



# Hydro-Pac™

## Salt Tolerant Biodegradable Drilling Support Fluid

**Description:** Hydro-Pac™ is a dry hybrid-polymer drilling fluid. Hydro-Pac™ is an innovative breakthrough in drilling fluids and containment fluids due to its ability to use saltwater as the hydrating mix water.

**Recommended Use:** Hydro-Pac™ is the product of choice for drilling Horizontal desalination wells, Tie-Backs and Mini-Piles and is engineered for use in slurry cutoff walls and Tunneling drilling operations where exposure to contaminants or seawater is expected. Produced from dry free flowing polymers, Hydro-Pac™ provides exceptional bore hole stability and cuttings removal in a wide range of ground conditions.

- Characteristics:**
- Hydrates easily in seawater, brackish water or fresh water.
  - Exceptional fluid loss control minimizes formation sloughing in Tie-backs and Mini-Piles.
  - When installing Tie-backs controls the water flow and keeps borehole open stopping flowing sands from entering.
  - Minimizes formation damage, maximizes production rates.
  - Effective in all ground conditions (one sack drilling fluid).
  - Can be cleaned down through regular de-sanders.

- Benefits:**
- Fast and efficient mixing in fresh and salt water.
  - Stable while drilling and recycles.
  - 4.4 lbs (2) Kilos of Hydro-Pac™ = viscosity of 132 lbs or 60 Kilos of civil grade 90 BBL bentonite or 25 Kilos of high yield 220 BBL bentonite.
  - Naturally biodegrades (stabilizer can be added to retard biodegradation).
  - Can be chemically destroyed with Slurry Buster.
  - Low cost slurry disposal. Destroy or biodegrade the Hydro-Pac™ polymer to settle out drilled cuttings in a settlement pit.

**Mixing and Application:**

	Kg/m <sup>3</sup>	lbs/100 US Gal
Consolidated Formation (Clay/Shale)	2 – 4 Kg's	1.4 – 2.6 lbs
Unconsolidated Formation (Sand/Gravel)	3 - 7 Kg's	2.6 – 4.6 lbs
Break-Down: Slurry Buster	5-gal per 1000/gal slurry	

**Packaging:** Hydro-Pac™ is packaged in 11 lb (5Kg) clear plastic bags (5 x 11 lb (5Kg) bags per 55 lb cardboard case 36 per pallet) or 55 lb (25 Kg) heavy wall poly bags 40 bags per stretch wrapped pallet.