



Gusmer Enterprises, Inc.®

Issue Date: 05/11/15
Version: 1.0

SAFETY DATA SHEET FORM

Product Identifier:

Gusmer Cellulose Carbon Filter Sheet with Bentonite

Section 1 - PRODUCT and COMPANY IDENTIFICATION

1.1 Product Identifier

Product Name: Gusmer Cellulose Carbon Filter Sheet with Bentonite
 Product Code(s): EO20C, SSBJC
 Chemical Name: Mixture
 Synonyms: Cellulose Filter Sheet

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.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Distributor: Gusmer Enterprises, Inc.

Postal Address: 81 M Street, Fresno, CA 93721 USA 1401 Ware Street, Waupaca, WI 54981 USA

Telephone Number: (01)(559) 485-2692 [USA] (product info) (01)(715) 258-5525 [USA] (product info)

Hours of Operation: Monday - Friday 8:00am-5:00pm PST Monday - Friday 8:00am-5:00pm CST

1.4 Emergency telephone number

Medical 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 contain 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:

May cause cancer by inhalation.
 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.
 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.

2.3 Emergency Overview

Appearance/Odor: Black, carbon-impregnated filter sheets, generally odorless.


Other Hazards: 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.

Activated carbon (especially when wet) can deplete oxygen from air in enclosed spaces, and dangerously low levels of oxygen may result. Prior to entering a confined space that contains or previously contained activated carbon, the space should be evaluated for oxygen and carbon monoxide concentrations, and any other hazards, by a qualified person.

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

| <u>Ingredient(s)</u> | <u>Common Name & Synonyms</u> | <u>Percentage</u> | <u>CAS No.</u> |
|--|-----------------------------------|-------------------|----------------|
| Cellulose Pulp | Kraft Pulp, Cotton Linter Pulp | 40-55% | 65996-61-4 |
| Activated Carbon | Charcoal Black | 1-5% | 7440-44-0 |
| Bentonite, acid-leached | NA | 45-55% | 70131-50-9 |
| Quartz | Silica, Crystalline Quartz | 1-3% | 14808-60-7 |
| FDA Approved resin binders and additives | | < 4% | NA |

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| Section 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. | | |
| Skin Contact: | 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: | Dust may cause abrasive irritation to eyes. | | |
| Skin Contact: | Prolonged skin contact may cause dryness. | | |
| Inhalation: | Dust may cause nose, throat and upper respiratory tract irritation. Prolonged inhalation of respirable dust containing silica 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. | | |
| Section 5 - FIREFIGHTING MEASURES | | | |
| 5.1 Extinguishing Media | | | |
| Suitable Extinguishing Media: | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. | | |
| Unsuitable Extinguishing Media: | DO NOT USE a solid water stream as it may scatter and spread fire. In the event of a fire, spreading large amounts of activated carbon is not recommended due to the risk of creating uncontrolled dust emissions. | | |
| 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). Activated carbon explosibility: (*K _{st} 105 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) | | | |



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Section 8 - EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters

| | OSHA PEL ¹ | ACGIH ² | NIOSH REL ³ |
|--|---|--|--|
| Cellulose (C₆H₁₀O₅)_n: | PEL-TWA 15 mg/m ³ Total Dust (PNOR) ¹ PEL-TWA 5 mg/m ³ Respirable Dust (PNOR) ¹ | TLV-TWA 10 mg/m ³ Total Dust Not Established | REL-TWA 10 mg/m ³ Total Dust REL-TWA 5 mg/m ³ Respirable Dust |
| Activated Carbon: | PEL-TWA 15 mg/m ³ Total Dust PEL-TWA 5 mg/m ³ Respirable Dust | TLV-TWA 10 mg/m ³ Total Dust TLV-TWA 3 mg/m ³ Respirable Dust | Not Established Not Established |
| Diatomaceous Earth, Flux-Calcined: | PEL-TWA 15 mg/m ³ Total Dust PEL-TWA 5 mg/m ³ Respirable Dust | Not Established Not Established | Not Established Not Established |
| Quartz: | TWA Total Dust = ½[(30mg/m ³)/(%SiO ₂ +2)] TWA Respirable Dust = ¼[(10mg/m ³)/(%SiO ₂ +2)] | Not Established 0.025 mg/m ³ Respirable Dust | Not Established 0.05 mg/m ³ 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. Minimize compressed air blowdown or other practices that generate high airborne-dust concentrations.

Section 9 - PHYSICAL and CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| | | | |
|--|----------------------------|--------------------------|---|
| Physical State: | Solid | | |
| Color: | Black colored filter sheet | | |
| Odor: | Generally Odorless | | |
| Odor Threshold: | None | | |
| pH: | No Data Available | | |
| Melting / Freezing Point (Specify): | No Data Available | | |
| Initial Boiling Point & Boiling Range: | No Data Available | | |
| 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 >200 and <300 bar m/s; Activated Carbon 105 bar m/s |
| Vapor Pressure: | No Data Available | | |
| Vapor Density: | No Data Available | | |
| Relative Density: | No Data Available | | |
| Solubility(ies): | No Data Available | | |
| Partition Coefficient (n-octanol/water): | No Data Available | | |
| Auto-ignition Temperature: | No Data Available | | |
| Decomposition: | No Data Available | | |
| Oxidizing Properties: | No Data Available | | |
| Viscosity: | 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

Strong oxidizing agents, strong acids. Avoid open flame, sparks and other sources of ignition.

10.6 Hazardous decomposition products

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



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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: <i>Cellulose</i> | LD ₅₀ (rat) | Inhalation | 5,800 mg/m ³ | Not Available |
| | LD ₅₀ (rat) | Oral | > 5,000 mg/kg | Not Available |
| | LD ₅₀ (rabbit) | Dermal | > 2,000 mg/kg | Not Available |
| <i>Activated Carbon</i> | LC50 (rat) | Inhalation | 1h > 8.5mg/l | Not Available |
| | LD50 (rat) | Oral | > 2000 mg/kg | Not Available |
| <i>Bentonite</i> | LC50 (rat) | Inhalation | > 5,000 mg/kg | Not Available |
| | LD50 (rat) | Oral | 1h > 200 mg/l | Not Available |

Skin Corrosion/Irritation: No Data Available

Serious Eye Damage/Eye Irritation: No Data Available

Respiratory or Skin Sensitization: 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 affect the lungs but reactions are typically reversible.
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: Bentonite is composed of amorphous and crystalline silica. Respirable crystalline silica (quartz) 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.

IARC: 1 - Group 1: Carcinogenic to humans (Quartz)

NTP: Listed

Section 12 - ECOLOGICAL INFORMATION

12.1 Toxicity

No Data Available

12.2 Persistence and degradability

Cellulose fiber slowly biodegrades in water (half life range 1 month - 1 year in freshwater and coastal seawater.)

12.3 Bioaccumulative potential

Not expected to bioaccumulate.

12.4 Mobility in soil

Cellulose fiber persists in arid soil (landfills).

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: Not Applicable

Packing Group: Not Applicable

Marine Pollutant: Not Applicable

Other Applicable Information: Not Applicable

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| Section 15 - REGULATORY INFORMATION | |
| <p>15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture</p> <p>TSCA: Bentonite and Cristobalite appear on the EPA TSCA inventory list.</p> <p>CERCLA: Bentonite is not classified as a hazardous substance under regulations of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 40 CFR 302.</p> <p>SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.</p> <p>SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold reporting levels established by SARA Title III, Section 313.</p> <p>SARA 311/312: Chronic Health Hazard</p> <p>California Prop. 65 Components: WARNING! This product contains crystalline silica, a chemical known to the State of California to cause cancer.</p> <p>WHMIS Classification: Class D-2-A WHMIS Ingredient Disclosure List: Silica, crystalline, cristobalite</p> | |
| Section 16 - OTHER INFORMATION | |
| <p>Product Number(s): Edible Oil Filter Media Series: EO20C, SSBJC</p> <p>Prepared By: Gusmer Enterprises, Inc. Name of Preparer: Eric Anderson Title: Safety, Compliance & GMP Manager Date: 5/11/2015</p> | |
| <p>DISCLAIMER: While the information in this document is based on data which, to the best of our knowledge, was accurate and reliable at the time of preparation, no responsibility can be accepted by us for errors or omissions. The provision of this information should not be construed as a recommendation to use any of our products in violation of any patent rights or in breach of any statute or regulation. Users are advised to make their own determination as to the suitability of this information in relation to their particular purposes and specific circumstances. Since the information contained in this document may be applied under conditions beyond our control, we can accept no responsibility for any loss or damage caused by any person acting or refraining from acting as a result of this information.</p> | |
| <p>GHS Hazard Warning Label</p> <div style="border: 1px solid black; padding: 10px; width: 80%; margin: 0 auto;"> <p>Gusmer Cellulose Carbon Filter Sheet with Bentonite</p>  <p>DANGER: May cause cancer by inhalation. Causes damage to lungs through prolonged or repeated exposure if inhaled</p> <p>Obtain special instructions before use. Do not breathe dust. Do not handle until 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.</p> <p>Gusmer Enterprises Inc. 81 M St. Fresno, CA 93721 (559) 485-2692 1401 Ware Street, Waupaca, WI 54981 (715) 258-5525 CONSULT SDS FOR ADDITIONAL INFORMATION ON HAZARD</p> <p>V1.0</p> </div> | |