

## CONSTRUCTION POLYMER: GCP Y100



-CAN BE MIXED  
INSTANTLY IN SURFACE  
TANK OR DIRECTLY IN  
EXCAVATION

-ADDS VOLUME NOT  
WEIGHT

-PRECIPITATE THE  
CUTTING TO BOTTOM OF  
THE EXCAVATION FOR  
EASY CLEAN OUT

-WORKS IN BOTH FRESH  
AND SALT WATER

-SLURRIES MAY BE  
RECYCLED MANY TIMES  
WITHOUT LOOSING  
QUALITY

-SAND CONTENT AFTER  
20 MINUTES IS USUALLY  
LESS THAN 1.0%



-MAKING CONCRETE PLACEMENT EASY WITH NO AFFECT  
IS STRENGTH

-DEGRADABLE AND FRIENDLY TO ENVIROMENT

-CAN BE BROKEN DOWN WITH HOUSEHOLD BLEACH IN  
CASE OF EMERGENCY

**Operational benefits:**

The operational benefits offered by our GCP Y 100 polymer fluids traditionally have been one of the main reasons for contractors to switch from conventional products to polymers. The size and cost of the ancillary plant required for



bentonite slurries make them relatively uneconomic for urban sites with restricted space and access such as those in city centers.

A site in which although measuring just 24 m by 40 m required sixty-two 750 mm diameter bored piles, i.e., approximately one pile every 4 m. The size of the site and the scope of the work meant that our polymer fluids were the only feasible option because they do not require multiple holding tanks for slurry hydration, nor do they require a separation plant to recover the used slurry. Unlike bentonite slurries, polymer fluids require only a short swelling and hydration time before use.

**Environmental benefits**

GCP Y-100 polymers can offer significant environmental benefits when compared to their clay-based counterparts.,



Bentonite can be highly polluting if released into the aquatic environment.
GCP Y-100 polymer fluids are preferred over bentonite as they need not pose a danger to fish and in particular, they do not build upon fish gills causing them to suffocate
Polymers are used at perhaps one-fiftieth to one-twentieth of bentonite concentrations and the products can be broken down with readily available oxidizing agents such as hypochlorite (bleach) so that after simple settlement the supernatant water can be disposed to sewer and the settled fines added to the excavation spoil ideal for re-use.

**Improved foundation Benefit**

As outlined above, operational and environmental benefits are often cited as the main reasons for using GCP Y100 products rather than bentonite. However, over the last two decades, many field studies have been carried out to investigate the effects of GCP Y100 polymer fluids and it is now appreciated that they can bring significantly improved load performance for piles, etc.