
P362: Take off contaminated clothing and wash before reuse.

GHS Storage Codes: P401: Store in a cool, dry area in enclosed containers.

Most Important Hazards:
-If crushed or handled extensively, dust may evolve and can be irritating to the eyes, skin or respiratory tract.
-Confined space entry. Appropriate safety precautions should be taken when entering any confined space. Entering containers or media vessel/tanks housing activated carbon for inspection, maintenance, etc. may constitute a confined space entry. In confined spaces, 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.

Adverse Human Health Effects:
—The following medical conditions may be aggravated by exposure to the product: asthma, chronic lung disease, and skin rashes.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name and Synonyms: Micronized Iron Oxide
Formula: Fe2O3
Chemical Family: Ferric Oxide
CAS Number: 1309-37-1-2151682

Common Chemical Name	Synonyms	CAS#	Wt%	EC #	Harmonization Code
Ferric Oxide	Iron Oxide	1309-37-1-2151682	85%	231-153-3	380210

4. FIRST-AID MEASURES

First aid measures should be taken as indicated below for the following routes of exposure.

Inhalation: Move to fresh air. If breathing difficulty occurs or persists, seek medical attention.
Skin Contact: Wash area with soap and water. If irritated persists, seek medical attention.
Eye Contact: Flush with large quantities of water for 15 min. Seek medical attention.
Ingestion: Seek medical attention.

Notes to Physician:
Product is expected to be non-toxic and only an eye irritant in the powder form. Treatment is recommended to be symptomatic and supportive.

Other Information:
This media is classified by the manufacturer for health effects according to EU Directive 1999/45/EC with Xi; R36/37/38

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:
If involved in a fire, use water spray, dry chemical, alcohol foam, or carbon dioxide.

Specific Hazards:
Wet activated carbon depletes oxygen from the air. Materials allowed to smolder for long periods in enclosed spaces may product amounts of carbon monoxide which may reach the lower explosive limit for carbon monoxide of 12.5% in air. Contact with strong oxidizers such as ozone or liquid oxygen may cause rapid combustion.

Protection of Firefighters:
Fire fighters should wear NIOSH approved, positive pressure, self-contained breathing apparatus and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:
Protective clothing appropriate for the environment should be worn. Goggles or safety glasses with side shields, NIOSH approved dust masks, rubber or plastic gloves, and full cover clothing covering arms and legs are recommended.

Environmental Precautions:
None known

Methods for Cleaning Up:
Clean up using dry procedures (broom, shovel, etc.); avoid dusting.

Recovery:
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:
See Section **13: DISPOSAL CONSIDERATIONS**

7. HANDLING AND STORAGE

Handling:
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.

Prevention of User Exposure: See section 8

Prevention of Fire and Explosion:
Contact with strong oxidizers may result in fire.

Precautions for Safe Handling:
-Confined space entry. Appropriate safety precautions should be taken when entering any confined space. Entering containers or media vessels/tanks housing active carbon for inspection, maintenance, etc. may constitute a confined space entry. In confined spaces, activated carbon may remove oxygen from the air causing severe hazards for workers entering such spaces. Before and entrance of a confined all local, state, and federal regulations should be followed.

-Avoid crushing the product to keep dusting to a minimum. As described under Handling above, mechanical ventilation or other measures may be needed to remove airborne dust.

-Protect from water exposure to contaminated air (gaseous, particulate, and aerosol contaminated), otherwise the product may be rendered useless.

Storage:
General good storage practices should be followed.

Suitable Conditions:
Store in a cool, dry area and keep in original, closed containers.

Incompatible Products:
-Product should be kept protected from water and exposure to contaminated air (gaseous, Particulate, and aerosol contaminated), otherwise the product may be rendered useless.

-Contact with strong oxidizers such as ozone, liquid oxygen, chlorine, permanganates, peroxides etc. may result in fire.

Recommended Packaging Materials:
-Corrugated boxes of 50 lb, double wall quality, with 4 mm plastic liners.
-Injection molded polystyrene pails and lids including a neoprene seal.

Not Suitable Materials:
Porous materials allowing contact with water, air, and the contaminants contained therein.

8. EXPOSURE CONTROLS I PERSONAL PROTECTION

Exposure Limit Values:

Inert or Nuisance Dust	5mg/m3 respirable fraction	OSHA PEL
	15 mg/m3 total dust	OSHA PEL

Exposure Controls:

Minimize eye and skin contact by using appropriate protective equipment. Use local or general room ventilations to control airborne dust that may be generated.

Personal Protective Equipment:

The following recommendations are made for appropriate personal protective equipment for the following.

Respiratory Protection:	NIOSH approved dust mask
Hand Protection:	Rubber or plastic gloves
Eye Protection:	Goggles or safety glasses with side shields
Skin and Body Protection:	Full cover clothing covering arms and legs.
Hygiene Measures:	Do not inhale dust and avoid contact with eyes.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid
Form:	cylindrical pellets approximately 4mm (1/8 in. nominal) in diameter
Color:	Yellow-brown
Odor:	No significant odor

Health, Safety, Environmental Information

pH:	6.9-9.0
Flash point:	Not applicable
Flammability:	Not flammable under normal conditions
Explosive properties:	Not explosive
Oxidizing properties:	Not an oxidizer
Vapor pressure:	1 @3586C (6487F)
Bulk density:	680-700 g/l
Solubility:	insoluble
Partition coefficient:	Not applicable
Viscosity:	Not applicable
Vapor density:	.04
Evaporation rate:	Not applicable
Specific gravity:	1.8-2.1

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions

Materials to Avoid:

Strong oxidizers such as ozone, liquid oxygen, chlorine, permanganate, etc may result in rapid combustion. Avoid contact with strong acids.

Conditions to Avoid:

Incompatibles and protect from water and exposure to contaminated air, otherwise media may be rendered useless.

Hazardous Decomposition Products:

Involvement in a fire causes formation of carbon dioxide and carbon monoxide.

Intended Use and Foreseeable Misuse:
Intended use is for air purification from gaseous contaminants. The product is not intended to remove dangerous particulates or biological contaminants. The product is not intended to purify water.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: Expected to be low[2], not tested
Local Effects: See section 3.

HAZARDS IDENTIFICATION, Adverse Human Health Effects.

Sensitization:
Primary skin irritation and corrosivity (rabbits): expected to be non-irritant, not tested
Eye irritation (rabbits): expected to be irritant not tested
Primary Route of Entry: Inhalation, ingestion, skin contact, eye contact

12. ECOLOGICAL INFORMATION

Not determined. See Section 3. "HAZARDS IDENTIFICATION, Environmental Effects".

13. DISPOSAL CONSIDERATIONS

Waste From Residues:
Sulphasorb Fe converts hydrogen sulfide into elemental sulfur, thereby eliminating the acidic aspect. Because of this, Sulphasorb Fe does not typical have restrictions on disposal. Consult your local disposal requirements.

Contaminated Packaging: Not relevant

14. TRANSPORT INFORMATION

International Regulations: The media contains less than 50% (by weight) activated carbon, which is produced by a steam activation process. Because of this the media is not subject to the provisions of the International Dangerous Goods Code (IMGD) or the labeling and packaging requirements of the International Maritime Organization (IMO) Class 4.2.

Proper Shipping Name: Micronized Iron Oxide

15. REGULATORY INFORMATION

Regulations:
This section contains information specifically applicable to the chemical product relative to the following regulations. Local regulations should always be consulted and followed.

SARA Title III (Superfund Amendments and Reauthorization Act)
Section 302 Extremely Hazardous Substances (40CFR355):
Not listed
Section 312 Hazard Categories (40CFR370.2):
Only expected as Acute (eye irritant), see section 11 TOXICOLOGICAL INFORMATION.

Section 313 Reportable Ingredients (40CFR372):
None listed

EU Classifications & Labeling:

Xi – Irritant
Risk Phrases:
R36/37/38: Irritating to eyes, respiratory system and skin
Safety Phrases:
S3: Keep in cool Place.
S8: Keep container dry.
S24/25: Avoid contact with skin and eyes.
S26: In case of contact with, eyes, rinse immediately with plenty of water and seek medical advice
S28: After contact with skin, wash immediately with plenty of soap and water.
S62: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.
S63: In case of accident by inhalation: remove casualty to fresh air and keep at rest.

16. OTHER INFORMATION

Ingredient R(isk) Phrase Definitions:
None

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The information contained herein is accurate to the best of our knowledge. We do not suggest or guarantee that any hazards listed herein are the only ones, which exist. Pure Air Filtration, LLC makes no warrants of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances. Effects can be aggravated by other materials and/or this material may aggravate or add to the effects of other materials. The user has sole responsibility to determine the suitability of the material for any use and the manner of use contemplated.