

## INFORMATION

# CA-LC10

### LOST CIRCULATION CARBONACEOUS

#### DESCRIPTION

CA-LC10 is a selected low sulphur hydrocarbon that has been ground to a specific particle size range. The physical properties of CA-LC10 are as follows:

Form	Angular Black Solid
Specific Gravity	1.30
Melting Point	1,000 °F
Bulk Density	50lb/cu ft
Absolute Volume	0.0925
Mesh Size (Retained):	1/4 inch, 0%; 1/8 inch, 0%; 12 mesh, 35- 45%; 30 mesh, 25- 40%; 50 mesh, 10- 20%; 100 mesh, 5-10%; 200 mesh, 1- 15%; 325 mesh, 1-5%

#### APPLICATION

CA-LC10 is used for lost circulation control and as an extender in cements. The low density and superior scouring action when the cement slurry is in turbulent flow makes CA-LC10 an outstanding additive for lost circulation control. CA-LC10 has little or no effect on the acceleration or retardation on the thickening time of the slurry and has less effect than other related materials on compressive strengths. The superior features of CA-LC10 compared to gilsonite (CA-EXI) are that it is insoluble in petroleum fluids, has a melting temperature higher than 1000° F and produces higher compressive cement strengths than those of a gilsonite-cement.

The second important function of CA-LC10 is its role as an inert light-weight extender for cements. CA-LC10's low specific gravity and low porosity/permeability reduces the need for large amounts of additional water that are often required with most other extenders and which reduce the strength of the set cement.

### **RECOMMENDED TREATMENT**

The amount of CA-LC10 required will vary between 5 to 50 lbs per sack of cement, depending upon the properties required.

The usual concentration will be between 12 to 24 lbs per sack as higher concentrations may be difficult to mix and could lead to bridging off of float equipment or of the annulus.

For each 25 lbs of CA-LC10, an extra gallon of mix water is required. Bentonite (unpeptized) can be used with CA-LC10.

However, because of the low specific gravity of CA-LC10, bentonite is not required to keep CA-LC10 in suspension. CALC10 is an inert material and no compatibility problems with other additives or in various systems have been observed.

CA-LC10 should be dry-blended with the cement when continuously mixing or, if batch-mixing, it should be added last.

CA-LC10 does not require complicated mixing equipment.

Physical properties of cement slurries with CA-LC10 are available from Messina.

### **CAUTION**

Any CA-LC10 dust can result in an explosion. Eliminate all sources of ignition and maintain dust levels to a minimum when mixing. CA-LC10 particles are abrasive and chemical goggles must be worn when handling. A dust mask should be worn if workers are exposed to a dusty atmosphere of CA-LC10.

### **PACKAGING**

CA-LC10 is normally available in 50 lb bags.

CA-LC10 is a Messina trademark