

First Line Technologies FiberTect

FiberTect dry decontamination solution is a three layer, inert, flexible, drapable, non-woven composite substrate for absorbing and adsorbing chemical warfare agents (CWA), toxic industrial chemicals (TICs), and pesticides. FiberTect is self-contained and packaged for easy use, storage, and transport. Materials used in the outside layers may vary to provide both absorption and adsorption properties and multiple functional uses. Made from Polyester, Cotton, FiberTect is available in 4 forms: Wipe, Mitt, Roll, Shuffle Pit. FiberTect is sourced and made in the USA.

FiberTect is licensed under US Patent 7,516,525.





FiberTect Roll



FiberTect Shuffle Pit



FiberTect Pad/Wipe



FiberTect Mit



TICs/TIMs Physically removes from surfaces and traps toxic

surfaces and traps toxic vapors within the activated carbon layer



Rad Particulates Removes powders, including radiological contamination, from surfaces including PPE

Highlights

- Wipe away bulk chemicals
- Retains toxic vapors
- Adsorb and absorb toxic materials
- 15-year shelf life
- Effective removal on personnel, weapons, sensitive equipment, and PPE
- Activated carbon non-woven fabric
- Devoid of loose particles
- Effective dry decon of persons, weapons, and sensitive equipment
- Effective removal of acids and bases

FiberTect can be in different forms, including sheets, cut pads, continuous roll or a mitt that can be worn over gloves. Additionally, it can be produced with various final densities, thicknesses, and tensile strengths depending on the specification and customer requirements by varying the needle punching methodologies.

Mitt: The mitt allows for easy clean-up of bulk chemicals on people, weapons, and sensitive equipment and can be used over gloves.

Wipe: The wipe is a versatile piece of cut cloth that comes individually wrapped and can be used in a variety of individual dry decon situations.

Roll: The perforated roll of FiberTect is ideal for instances in which the amount of dry decon needed is not known. The roll comes perforated into (20) 12" x 12" wipes.

Shuffle Pits: Shuffle Pits function of a decon pool with the capability of dry decontamination to capture and reduce the spread of contaminants. Shuffle Pits are reusable, inter-operable with others on the market, and allow for decon within a 4' x 4' footprint.



> 95% reduction of

chemical agents on most surfaces

Physically removes vegetative bacteria, fungi, and viruses



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3-Layer Design

The three layers of material consist of a top and bottom fabric with a center layer of fibrous activated carbon that is needle punched into a composite fabric. The top and bottom layers provide structural coherence, improving mechanical strength and abrasion resistance. FiberTect is non-particulate and is devoid of loose particles and is effective in decontaminating personnel and sensitive parts of military equipment.

Testing and Development

FiberTect development and testing was sponsored by the U.S. Department of Homeland Security and managed by the Technical Support Working Group, Office of the Assistant Secretary of Defense for Special Operations/Low Intensity Conflict, U.S. Department of Defense. Product testing has been conducted by Lawrence Livermore National Laboratories (LLNL). FiberTect proved superior in all testing results against 30 comparable products for decontaminating against toxic chemical agents, TICs and TIMs. Challenge chemicals and results include:

Sulfur Mustard: Outperformed all 30 other sorbents for absorptive capacities directly from skin (95% removal) and adsorptive capacities, including current military M291 sorbent.

Methylparathion (organophosphate): Outperformed all sorbents for absorptive and adsorptive capacities.

70% Nitric Acid, 70% Sulfuric Acid, 10% Sodium Hypochlorite, and P-Zylene: No material degradation.

Water and P-Xylene: Outperformed other sorbents for both hydrophilic and hydrophobic absorptive capacities.

Cotton FiberTect for Oil Spill Clean-Up - Also available

- Greater oil absorption than synthetic fabrics
- · Absorbs and holds hydrocarbons and vapors that are toxic
- Reusable for oil
- Works on multiple types of oil (i.e. crude oil)
- · Able to clean crude oil viscosity materials with ease
- Porous carbon retains micro particles from oil dispersant mixtures that are harmful to marine life
- EPA Certified
- Environmentally safe and non-toxic
- Lab-validated solution on crude and motor oils