

Fibertect for Oil Fact Sheet Fibertect Cotton Soaking (FBT-CS)

Fibertect[®] is a three layer, inert, flexible, drapable, nonwoven fabric for absorbing and adsorbing oil and hydrocarbon vapor retention. Fibertect is self-contained and packaged for easy use, storage, and transport. Materials used in the outer layers may vary to provide absorption and adsorption properties and multiple functional uses. For use during oil spills, Fibertect is made of unbleached raw cotton on the outer layers with the activated inner carbon layer.

Highlights:

- Greater oil absorption than current synthetic fabrics
- Fibertect can hold hydrocarbons that are toxic
- Porous carbon retains micro particles from oil dispersant mixtures that are harmful to marine life
- Biodegradable and non-toxic
- Lab-validated, tested solution

Three 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, is devoid of loose particles, and is effective in decontaminating personnel, wildlife, and equipment. Fibertect is a patented technology (US7,516,525).

Fibertect is made as a sorbent and manufactured in forms for spreading over an oil slick or as **sheets, rolls, pillows, booms, cut pads, continuous roll, or a mitt** that can be worn over gloves for decontamination.



Biodegradability:

As discussed under US Patent 5,395,535, raw cotton without any chemical treatment (i.e. gin waste) naturally contains anaerobic bacteria. This remains in the cotton used in Fibertect. These microbes that remain in cotton over days eat the oil and degrade it. Additional enzymes or microbes do not need to be added to Fibertect as the cotton does this on its own. The use of raw cotton over days not only degrades the wipe but the microbes also disintegrate the oil.



Oil Absorption: Cotton-Carbon (Fibertect CS) vs. Synthetic Fabric

- 1 gram of Fibertect CS absorbs 15 grams of oil. Comparatively, 1 gram of synthetic nonwoven absorbs only 6 grams.
- Fibertect has hydrocarbon- and volatile vapors-holding capacity. <u>This is the strength of Fibertect.</u> Environmental toxicologists are stressing the importance of the harmful effect of vaporizing hydrocarbons from the oil.

Fibertect CS can hold hydrocarbons that are carcinogenic and harmful to marine life.

Fibertect CS absorbs <u>2.5 times</u> that of synthetic nonwoven fabrics.



(After 5 minutes soaking in oil-water mixture)

*Testing completed at The Institute of Environmental and Human Health at Texas Tech University.

Video with demonstration: <u>http://www.firstlinetech.com/resource/video/TTU-Fibertect-Video/</u> More information available: <u>http://www.firstlinetech.com/fibertect</u>

Ordering information:

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