PetroFix™ Specification Sheet

PetroFix Technical Description

PetroFix is a remedial technology designed to treat petroleum fuel spills in soil and groundwater. A simple-to-use fluid that can be applied under low pressure into the subsurface or simply poured into open excavations, PetroFix offers a cost-effective solution for environmental practitioners and responsible parties to address petroleum hydrocarbon contaminants quickly and effectively.

PetroFix has a dual function; quickly removing hydrocarbons from the dissolved phase, by adsorbing them onto the activated carbon particles, while added electron acceptors stimulate hydrocarbon biodegradation in situ. PetroFix does not require high pressure 'fracking' for application and can be applied with ease using readily available equipment associated with direct push technology.

The remedial fluid is a highly concentrated water-based suspension consisting of micron-scale activated carbon and biostimulating electron acceptors. PetroFix has a viscosity higher than water and is black in appearance. Its environmentally-compatible formulation of micron-scale activated carbon (1-2 microns) is combined with both slow and quick-release inorganic electron acceptors. A blend of additional electron acceptors is included along with the PetroFix fluid. Practitioners can select between a sulfate and nitrate combination blend (recommended), or sulfate only for the additional electron acceptors required.

PetroFix Fluid Chemical Composition	Properties
Activated Carbon - CAS 7440-44-0 >30% Calcium sulfate dihydrate - CAS 10101-41-4 < 10%	**Appearance:** Black Fluid **Viscosity:** 1500-3500 cP (syrup-like) **pH:** 8-10

PetroFix Electron Acceptor Powder Chemical Composition	Properties
OPTION 1 - EA Blend (preferred) Sodium Nitrate - CAS 7631-99-4, 50% Ammonium Sulfate - CAS 7783-20-2, 50% OPTION 2 - EA Blend NF Potassium Sulfate - CAS 7778-80-5, 50% Ammonium Sulfate - CAS 7783-20-2, 50%	**Appearance:** White powder

PetroFIX™ Remediation Fluid

Storage and Handling Guidelines

Storage:

- Store away from incompatible materials
- Store in original, closed container
- Store at temperatures between 4°C and 35°C
- Do not allow material to freeze or store in direct sunlight.
- Freezing and hot weather technical memo can be accessed at this link here.
- Dispose of waste and residues in accordance with local authority requirements

Handling:

- Never add additives to solution prior to mixing with water
- Wear appropriate personal protective equipment
- Do not taste or ingest
- Observe good industrial hygiene practices
- Wash hands after handling

Applications

PetroFix is mixed with water on-site and easily applied into the sub-surface using low pressure injections, or mixed in excavations. PetroFix is compatible with, and can be used with ORC Advanced® to expedite rates of biodegradation. For more information about co-application with ORC Advanced, contact REGENESIS.

REGENESIS®

www.regenesis.com

Corporate Headquarters
1011 Calle Sombra, San Clemente CA 92673 USA
Tel: +1 949.366.8000

Europe (UK, Ireland, Belgium and Italy)
Email: europe@regenesis.com
Tel: +44 (0)1225 61 81 61