

SAFETY DATA SHEET

Gusmer Cellu-Stack® Filters with DE

Section 1 - PRODUCT and COMPANY IDENTIFICATION

1.1 Product Identifier

Product Name: Gusmer Cellu-Stack® Filters with DE

Product Code(s): See Section 16 Chemical Name: Mixture Synonyms: Cellu-Stack®

1.2 Relevant identified uses of the substance or mixture and uses advised against

Intended Product Use: Filtration
Uses Advised Against: To avoid exposure to airborne dust, do not damage or abrade filter material.

Intended for use only by commercial manufacturers. Not intended for retail sale or use by individual consumers.

1.3 Details of the supplier of the safety data sheet
Manufacturer/Distributor: Gusmer Enterprises, Inc.

Postal Address: 1401 Ware Street, Waupaca, WI 54981 USA Telephone Number: (01)(715) 258-5525 [USA] (product info) Hours of Operation: Monday - Friday 8:00am-5:00pm CST

1.4 Emergency telephone numberMedical Emergency: 911
Chemical Emergency: (800) 424-9300

Section 2 - HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

Not considered a hazardous material when used in its normal state and use. This product does not release respirable dust when used in its normal state and uses; however this product does contains crystalline silica (CS), which is considered a hazard by inhalation.

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Carcinogenicity (Category 1A)

Specific target organ toxicity - repeated exposure, inhalation (Category 1)

2.2 Label Elements

Hazard Pictogram(s):



Signal Word: Danger

Hazard Statements:

Causes damage to lungs through prolonged or repeated exposure if inhaled.

Precautionary Statements: Obtain special instructions before use

Do not handle until all safety precautions have been read and understood.

Do not breathe dust.

Jose personal protective equipment as required.

F exposed or concerned: Get medical advice/attention.

Store locked up.

Dispose of contents/ container to an approved waste disposal plant.

2.3 Emergency Overview

Appearance/Odor: Other Hazards:

White to buff colored filter media with white talc-filled polypropylene edge seals, natural polypropylene spacers, natural and synthetic rubber gaskets., generally odorless.

Warning: This product does not release respirable dust when used in its normal state and uses; however this product does contain crystalline silica (CS), which is considered a hazard by inhalation. IARC has classified inhalation of CS as carcinogenic for humans. CS is listed by NTP as a known human carcinogen. Inhalation of CS is also a known cause of silicosis, a noncancerous lung disease.

Product may form combustible dust concentrations in air during processing. Specifically, in instances where product dust is suspended in air in sufficient concentrations and in proximity to an ignition source. Product as supplied and shipped does not constitute a dust hazard. Users of this product should examine the potential to generate dusts during handling and processing and related combustibility hazards and controls.

Section 3 - COMPOSITION / INFORMATION on INGREDIENTS

Ingredient(s)	Common Name & Synonyms	<u>Percentage</u>	CAS No.
Cellulose Pulp	Kraft Pulp, Cotton Linter Pulp	20-60%	65996-61-4
Diatomaceous Earth, Natural	DE	0-73%	61790-53-2
Diatomaceous Earth, Calcined	DE	0-73%	91053-39-3
Diatomaceous Earth, Flux-Calcined	DE	0-73%	68855-54-9
Cristobalite	Silica Crystalline, Tridymite	< 37%	14464-46-1
Quartz	Silica, Crystalline Quartz	< 5%	14808-60-7
FDA Approved resin binders & additives		< 5%	NA

Note: Polypropylene components are not included as they are not considered hazardous in a molded form.

ection 4 - FIRST AID MEASURES

4.1 Description of the first aid measures

Eye Contact: Dust may mechanically irritate the eyes, resulting in redness or watering. Treat dust in eye as foreign object. Flush with water to remove dust particles. Get medical help if irritation persists. Not anticipated to be irritating for product in purchased form, wash with mild soap and water. Use moisture renewing lotions if dryness occurs.

Inhalation: Excessive dust concentrations may cause unpleasant obstruction in the nasal passages. Remove to fresh air. Get medical help if persistent irritation, severe coughing or breathing difficulty occurs.

Ingestion: Not applicable for product in purchased form.

4.2 Most important symptoms and effects, both acute and delayed

Eye Contact:

Skin Contact:

Inhalation:

Dust may cause abrasive irritation to eyes.

Skin Contact:

Prolonged skin contact my cause dynes.

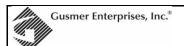
Use may cause a progressive lung disease, silicosis and lung cancer. See section 11 for

additional information.

Ingestion: Not applicable for product in purchased form.

Chronic Effects: Silicosis

4.3 Indication of any immediate medical attention and special treatment needed Treatment: No special advice, treat symptomatically.



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Section 5 - FIREFIGHTING MEASURES

5.1 Extinguishing Media

Suitable Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

5.2 Special hazards arising from the substance or mixture

Products of combustion include carbon monoxide, carbon dioxide and fine particulate in the form of smoke.

Silicon Oxides

5.3 Advice for firefighters

As in any fire, wear NIOSH-approved self contained breathing apparatus and appropriate protective clothing.

Product as supplied and shipped is highly unlikely to release sufficient cellulose dust to constitute a combustible dust explosion hazard. Depending on airborne concentration, moisture content, particle diameter, surface area and exposure to an ignition source, airborne cellulose dust may ignite and burn with explosive force in a contained area. Cellulose dust may similarly deflagrate (combustion without detonation like a supersonic explosion) if ignited in an open or loosely contained area. Cellulose dust explosibility: ("K_{st} dry = >200 and <300 bar m/s). Caution should be taken in the processing, shipping, handling and use of these materials, particularly if they are in a dry state and dust is produced. Reference NFPA standards 654, 69 and the NFPA Fire Protection Handbook for guidance.

*K_{st} the maximum rate of pressure rise is used to calculate the *K_{st} value; an internationally recognized index used to classify dust explosibility.

Section 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. Sweep or vacuum up for recovery and disposal. Avoid creating dusty conditions whenever feasible. Maintain good housekeeping to avoid accumulation of cellulose dust on exposed surfaces. Use NIOSH approved filtering face piece respirator ("dust mask") and goggles where ventilation is not possible and exposure limits may be exceeded or for additional worker comfort.

Other precautions: Minimize compressed air blowdown or other practices that generate high dust levels.

6.2 Environmental precautions

None, discharge in accordance with federal, state and local laws.

6.3 Methods and materials for containment and cleaning up

If large amounts of dust are generated, collect with vacuum or suppress with water spray and sweep up.

See Section 8 for appropriate personal protective equipment Section 7 - Handling and Storage

7.1 Precautions for safe handling

Avoid generating excessive dust. If dust levels are suspected to be over PEL, wear a NIOSH approved N95 or greater respirator. Protect from excessive moisture. Maintain good housekeeping practices. See Section 8 for more information

7.2 Conditions for safe storage, including any incompatibilities

Store in cool, dry place away from open flame and other sources of ignition.

See Section 8 for OSHA permissible exposure limit(s) Section 8 - EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters			
Cellulose (C ₆ H ₁₀ O ₅) _n	OSHA PEL ¹ PEL-TWA 15 mg/m ³ Total Dust (PNOR) ¹ PEL-TWA 5 mg/m ³ Respirable Dust (PNOR) ¹	ACGIH ² TLV-TWA 10 mg/m³ Total Dust Not Established	NIOSH REL ³ REL-TWA 10 mg/m ³ Total Dust REL-TWA 5 mg/m ³ Respirable Dust
Diatomaceous Earth, Calcined	PEL-TWA 15 mg/m ³ Total Dust	Not Established	Not Established
& Flux Calcined	PEL-TWA 5 mg/m ³ Respirable Dust	Not Established	Not Established
Cristobalite	TWA Total Dust = $\frac{1}{2}[(30\text{mg/m}^3)/(\%\text{SiO2+2})]$	Not Established	Not Established
	TWA Respirable Dust = $\frac{1}{2}[(10\text{mg/m}^3)/(\%\text{SiO2+2})]$	0.025 mg/m³ Respirable Dust	0.05 mg/m³ Respirable Dust
Quartz	TWA Total Dust = ½[(30mg/m³)/(%SiO2+2)]	Not Established	Not Established
	TWA Respirable Dust = ½[(10mg/m³)/(%SiO2+2)]	0.025 mg/m³ Respirable Dust	0.05 mg/m³ Respirable Dust
Diatomaceous Earth, Natural	TWA Total Dust = (80 mg/m³)/(%SiO2)	Not Established	REL-TWA 10 mg/m³ Total Dust
	Not Established	Not Established	REL-TWA 5 mg/m³ Respirable Dust

Notes: 1. OSHA particulate not otherwise regulated (PNOR)

8.2 Exposure controls

Normal Handling Conditions

Engineering Controls:

If necessary use ventilation system to keep airborne dust concentration below permissible exposure limits. Ventilation to control dust should be considered where potential explosive concentrations and ignition sources are present. The design and operation of any exhaust system should consider the possibility of explosive concentrations of cellulose dust within the system.

Ensure that exhaust ventilation and material transport systems involved in handling this product contain explosion relief vents or suppression systems designed and operated in accordance with applicable standards if the operating conditions justify their use

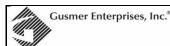
Respiratory Protection: If dust levels are suspected to be over PEL, wear a NIOSH approved N95 or greater respirator.

Eye Protection: ANSI Z87+ approved dust goggles or safety glasses, if necessary, to avoid eye irritation.

Skin Protection: Cover skin with clothing and/or gloves if skin dryness or irritation occurs.

General Hygiene: Maintain good housekeeping practices, wash hands after handling, avoid direct eye contact. Clean up areas where cellulose dust settles to avoid excessive accumulation of this combustible material.

compressed air blowdown or other practices that generate high airborne-dust concentration



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Section 9 - PHYSICAL and CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State Solid

Color: White to buff colored filter media with white talc-filled polypropylene edge seals, natural polypropylene spacers, natural and synthetic rubber gaskets.

Odor: Generally Odorless Odor Threshold:

pH: No Data Available pH: Melting / Freezing Point (Specify): Initial Boiling Point & No Data Available

Boiling Range: Flash Point: No Data Available Evaporation Rate: No Data Available

Flammability (solid, gas): upper: No Data Available lower: No Data Available

Explosive Limits: LEL: No Data Available UEL: No Data Available Kst: Cellulose dust explosibility: (*Kst dry = >200 and <300 bar m/s) Vapor Pressure: No Data Available

Vapor Density: Relative Density: No Data Available No Data Available Solubility(ies): Partition Coefficient (n-No Data Available No Data Available octanol/water): Auto-ignition Temperature: about 765°F (407°C)

Decomposition Cellulose and polypropylene components will degrade at temperatures >400°F (204°C). If heated to 800°F -1000°F (427°C-538°C), amorphous silica may form into crystalline silica.

Oxidizing Properties: Viscosity: No Data Available No Data Available

Section 10 - STABILITY and REACTIVITY

10.1 Reactivity

No Data Available

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

None

10.4 Conditions to avoid

Avoid open flame, sparks and other sources of ignition.

10.5 Incompatible materials

Avoid open flame, sparks and other sources of ignition.

Concentrated Hydrofluoric Acid in contact with Diatomaceous Earth may form silicon tetra fluoride gas, a strong oxidizer.

10.6 Hazardous decomposition products
If heated to 800°F-1000°F (427°C-538°C), amorphous silica may form into crystalline silica.

Combustion products include carbon monoxide, carbon dioxide and fine particulate in the form of smoke

Section 11 - TOXICOLOGY INFORMATION

11.1 Information on toxicological effects

Toxicology Data: The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.

Toxicity Test Exposure Route Dose Observed Effect Acute Toxicity: Cellulose LD₅₀ (rat) Inhalation 5,800 mg/m³ Not Available Oral LD_{so} (rat) > 5,000 mg/kg Not Available > 2,000 mg/kg LD₅₀ (rabbit) Dermal Not Available

Skin Corrosion/Irritation: No Data Available

Serious Eye Damage/Eye Irritation: No Data Available

Acute: Exposure to dust may cause irritation. Processes such as cutting, grinding, crushing, or impact may result in generation of excessive amounts of airborne dusts in the workplace. Nuisance dust may Respiratory or Skin affect the lungs but reactions are typically reversible

Sensitization: Acute inhalation of high concentrations of respirable crystalline silica may cause acute silicosis.

Chronic: Prolonged exposure to the dust may cause wheezing, chest tightness, productive cough nasal irritation and symptoms of chronic respiratory disease. Dust may also induce asthmatic reactions via

an allergic mechanism, particularly in individuals who are predisposed to developing allergies.

STOT - Single Exposure: No Data Available

STOT - Repeated Exposure: May cause damage to lungs through prolonged or repeated exposure

Aspiration Hazard: No Data Available

11.2 Further Information

Mutagenicity: No Data Available

Productive Toxicity: No Data Available

Carcinogenicity: Calcined and Flux-Calcined diatomaceous earth (Kieselguhr) is composed of amorphous and crystalline silica. Respirable crystalline silica (cristobalite) is classified by the IARC and NTP as a known human

carcinogen. Crystalline silica is only known to cause cancer when inhaled in a respirable form. It is not known to cause cancer by any other route of exposure

1 - Group 1: Carcinogenic to humans (Cristobalite) (Diatomaceous earth (Calcined & Flux-Calcined)) Group 1: Carcinogenic to humans (Quartz) (Diatomaceous earth (Calcined & Flux-Calcined))
 Group 3: Not classifiable as to its carcinogenicity to humans (Diatomaceous earth, Natural) IARC:

NTP: Known to be human carcinogen (Cristobalite) Known to be human carcinogen (Quartz)

Version: 3.

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Section 12 - ECOLOGICAL INFORMATION

12.1 Toxicity

No Data Available

12.2 Persistence and degradability

Non-biodegradable material, inert material

12.3 Bioaccumulative potential

Little Potential to bioaccumulate.

12.4 Mobility in soil

No Data Available 12.5 Other adverse effects

No Data Available

Section 13 - DISPOSAL CONSIDERATIONS

Substance: Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - TRANSPORTATION INFORMATION

UN Number: Not Applicable Class: Not Applicable Proper Shipping Name: Packing Group: Not Applicable Not Applicable Marine Pollutant: Not Applicable Other Applicable Not Applicable Information:

Section 15 - REGULATORY INFORMATION

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

Intended for use only by commercial manufacturers. Not intended for retail sale or use by individual consumers.

MARNING: This product can expose you to chemicals including Crystalline Silica, Antimony [Oxide], Arsenic, Beryllium, Chromium (Hexavalent), Cobalt, Cadmium, Lead, Nickel, which are known to the State of California to cause cancer and chemicals Cadmium, Lead, Mercury which are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Section 16 - OTHER INFORMATION

Product Number(s):

H212XXXXX735W, H212XXXXX745W

Gusmer Cellu-Stack® Filters with DE 16" 700 Series: 16XXXX1730SD-W, 16XXXX1760SD-W

Gusmer Cellu-Stack® Filters with DE 12" 900 Series: 12XXXX1925SD, 12XXXX1930SD, 12XXXX1935SD, 12XXXX1940SD, 12XXXX1945SD, 12XXXX1945N, 12XXXX1950SD, 12XXXX1960SD, 12XXXXX1960SD, 12XXXXX1960

Y2XXXX1925SD, Y2XXXX1930SD, Y2XXXX1935SD, Y2XXXX1940SD, Y2XXXX1950SD, Y2XXXX1960SD 2435-01-0601-NF, 2450-01-0601-NF

Gusmer Cellu-Stack® Filters with DE 16" 900 Series: 16XXXX1925SD, 16XXXX1930SD, 16XXXX1935SD, 16XXXX1940SD, 16XXXX1945SD, 16XXXX1950SD, 16XXXX1955SD, 16XXXX1960SD, 16XXXX1960SD

Y6XXXX1940SD, Y6XXXX1960SD

Prepared By: Gusmer Enterprises, Inc. Name of Preparer: Eric Anderson

Title: Director of Safety & Product Compliance
Date: 10/9/2023

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GHS Hazard Warning Label

Gusmer Cellu-Stack® Filters with DE



DANGER: May cause cancer by inhalation. Causes damage to lungs through prolonged or repeated exposure if inhaled.

Obtain special instructions before use. Do not breathe dust. Do not handle Obtain special instructions before use. Do not breathe dust. Do not havil all safety precautions have been read and understood. Use personal protective equipment as required. IF exposed or concerned: Get medical advice/attention. Store locked up, dispose of contents/ container to an approved waste disposal plant. Ventilation recommended.

Gusmer Enterprises Inc.

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CONSULT SDS FOR ADDITIONAL INFORMATION ON HAZARD

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