

## PRODUCT DATA SHEET

**CP-52 light-weight additive for oil well cementing****Product Description**

CP-52 Light-weight additive for oil well cement mainly consists of floating beads. After coal combustion, the part of the ash melt and due to the surface tension, the ash part shrinks to spheres, when the powder ash flies into the water, it is cooled dramatically, and forms hollow closed particles lighter than water, and those are floating beads.

**Characteristics**

Floating beads with a certain activity in the cement slurry, the main chemical composition is silica, alumina, and a small amount of iron oxide, calcium oxide and magnesium oxide. These substances can be precipitated with portlandite or oulopholite shaped by the cement hydration, then they could form a kind of chemical compound having gelling properties, thereby increasing the strength. Taking advantage of floating beads as a kind of light-weight material can prepare the slurry whose density lows to  $1.2\text{g} / \text{cm}^3$ . At the same density conditions, floating beads with low density cement slurry generally have lower content of free fluid, higher strength and lower permeability of cement and other properties.

**Technical Specification**

Appearance	White or gray flowing powder
Water content, %	$\leq 0.2$
Stacking Density, $\text{g}/\text{cm}^3$	$\leq 0.50$
Fineness (0.315 mesh), %	$\leq 10.0$
Density, $\text{g}/\text{cm}^3$	$\leq 0.80$
Cement slurry density, $\text{g}/\text{cm}^3$	$\leq 1.6$
Free fluid, %	$\leq 1.4$
Settlement experiment, %	$\leq 2.0$
24h Compression strength, MPa/ ordinary pressure 24h	$\geq 8.0$

Table slurry formulation: Class G cement 25% CP-52 + 6% CP-53 + 1.5% G33S + 0.5% USZ  
W / S (water-solid ratio): 0.53 Water: Distilled water.

**Packing, Storage**

- Packed in tri-layer paper bags, 25kg/bag, or packed according to the request of clients.
- Placed in dry, ventilated, shady and cool circumstance. Be kept away from harmful substance in store and transportation.
- Its storage life is two years.