

Fibertect® for Oil Fact Sheet

Fibertect Cotton Soaking (FBT-CS)

Fibertect® is a three layer, inert, flexible, drapable, nonwoven fabric for absorbing 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 CS is made of unbleached raw cotton on the outer layers with the activated inner carbon layer.

Highlights:

- Greater oil absorption than synthetic fabrics
- Absorbs and holds hydrocarbons and vapors that are toxic
- Reusable multiple times 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 using crude and motor oils, 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 needlepunched 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 cleaning high and low viscosity oil as **sheets, rolls, pillows, booms, cut pads, continuous roll, or a mitt** that can be worn over gloves for decontamination.

In this photograph, Ernest Smith, Ph.D. (TIEHH, TTU), is using Fibertect CS to wipe crude oil from the BP Oil Spill found in the Gulf of Mexico 20 miles off the coast of Orange Beach, AL.



Fibertect CS Weight: 320 GSM or 0.0655 lbs. per sq ft
Absorption: 2.25 gals of Crude Oil per lb of Fibertect CS
Hold Time: 200+ hours

Reusability:

Fibertect CS is reusable up to 10 times. After the Fibertect CS has absorbed the oil it can be wrung out to release the captured oil. Fibertect CS can then be reused to absorb oil. Note: after every use the absorption rate will be reduced.

Biodegradability:

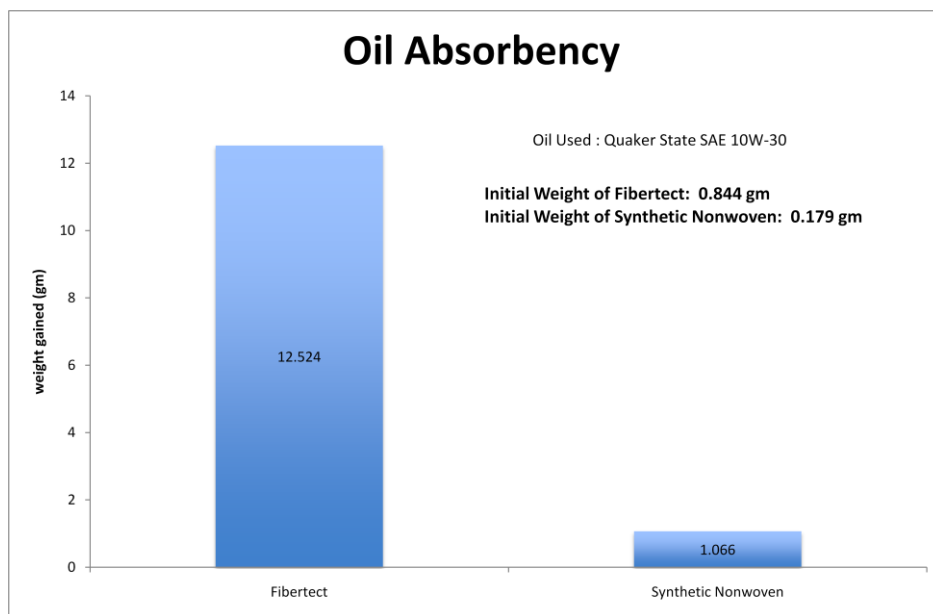
As discussed under US Patent 5,395,535, raw cotton without any chemical treatment (i.e. gin waste) naturally contains anaerobic bacteria. This remains in the cotton used in Fibertect. These microbes that remain in cotton over days eat the oil and degrade it. Additional enzymes or microbes do not need 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 spunbond nonwoven absorbs only 6 grams.
- Fibertect has hydrocarbon- and volatile vapors-holding capacity. This is the strength of Fibertect. Environmental toxicologists are stressing the importance of the harmful effect of vaporizing hydrocarbons from the oil.
- Results presented in a recent NOAA report stresses the low concentration of polycyclic aromatic hydrocarbons (PAHs) at a depth as low as 400 meters in the Gulf of Mexico near the exploded Deep Water Horizon rig, which emphasizes the need to adsorb VOCs and PAHs.

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

Fibertect CS absorbs 2.5 times that of synthetic spunbond 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: <http://www.firstlinetech.com/resource/video/TTU-Fibertect-Video/>

More information available: <http://www.firstlinetech.com/fibertect>

Ordering information:

First Line Technology

3656 Centerview Drive, Suite 4

Chantilly, VA 20151

Ph: +1 (703) 955-7510

Fax: +1 (703) 955-7540

Toll Free: (866) 556-0517

Email: sales@firstlinetech.com

Web: www.firstlinetech.com