



Safety Data Sheet

SHELTER-RITE® Architectural Fabrics

NOTE: This product meets the definition of "article" under the OSHA Hazard Communication Regulations in 29 CFR 1910.1200(c) and is exempt from the requirement to provide a Safety Data Sheet per 29 CFR 1910.1200(b)(6)(v). This Safety Data Sheet is provided on a voluntary basis to provide additional information to customers.

Rev. Date: 13 Jan 2023

SECTION 1. IDENTIFICATION

Product Name: SHELTER-RITE® Architectural Fabrics

Trade Names: Styles: 8028, 8032, 8221, 8321, 8324, 8424, 8520, 9032, 9319
Coatings: FRLTC, FRLTA

Recommended Use: Fabric buildings/structures

Manufacturer: SEAMAN CORPORATION
1000 Venture Blvd.
Wooster, OH 44691 USA
PHONE: (330) 262-1111
www.seamancorp.com

24-HR EMERGENCY (Chemtrec)
U.S./Canada: (800) 424-9300
International: +1 703 527-3887

SECTION 2. HAZARDS IDENTIFICATION

This material does not meet any hazard classification under the HCS.

Under normal use and handling, the product is not expected to create any physical or health hazards.

Excessive heating may result in the generation of smoke or fumes containing hydrogen chloride, carbon dioxide, carbon monoxide, and trace amounts of organic compounds due to decomposition of the components. These fumes may be irritating to respiratory tract and eyes.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Exposure to individual components is not expected under normal conditions of use. Listing of major components and exposure limits are given for reference only.

Regulated Components

Antimony Trioxide
Folpet

CAS No.

1309-64-4
133-07-3

Weight %

5-10%
< 1%

Major Components

Polyester fabric
PVC Resin
Phthalate plasticizer
Ethene, 1,1,-difluoro-, homopolymer (Kynar® and TS215 PVDF coated products only)
Ethene, fluoro-, homopolymer (Tedlar® clad products only)

CAS No.

Not applicable
9002-86-2
**
24937-79-9
24981-14-4

** Specific chemical identity is withheld as a trade secret under 29 CFR 1910.1200(i). None of the plasticizers used are regulated under the Consumer Products Safety Improvement Act, REACH Annex XVII, or appear on the REACH SvHC Candidate List or Authorisation List.

SECTION 4. FIRST AID MEASURES

Inhalation: If exposed to fumes from overheating or combustion, move to fresh air. Seek medical attention if symptoms persist.
Skin Contact: Wash exposed skin with soap and water. If irritation develops or persists, seek medical attention.
Eye Contact: Flush eyes with plenty of water for at least 15 minutes. Seek medical attention.
Ingestion: Not applicable

SECTION 5. FIRE FIGHTING MEASURES

Flammable Properties: Material is self extinguishing, but will burn if exposed continuously to an external combustion source and yield hydrogen chloride, carbon monoxide, carbon dioxide, and small amounts of aliphatic and aromatic hydrocarbons.
Suitable Extinguishing Media: Water fog, CO₂, foam or dry chemical (CAUTION: CO₂ will displace air in confined spaces and may cause an oxygen deficient atmosphere.)
Products of Combustion: Hydrogen chloride, carbon dioxide, carbon monoxide, trace amounts of aliphatic and aromatic organics
Protection of Firefighters: Firefighters should wear self-contained breathing apparatus and full fire-fighting turnout gear. No special procedures are expected to be necessary for this product.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protection recommended in Section 8.
Environmental Precautions: No special procedures necessary
Methods for Containment: No special procedures necessary
Methods for Clean-up: No special procedures necessary

SECTION 7. HANDLING AND STORAGE

Handling: Use protective equipment recommended in Section 8. Wash hands after repeated handling. When hot air or wedge welding, insure adequate local ventilation to prevent the buildup of fumes.
Unwinding, winding, and passage of the fabric through and over rollers can generate a strong electrostatic charge on the surface of the fabric. Static discharge devices should be used when handling in this way.
Storage: Rolled goods should be kept dry and protected from moisture.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT

Engineering Controls: Provide local exhaust ventilation for any thermal processing operations.
Eye/Face: Wear safety glasses during processing
Skin: Wear general purpose gloves during prolonged handling
Respiratory: Provide adequate local ventilation. If exposure limits are exceeded, NIOSH approved respiratory protection must be provided.
General Hygiene: Wash hands with soap and water after handling material.

EXPOSURE GUIDELINES

COMPONENT	OSHA (PEL)	ACGIH (TLV)	NIOSH (REL)	COMMENTS
PVC Resin (9002-86-2)	-	-	-	None established
Folpet (133-07-3)	-	-	-	None established

Titanium Dioxide (13463-67-7)	15 mg/m ³ TWA (total dust)	10 mg/m ³ TWA	-	
Antimony Trioxide (1309-64-4):	0.5 mg/m ³ TWA as Sb	0.5 mg/m ³ TWA as Sb	0.5 mg/m ³ TWA as Sb	

NOTE: Due to product form, exposure to dust or fume is not expected to occur; exposure limits are given for reference only.

Potential byproducts from thermal processing/overheating:

	OSHA (PEL)	ACGIH (TLV)	NIOSH (REL)	COMMENTS
Hydrogen Chloride (7647-01-0)	5 ppm (7 mg/m ³) Ceiling	2 ppm (2.98 mg/m ³) Ceiling	5 ppm (7 mg/m ³) Ceiling	The odor threshold for HCl is 0.25 ppm
Carbon Monoxide (630-08-0)	50 ppm (55 mg/m ³) TWA	25 ppm (29 mg/m ³) TWA	35 ppm (40 mg/m ³) TWA; 200 ppm (229 mg/m ³) Ceiling	

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Polymeric sheeting	Odor:	Characteristic
Odor threshold:	NA	pH:	NA
Melting/Freezing Point:	NA	Boiling Point:	NA
Flash Point:	NA	Evaporation Rate:	NA
Flammability:	NA	LFL/UFL:	NA
Vapor Pressure:	NA	Vapor Density:	NA
Relative Density:	NA	Solubility:	none
Partition Coefficient K_{ow}:	NA	Auto-Ignition Temp.:	850°F
Decomposition Temp.:	Not determined	Viscosity:	NA

SECTION 10. STABILITY AND REACTIVITY

Reactivity:	Not reactive
Chemical Stability:	Stable at normal temperatures
Hazardous Reactions:	Will not occur
Conditions to Avoid:	Prolonged excessive heating
Incompatible Materials:	None known.
Hazardous Decomposition:	Thermal decomposition products: Hydrogen chloride, carbon dioxide, carbon monoxide, trace amounts of aliphatic and aromatic organics

SECTION 11. TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS:

Summary:	Smoke generated from heating or burning the product is the primary health effect.
Inhalation:	Irritation of the upper respiratory tract may occur from fumes and smoke generated during heating
Skin Contact:	Prolonged handling may cause mechanical irritation
Eye Contact:	Fumes from heating may cause irritation, redness, and burning
Ingestion:	Not an expected route of entry
Target Organs:	Lungs/respiratory tract, eyes

ACUTE TOXICITY

General Information: No data available for this product as a whole. Adverse health effects would not be anticipated with normal use. However, thermal processing can emit fumes which may cause eye and respiratory irritation.

Component Analysis: Due to the physical form of the product, exposure to the chemical components of the fabric and coating is not expected. Contact manufacturer (contact information in Section 16) to obtain detailed information regarding component toxicity.

CARCINOGENICITY

General Information: This product has not been evaluated by OSHA, NTP, ACGIH, or IARC. No specific data available.

Component Analysis: PVC Resin (9002-86-2):
IARC: Group 3 – Not Classifiable (Vol. 19, Suppl. 7, 1987)
Antimony Trioxide (1309-64-4):
IARC: Group 2B – Possibly Carcinogenic to Humans (Vol. 47, 1989)
ACGIH: A2 – Suspected Human Carcinogen
Titanium Dioxide (13463-67-7):
IARC: Group 2B – Possibly Carcinogenic to Humans (Vol. 93, 2010)
ACGIH: A4 – Not Classifiable as a Human Carcinogen
NIOSH: Potential occupational carcinogen
Folpet (133-07-3):
EPA: B2 – Probable Human Carcinogen (sufficient evidence from animal studies; inadequate evidence or no data from epidemiologic studies)

CHRONIC TOXICITY No data is available on mutagenicity, reproductive effects, or developmental effects.

SECTION 12. ECOLOGICAL INFORMATION

No data is available on the adverse effects of this product on the environment. Toxicity is expected to be low based on insolubility in water.

SECTION 13. DISPOSAL CONSIDERATIONS

Dispose of waste in accordance with Federal, State, and local environmental control regulations. This material is not hazardous in its manufactured form under the Resource Conservation and Recovery Act. (40 CFR 261)


SECTION 14. TRANSPORTATION INFORMATION

This product is not classified as hazardous for transportation.

SECTION 15. REGULATORY INFORMATION

SARA Title III: Health: Acute NO Chronic NO EHS NO
Physical: Fire NO Reactivity NO Pressure NO

SARA 313 (TRI): This product is considered an "article" under SARA Title III Section 313 and is not subject to reporting under normal conditions of use.

California Proposition 65:  **WARNING:** This product can expose you to chemicals including antimony trioxide and folpet, which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16. OTHER INFORMATION

The data in this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. No warranty of merchantability or any other warranty, expressed or implied, is given. In no case shall the information provided herein be considered a part of the terms and conditions of sale. Seaman Corporation assumes no obligation or liability for the information given or results obtained. All materials may present unknown hazards and should be used with caution. Final determination of suitability of any material is the sole responsibility of the user.

For questions related to the safety of this product, e-mail msds@seamancorp.com or call (330) 262-1111.

Shelter-Rite® is a registered trademark of Seaman Corporation
Kynar® is a registered trademark of Arkema
Tedlar® is a registered trademark of DuPont



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PHONE: (330) 262-1111 ▪ FAX: (330) 263-6950 ▪ www.seamancorp.com



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19 October 2023

Chris Jordan
Director of Project Management
Arizon Building Systems
11880 Dorsett Road
St. Louis, MO 63043

RE: PFAS content – 8028 FRLTC

Dear Mr. Jordan:

To clarify the status of Seaman Corporation's Shelter-Rite® 8028 FRLTC products:

8028 FRLTC with Acrylic Top Finish (TS139) or Tedlar® cladding do not contain any intentionally added constituents classified as perfluoroalkyl or polyfluoroalkyl substances (PFAS), as defined by the broad definitions of the Organization for Economic Co-operation and Development (OECD) or various state regulations, including the Washington Safer Products Restrictions (WAC 173-337-025).

The PVDF coating used in 8028 FRLTC with PVDF Top Finish (TS215 or TS237) does qualify as a PFAS under the above definitions. However, it is a polymeric PFAS, significantly different from the non-polymeric PFAS's that have been the cause of recently publicized groundwater contamination issues. In fact, PVDF is considered a "polymer of low concern" under OECD and other national standards, including the United States, where it is exempt from Pre-Manufacture Notification under the Toxic Substances Control Act (TSCA). In addition, PVDF was not included in the definition of PFAS under the recently issued TSCA PFAS Reporting Rule (88 Fed. Reg. 70516, 40 CFR 705).

If you have any questions, please contact me at (330) 202-4470, or e-mail me at ashimko@seamancorp.com.

Best Regards,

Andrew J. Shimko, P.E.
Environmental Manager
SEAMAN CORPORATION