

GREMARCO

SAFETY DATA SHEET

Prepared in accordance with the OSHA Hazard Communication Standard, 29 CFR 1910.1200, and GHS Revision 7

Article status and voluntary provision: This product is a bound, non-friable fabric in which all components are fixed within a stable matrix. Under normal conditions of use it does not release more than trace quantities of any hazardous chemical and does not meet the hazard criteria of 29 CFR 1910.1200. Gremarco, LLC considers this product to be an article as defined in 29 CFR 1910.1200(c) and therefore exempt from Safety Data Sheet requirements. This Safety Data Sheet is provided voluntarily, in GHS format, for customer information. See Section 16 regarding hazards that may arise from adsorbed contaminants after use.

1. Identification

Product identifier	Activated Carbon Impregnated Filtration Media — C-Series
Other means of identification	Carbon fabric; carbon cloth; odor adsorbent fabric; activated carbon media
Recommended use	Adsorbent filtration media for the removal of odors and gaseous contaminants from air and gas streams. Supplied to OEM filter manufacturers and converters for incorporation into finished filter assemblies. Industrial and commercial use only.
Restrictions on use	Not for use in liquid-phase or water filtration: this product contains a phosphate flame retardant that may leach into water and is toxic to aquatic life. Not for consumer sale except as incorporated into a finished filter product. It is the customer's responsibility to determine suitability for its intended use, and to test and certify any finished product incorporating this media.
Manufacturer	Gremarco, LLC 131 East Main Street West Brookfield, MA 01585 United States Telephone: 1.508.867.5244
Emergency telephone	1.508.867.5244

2. Hazard(s) Identification

Classification of the substance or mixture

Not classified as hazardous under the OSHA Hazard Communication Standard, 29 CFR 1910.1200, as supplied.

Label elements

Hazard pictogram	None
Signal word	None
Hazard statements	None
Precautionary statements	None required. See Section 7 for recommended handling practices.

Hazards not otherwise classified (HNOC)

Carbon fines and fabric dust generated during cutting, slitting, die-cutting, or other converting operations may cause mechanical irritation of the eyes, skin, and upper respiratory tract.

Accumulated carbon fines are a combustible particulate. Fines liberated in sufficient concentration in air, in the presence of an ignition source, may present a deflagration or flash fire hazard. The product as supplied, in bound fabric form, is not capable of a dust explosion; the hazard arises only where converting operations enrich fine dust. Refer to NFPA 652 and NFPA 654 for the safe handling of combustible particulate solids.

Activated carbon adsorbs oxygen from air. Confined spaces containing large quantities of this media may become oxygen-deficient. Test the atmosphere before entering any enclosed space in which bulk quantities are stored.

Unknown acute toxicity

6–8% of the mixture consists of a component (the acrylic polymer binder) for which numerical acute toxicity data are not available; the binder is classified by its manufacturer as non-hazardous. The mixture is not classified for acute toxicity.

3. Composition / Information on Ingredients

Mixture. Composition of the finished fabric:

Component (chemical family)	Concentration (%)	GHS classification
Polyester nonwoven substrate	33–50	Not classified
Activated carbon (adsorbent)	23–35	Not classified
Acrylic polymer binder	6–8	Not classified
Inorganic phosphate flame retardant	4–5	Not classified
Anionic dispersant	1	Not classified

C-Series contains an inorganic phosphate flame retardant and carries a UL 900 Class 2 rating as a filter media. No component is present at a concentration that requires classification of the mixture. The specific chemical identities, CAS numbers, and exact concentrations of the components are withheld as confidential business information in accordance with 29 CFR 1910.1200(i); the components are described above by chemical family and concentration range. No withheld component is classified as hazardous. Occupational exposure limits, where established, are listed in Section 8.

4. First-Aid Measures

General	No adverse effects are anticipated from normal handling of the product as supplied. The measures below address exposure to dust or fines generated during converting.
Inhalation	Move the person to fresh air and keep them comfortable for breathing. If irritation persists, get medical attention.
Skin contact	Wash with soap and water. The product is not expected to irritate the skin. If irritation develops or persists, get medical attention.
Eye contact	Do not rub the eyes. Rinse cautiously with water for several minutes, holding the eyelids open. Remove contact lenses if present and easy to do. If irritation persists, get medical attention.
Ingestion	Rinse the mouth with water. Do not induce vomiting. Get medical attention if the person feels unwell.
Most important symptoms and effects	Mechanical irritation of the eyes and upper respiratory tract from airborne dust. No other acute or delayed effects are known.
Note to physicians	Treat symptomatically. No specific antidote is known. Activated carbon is used therapeutically as an oral adsorbent and is not systemically toxic.

5. Fire-Fighting Measures

Suitable extinguishing media	Water spray or fog, foam, dry chemical, or carbon dioxide. Water is preferred: smoldering activated carbon requires thorough wetting to be fully extinguished.
Unsuitable extinguishing media	Avoid high-pressure, high-velocity water streams, which may disperse fines into the air and create an explosible dust cloud. Carbon dioxide alone may not extinguish a deep-seated smolder within a roll or bale.
Specific hazards	Activated carbon can burn without flame or visible smoke and can smolder undetected deep inside a roll for an extended period. Fire may appear to be extinguished and then re-ignite. Fine dust dispersed in air in sufficient concentration, in the presence of an ignition source, presents a deflagration or flash fire hazard. Combustion may liberate dense, acrid smoke.

Hazardous combustion products	Carbon monoxide, carbon dioxide, oxides of nitrogen, ammonia, oxides of phosphorus and phosphoric acid mist, acrolein, and other organic decomposition products of polyester and acrylic binder.
Protective equipment for fire-fighters	Wear full protective fire-fighting gear including a self-contained breathing apparatus operated in positive-pressure mode. Respiratory protection is essential. Approach from upwind. Fight from a protected location and avoid dispersing dust into the air.

6. Accidental Release Measures

Personal precautions	The product as supplied is a fabric and does not spill in the conventional sense. For releases of carbon fines: eliminate ignition sources, ensure adequate ventilation, and avoid generating airborne dust. Wear eye protection, gloves, and a dust mask where dust is being generated.
Environmental precautions	Prevent fines from entering drains, waterways, or soil. No significant environmental hazard is anticipated from the product as manufactured.
Methods for containment and cleanup	Collect rolls, sheets, or scrap mechanically. For fines, vacuum using equipment rated for combustible dust, or sweep gently after light misting with water to suppress dust. Do not dry sweep in a manner that aerosolizes fines. Do not use compressed air for cleaning. Place collected material in a suitable closed container for disposal in accordance with Section 13.
Reference to other sections	See Section 8 for personal protective equipment and Section 13 for disposal.

7. Handling and Storage

Precautions for safe handling	Handle rolls and sheets so as to minimize abrasion and dusting. Avoid rough handling. Where converting operations generate fines, use local exhaust ventilation and institute routine housekeeping so that dust does not accumulate on surfaces, ledges, or equipment. Keep away from ignition sources. Do not smoke in handling or storage areas. Ground and bond dust-handling equipment to control static discharge. Wash hands after handling. Do not eat, drink, or smoke in handling areas.
Conditions for safe storage	Store sealed in a cool, dry, well-ventilated area away from ignition sources. Store in the original packaging. Keep away from incompatible materials (see below). Activated carbon will adsorb odors, vapors, and volatile contaminants from the surrounding atmosphere, which reduces its remaining capacity. Do not store near solvents, fuels, paints, or other sources of vapor. Activated carbon depletes oxygen in enclosed spaces. Where bulk quantities are stored in a confined space, test the atmosphere before entry.
Incompatible materials	Strong oxidizing agents (for example liquid oxygen, ozone, permanganates, peroxides, concentrated nitric acid, chlorates). Strong acids and strong bases.

8. Exposure Controls / Personal Protection

Occupational exposure limits

Component	Source	Limit
Activated carbon (7440-44-0), as Particulates Not Otherwise Regulated	OSHA PEL (29 CFR 1910.1000, Table Z-1)	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
Particulates not otherwise specified	ACGIH TLV	10 mg/m ³ TWA (inhalable); 3 mg/m ³ TWA (respirable)
Other components (substrate, binder, flame retardant, dispersant)	OSHA, ACGIH, NIOSH	None established

Engineering controls

None required for handling the product as supplied. Where cutting, slitting, or other converting operations generate airborne fines, provide local exhaust ventilation sufficient to keep exposures below the limits above. Dust collection equipment should be designed and protected in accordance with NFPA 652 and NFPA 654.

Individual protection measures

Eye/face protection	Safety glasses with side shields where dust is generated.
Skin/hand protection	Gloves are not required for normal handling. Cut-resistant or general-purpose work gloves are recommended for handling cut edges and for comfort.
Body protection	Normal work clothing.
Respiratory protection	Not required for normal handling. Where dust is generated and cannot be controlled by ventilation, use a NIOSH-approved N95 or better particulate respirator in accordance with a respiratory protection program meeting 29 CFR 1910.134.
General hygiene	Wash hands after handling. Do not eat, drink, or smoke in the work area.

9. Physical and Chemical Properties

Property	Value
Physical state	Solid — flexible fabric / nonwoven roll goods
Appearance	Deep gray to black fabric containing activated carbon fixed in a stable, inert matrix
Color	Deep gray to black
Odor	None to slight
Odor threshold	Not applicable
pH	Not applicable (solid article); activated carbon component, 4–11 in aqueous slurry
Melting point / freezing point	No data available. The polyester substrate component softens at approximately 250 °C (482 °F).
Initial boiling point and boiling range	Not applicable
Flash point	Not applicable (solid)
Evaporation rate	Not applicable
Flammability (solid, gas)	Combustible solid. Rated UL 900 Class 2 as a filter media. Does not meet the GHS criteria for a flammable solid.
Upper / lower flammability or explosive limits	Not applicable to the fabric as supplied. See Section 2 regarding combustible fines.
Vapor pressure	Not applicable
Vapor density	Not applicable
Relative density	Not applicable (fabric)
Bulk density	2–8 lb/ft ³ typical (32–128 kg/m ³)
Solubility in water	Insoluble
Partition coefficient, n-octanol/water	Not applicable
Auto-ignition temperature	No data available for the finished fabric. The activated carbon component has a reported ignition temperature above 250 °C (482 °F).
Decomposition temperature	No data available
Viscosity	Not applicable
Particle characteristics	Not applicable — supplied as bound fabric, not as a particulate. Fines may be generated during converting.

10. Stability and Reactivity

Reactivity	Not reactive under normal conditions of use and storage. Activated carbon is a strong adsorbent and may react with strong oxidizing agents.
Chemical stability	Stable under normal conditions of temperature and pressure.
Possibility of hazardous reactions	None anticipated under normal use. Contact with strong oxidizers may cause rapid oxidation or fire. As supplied, the bound fabric is not capable of a dust explosion; enrichment with fine dust during converting creates a dust explosion risk.
Conditions to avoid	Ignition sources, open flame, excessive heat, generation and accumulation of airborne fines, contact with strong oxidizers, storage near sources of volatile organic vapors.
Incompatible materials	Strong oxidizing agents (for example liquid oxygen, ozone, permanganates, peroxides, concentrated nitric acid, chlorates). Strong acids and strong bases.
Hazardous decomposition products	None under normal conditions of storage. On combustion: carbon monoxide, carbon dioxide, oxides of nitrogen, ammonia, oxides of phosphorus / phosphoric acid mist, and organic decomposition products.

11. Toxicological Information

Information on likely routes of exposure

Inhalation of dust and eye contact with dust are the only anticipated routes of exposure, and only where converting operations generate fines. Skin contact with the fabric presents no anticipated hazard. Ingestion is not a plausible route.

Symptoms and effects

Inhalation	Dust may cause mechanical irritation of the upper respiratory tract, with coughing.
Eye contact	Dust may cause mechanical irritation, with redness.
Skin contact	No irritant effect expected.
Ingestion	Not a plausible route of exposure. No data available.
Delayed and chronic effects	No data available for the mixture. No component is classified for carcinogenicity, germ cell mutagenicity, reproductive toxicity, respiratory or skin sensitization, or specific target organ toxicity.

Numerical measures of toxicity

Component	Route / test	Result
Activated carbon	Oral LD50, rat (OECD 423)	> 2,000 mg/kg
Activated carbon	Inhalation LC50/1 h, rat	> 64.4 mg/L
Inorganic phosphate flame retardant	Oral LD50, rat	4,740 mg/kg
Anionic dispersant	Oral LD50, rat	> 2,000 mg/kg
Acrylic polymer binder	—	No data available for the polymer binder. Not classified.
Mixture	Acute toxicity estimate	Not classified. No acute toxicity data are available for the mixture itself; classification is based on the components.

Carcinogenicity

No component of this product is listed as a carcinogen by IARC, NTP, ACGIH, or OSHA.

12. Ecological Information

Ecotoxicity	No data available for the finished mixture. The product is a bound solid and is not expected to be bioavailable as manufactured. This product contains a phosphate flame retardant and is not intended for use in water. The phosphate flame retardant component has reported fish LC50 (96 h): 123 mg/L,
--------------------	--

	Oncorhynchus mykiss (flow-through); 389–654 mg/L, Pimephales promelas (static); > 500 mg/L, Brachydanio rerio (static).
Persistence and degradability	Not readily biodegradable. Activated carbon is chemically inert and persistent.
Bioaccumulative potential	No data available. Not expected to bioaccumulate.
Mobility in soil	Not applicable — bound solid.
Other adverse effects	Phosphate release from the flame retardant component may be toxic to aquatic life and may contribute to nutrient loading if the product enters surface water. See restrictions on use in Section 1.
PBT / vPvB assessment	Not applicable.

13. Disposal Considerations

Waste from the product as manufactured	The product as manufactured is not a hazardous waste under RCRA (40 CFR 261). Unused media and manufacturing scrap may generally be disposed of as ordinary industrial solid waste.
Waste from used product	Important — see Section 16. Once placed in service, activated carbon media adsorbs and concentrates whatever contaminants are present in the air or liquid stream it treats. Spent media may therefore be a regulated or hazardous waste even though the product as manufactured is not. The end user is responsible for characterizing spent media based on its service history.
Safe handling of waste	Spent media may contain adsorbed contaminants and may self-heat. Store spent media in closed containers away from ignition sources pending disposal.
Methods of disposal	Dispose of in accordance with all applicable federal, state, and local regulations. Do not incinerate spent media without first characterizing the adsorbed contaminants.

14. Transport Information

Not regulated as a dangerous good by US DOT (49 CFR), IATA, or IMDG in the form supplied.

	DOT	IATA	IMDG
UN number	Not regulated	Not regulated	Not regulated
Proper shipping name	Not applicable	Not applicable	Not applicable
Transport hazard class	Not applicable	Not applicable	Not applicable
Packing group	Not applicable	Not applicable	Not applicable
Marine pollutant	No	No	No

Special precautions for the user: Keep away from ignition sources during transport. Protect from moisture.

Note: Bulk, unbound activated carbon may be subject to UN 1362, Carbon, activated, Class 4.2, unless it passes the UN self-heating test (N.4). The bound fabric supplied under this Safety Data Sheet is not offered in bulk particulate form and is not subject to that entry.

Transport in bulk according to MARPOL Annex II and the IBC Code: not applicable.

15. Regulatory Information

United States — Federal

TSCA	All components are listed on the TSCA inventory or are exempt from listing. As an article, this product is exempt from TSCA reporting requirements under 40 CFR 704.5.
SARA Section 302	No component is listed as an extremely hazardous substance.
SARA Section 311/312	Acute health: No. Chronic health: No. Fire: No. Pressure: No. Reactivity: No.

SARA Section 313	No component is present at or above the de minimis reporting threshold.
CERCLA	No component is listed under 40 CFR 302.4.
OSHA	Not classified as hazardous under 29 CFR 1910.1200. Considered an article under 29 CFR 1910.1200(c).

United States — State

California Proposition 65	This product is not known to contain any chemical listed under California Proposition 65 at a level requiring a warning.
Massachusetts Right-to-Know	No component of this product is present above the applicable reporting threshold of the Massachusetts Substance List (105 CMR 670). The acrylic binder contains less than 0.1% formaldehyde, which appears on the list but is below its reporting threshold in the finished product.
Other state lists	No component of this product is listed on the California, Minnesota, New Jersey, or Pennsylvania right-to-know lists.

International

Canada (CEPA DSL)	All components are on the Domestic Substances List or are exempt.
Canada (WHMIS 2015)	Not classified as a hazardous product. Note that WHMIS 2015 includes a combustible dust hazard class that has no direct equivalent under the US Hazard Communication Standard; the product as supplied in bound fabric form does not fall within it.

16. Other Information

Important disclaimer regarding adsorbed contaminants

Activated carbon is a chemical adsorbent medium. In certain circumstances or specific end uses it may adsorb and concentrate a hazardous or regulated contaminant. Where this occurs, the end user is responsible for evaluating the hazards associated with the handling, transportation, and disposal of the filter media after use. These hazards do not exist in the product as manufactured and cannot be characterized by Gremarco, LLC, because they depend entirely on the service conditions selected by the end user.

Combustible dust

The UN GHS does not contain a hazard class for combustible dust; OSHA addresses it through the Hazard Communication Standard as a hazard not otherwise classified. This product as supplied is a bound fabric and does not present a combustible dust hazard. Fines generated during converting operations are a combustible particulate. Refer to NFPA 652 and NFPA 654.

Formaldehyde content

The self cross-linking acrylic binder used in this product contains less than 0.1% free formaldehyde as supplied, according to the binder manufacturer's Safety Data Sheet. High-temperature curing during manufacture may release trace formaldehyde. Residual formaldehyde in the finished, cured fabric is present only at trace levels, well below the 0.1% concentration that would require classification or composition disclosure of the finished product. This information is provided in response to customer inquiries and does not constitute a hazard classification of the finished product.

Key to abbreviations

ACGIH — American Conference of Governmental Industrial Hygienists · CAS — Chemical Abstracts Service · CERCLA — Comprehensive Environmental Response, Compensation, and Liability Act · DOT — US Department of Transportation · GHS — Globally Harmonized System of Classification and Labelling of Chemicals · HCS — Hazard Communication Standard · HNOC — Hazards Not Otherwise Classified · IARC — International Agency for Research on Cancer · IATA — International Air Transport Association · IMDG — International Maritime Dangerous Goods · LC50 — Lethal concentration, 50 percent · LD50 — Lethal dose, 50 percent · NFPA — National Fire Protection Association · NIOSH — National Institute for Occupational Safety and Health · NTP — National Toxicology Program · OSHA — Occupational Safety and Health Administration · PEL — Permissible Exposure Limit · RCRA — Resource Conservation and Recovery Act · SARA — Superfund Amendments and Reauthorization Act · TLV — Threshold Limit Value · TSCA — Toxic Substances Control Act · TWA — Time-Weighted Average

References

Classification and hazard data for this product are based on the current Safety Data Sheets of the activated carbon adsorbent and of the coating component suppliers, all held on file by Gremarco, LLC and available to regulatory authorities on request. General references: OSHA 29 CFR 1910.1200 and 29 CFR 1910.1000; NIOSH Pocket Guide to Chemical Hazards.

Revision information

Prepared by	Gremarco, LLC
Date of preparation	July 17, 2026
Version	2.0
Supersedes	Revision 2023-5
Summary of changes	Complete rewrite to the 16-section GHS format, and separation of Series C onto its own Safety Data Sheet. C-Series is the air- and gas-phase media and contains an inorganic phosphate flame retardant; it is not for water use. Section 1: supplier address, use restrictions, and aquatic-toxicity restriction added. Section 2: hazards not otherwise classified added. Section 3: full composition disclosed. Sections 4, 6, 8: substantive content added. Section 8: OSHA PEL and ACGIH TLV added. Sections 11, 12: component toxicity and ecotoxicity data added. Supersedes combined Revision 2023-5, which covered multiple series on one sheet.

The information in this Safety Data Sheet was prepared by Gremarco, LLC and is accurate to the best of our knowledge as of the date of issue. It is offered solely as guidance for the safe handling, use, processing, storage, transportation, and disposal of this product, and is not to be considered a warranty or quality specification. Final determination of the suitability of this product for any particular purpose is the sole responsibility of the user.

— End of Safety Data Sheet —