



SAFETY DATA SHEET
Gusmer Cellulose Carbon Filter Sheet

Section 1 - PRODUCT and COMPANY IDENTIFICATION**1.1 Product Identifier**

Product Name: Gusmer Cellulose Carbon Filter Sheet
 Product Code(s): 1640CRM, 2640CRMP, 1640CRX, 1640HCX, 1640SXE
 MC35, MC55, MC35C, MC55A, MC55C, MC55G
 Chemical Name: Mixture
 Synonyms: Cellulose Filter Sheet with Carbon

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

Intended Product Use: Filtration
 Intended for use only by commercial manufacturers. Not intended for retail sale or use by individual consumers.
 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****GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

This product, as shipped, is not regulated as an OSHA hazardous material when used in its normal state and use.

2.2 Label Elements

Hazard Pictogram(s): None Signal Word: NA
 Hazard Statements: NA Precautionary Statements: NA

2.3 Emergency Overview

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

Other Hazards: **Warning:** 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.

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.

The primary health hazard posed by this product is thought to be due to exposure to cellulose and activated carbon dusts (reference "Section 8" below). Cellulose and activated carbon dust may aggravate pre-existing respiratory conditions or allergies.

Do not generate dust because airborne respirable crystalline silica may be generated.

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	10-50%	65996-61-4
Activated Carbon	Charcoal Black	20-75%	7440-44-0
FDA Approved resin binders and additives		< 5%	NA

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.
 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 can cause eye irritation
 Skin Contact: Possible irritation.
 Inhalation: May cause unpleasant obstruction in the nasal passages.
 Ingestion: Not applicable for product in purchased form.

Chronic Effects: Not applicable

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: Water or other extinguishing agents appropriate for fighting surrounding fires.
 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.

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} 113 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**

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. Do not store together with strong oxidizing agents.

See Section 8 for OSHA permissible exposure limit(s)

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 (PNOR) ¹ PEL-TWA 5 mg/m ³ Respirable Dust (PNOR) ¹	TLV-TWA 10 mg/m ³ Total Dust TLV-TWA 3 mg/m ³ Respirable Dust	Not Established Not Established
Quartz (respirable)	PEL-TWA 50 ug/m ³ (vacated) TWA: 0.1 mg/m ³ respirable dust	TLV-TWA 0.025 mg/m ³ Respirable Dust	Not Established

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.



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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	Kst: Cellulose dust >200 and <300 bar m/s; Activated Carbon 113 bar m/s
Explosive Limits:	LEL: No Data Available	UEL: No Data Available	
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.

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>	LC 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>	LC ₅₀ (rat)	Inhalation	1h > 8.5mg/l	Not Available
	LD ₅₀ (rat)	Oral	> 2000 mg/kg	Not Available

Skin Corrosion/Irritation: No Data Available**Serious Eye Damage/Eye Irritation:** No Data Available**Respiratory or Skin Sensitization:** No Data Available**STOT - Single Exposure:** No Data Available**STOT - Repeated Exposure:** No Data Available**Aspiration Hazard:** No Data Available**11.2 Further Information****Mutagenicity:** No Data Available**Productive Toxicity:** No Data Available**Carcinogenicity:** Not classified as a carcinogen by OSHA, NTP, or IARC in their reviews. Contains a component (crystalline silica) that is listed by IARC as group 1, by ACGIH as group A2, and by NTP as a known human carcinogen



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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**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.

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.**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.**SARA 311/312:** No SARA Hazards**California Prop. 65 Components:**

"Silica, crystalline (airborne particles of respirable size)". Activated carbon, which is manufactured from a naturally occurring raw material(s), contains a low level of crystalline silica. Please note that all listing qualifiers (airborne and respirable size (10 micrometers or less in diameter)) must be met for the crystalline silica in this product to be considered a Proposition 65 substance. Certain metals, including arsenic, cadmium, lead, mercury, or nickel, may be present at low concentrations on and/or in activated carbon and are California Proposition 65 listed substances.

⚠ WARNING: This product can expose you to chemicals including **Crystalline Silica, Arsenic, 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):****1600 Filter Sheet Series Item Numbers:** 1640CRM, 2640CRMP, 1640CRX, 1640HCX, 1640SXE**MC Carbon Filter Sheet Series Item Numbers:** MC35, MC55, MC35C, MC55A, MC55C, MC55G**Prepared By:** Gusmer Enterprises, Inc.**Name of Preparer:** Eric Anderson**Title:** Safety, Compliance & GMP Manager**Date:** 7/23/2021

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GHS Hazard Warning Label**No Hazard Warning Label Required:**

Not considered a hazardous material when used in its normal state and use.