

Clay

Adsorption and Reduction of Hydrocarbons, Oils and Fuels



KNOWN CONTAMINANTS REDUCED BY MODIFIED CLAY:

- 1,1,2,-Trichloroethane
- 1,1,2,-Tetrahaloroethane
- 1,1,1,-Dichloroethane
- 1,1,1,-Dichloroethylene
- 1,2,3,-Trichloroethane
- 1,2,-Dichlorobenzene
- 1,2,-Dichloropropane
- trans-1,2,-Dichloroethylene
- Acetone
- Atrazine
- Benzene
- BHC's
- Bromodichloromethane
- Bromoform
- Carbon Tetrachloride
- Chlorine
- Chlorobenzene
- Chlorodibromomethane
- Chloroform
- C1S-1,3-Dichloropropene
- DBCP
- DBOP
- DDT
- Dieldrin
- Diesel Fuel
- EDM
- Ethers
- Ethylbenzene
- Flourenes (some)
- Gasoline
- L2-Dichloroethane
- Lindane
- Methylene Chloride
- Napthalenes
- Nitro Compounds
- p-Dichlorobenzene
- PCB's
- Petroleum Oils
- Phenol Compounds
- Pyrene
- Tetrachloroethylene
- THM's
- Toluene
- Toluene Compounds
- Toxaphene
- Trichloroethylene (TCE)
- Xylenes

Clay not only absorb the hydrocarbon contaminants which are suspended, emulsified and/or dissolved in solution, but they also **lock them in**, reducing the risk of leaching contaminants during treatment applications. Contaminants are actually removed, unlike bleaching operations in which a colored impurity is chemically changed to colorless material. Clay is used in a broad line of environmental applications directly related to water treatment (feed water, process water, waste water) and water fixation.

BASIC FACTS ABOUT ZEOLITE MINERAL MEDIA

- Hydrophobic in nature, displays low surface tensions, repels water and is best suited for excellent performance in adsorbing hydrocarbons.
- Obtains contaminant reductions up to 99.999% efficient, often well with EPA compliance levels.
- Relatively inert, non-toxic, non-corrosive, non-hazardous, not prone to oxidation.
- Displays excellent performance, even in the low concentration range.
- Rapid kinetic uptake.
- Increases solution purity and crystallization.
- Breaks down emulsions, improves demulsibility.
- Adsorbs up to 400% of its own weight, while activated carbon can only absorb an average of only 10% to 20% of its own weight.
- Adsorbs, bonds and locks contaminants in a chemical bond with no leaching.
- High resistance to abrasion, breakage and deterioration during use, assuring a long life in service.
- Mechanically strong in order to resist crushing and abrading action to which they are often subjected.
- Will not dry out, crack, channel or deteriorate when stored in dry, anhydrous conditions for tlong periods of time.
- Can be blended with other adsorbents such as carbon, clay, minerals, molecular bonding agents, elastomeric polymers, etc.