

**FLUID LOSS CEMENT ADDITIVE**  
**CEMENT FRICTION REDUCER**  
**HIGH TEMPERATURE CEMENT RETARDER**  
**LOW TEMPERATURE CEMENT RETARDER**

**FLUID LOSS CEMENT ADDITIVE**  
**REDUCER 22 FS**

**PRODUCT USE :**

REDUCER 22 FS is used as a Fluid Loss Agent and viscosifier in designing cement slurries for primary and secondary cementing jobs under a wide range of temperatures up to 180°C. In both fresh and salt mix water where salt concentrations reaches up to 18%.

**DESCRIPTION :**

REDUCER 22 FS is a low viscosity cellulose derivative cement fluid loss additive for oil well cementations with BHCT from 30°C to 180°C where mix water ranges from fresh to salt water.

**APPLICATION :**

REDUCER 22 FS is applicable for designing cement slurries in conjunction with dispersants and retarders to achieve low fluid loss ranges from 50 to 90 ml for cementing long casing/liners and even for squeeze jobs. REDUCER 22 FS provides excellent filtration control and lowers operating free water over a wide range of temperatures and forbids cement setting due to its low viscosity in static and dynamic state, there by minimizing the dehydration of the cement slurry and maintains the fluidity of the slurry with low frictional pressures during displacement thus preventing annular bridging in tight annulus. REDUCER 22 FS has positive effect on increasing the thickening time and is compatible with other cement additives and all API Oil well cements including with mud products.

**HANDLING :**

Incase of eye contact, flush eye with water and also wash skin with soap and water. It is non-toxic.

**PHYSICAL DATA :**

Appearance:	Light Cream / Off-white free flowing powder
Bulk Density:	550 – 650 KG/M <sup>3</sup>
Moisture:	10% max
Temp. Stability:	182°C (BHCT)

**AVAILABILITY :**

25 Kg. Net in bags. 5 ply with P/E liner.

**CEMENT FRICTION REDUCER**  
**TURB DB 1**

**PRODUCT USE :**

TURB DB 1 is a sulfonated copolymer cement dispersant, is highly effective in reducing the viscosity of cement slurries during surface fixing and at BHCT exceeding 148°C.

**DESCRIPTION :**

TURB DB 1 is a sulfonated salt of synthetic copolymer type cement dispersant and friction reducer additive with high performance at bottom hole circulating temperature (BHCT) exceeding 148°C.

**APPLICATION :**

The treatment of cement slurries by TURB DB 1 increases the fluidity of cement slurries and reduces the friction pressures during displacement of cement which leads to higher pumping velocities and turbulent flows can be achieved at low rates for deep liners and casings, where the annulus is less than one inch between the formation and the liner/casing. TURB DB 1 is compatible with mud products and all types of oil well cements including class G cement neat and blended with silica flour at any ratio. TURB DB 1 in addition to its excellent dispersing effects, it also retards and increases the thickening time of the cement slurry and reduces the fluid loss and stabilizes the operational free water.

**HANDLING :**

TURB DB 1 is a non-hazardous product, but direct contact should be avoided during handling. In case of skin or eye contact, wash with plenty of water and soap.

**PHYSICAL DATA :**

Appearance:	Light tan Powder
Bulk Density:	530 KG/M <sup>3</sup>
Moisture:	6 – 8 % max
Temp. Stability:	148°C
pH (2% Solution):	7.5
Solubility:	Soluble in fresh and salt water.

**AVAILABILITY :**

25 Kg. Net in bags, 5 ply with P/E liner.

## **HIGH TEMPERATURE CEMENT RETARDER RET - 115**

### **PRODUCT USE :**

RET 115 is a retarder composed of a blend of modified lignosulphonate and organic salt with temperature stabilizer used for cementing deep oil field wells with high BHCT up to 190°C.

### **DESCRIPTION :**

RET 115 is a blend of modified lignosulphonate, organic acid salt and temperature enhancers cement retarders for high temperature wells where the bottom hole circulating temp. (BHCT) is above 100°C.

### **APPLICATION :**

RET 115 is an effective high temp. retarder at low concentrations and has good dispersing and fluid loss properties. RET 115 is applicable for primary and secondary cementing jobs and compatible with all API – oil well cements including class G neat and blended with silica flour at any ratio. The retarder can be dry blended with cement with other additives or dissolved in the mix water prior to cementing job. RET 115 can be used to retard gelled slurries and tail slurries of different weights where the mixing water ranges from fresh to salt saturated water. It reduces the slurry viscosity's during surface mixing and at bottom hole temp. thus achieving high plumping rates for turbulent flows for cementing long deep liners in hot wells, without gelation or false setting effects. RET 115 is compatible with other cement additives and mud products.

### **HANDLING :**

RET 115 components are of low to very low toxicity. In case of eye contact, flush eye with water for at least 15 minutes. In case of skin contact, wash with soap and water.

### **PHYSICAL DATA :**

Appearance:	Dark Brown Powder
Bulk Density:	630 – 680 KG/M <sup>3</sup>
Moisture:	10% max
Temp. Stability:	190°C (max)
Solubility:	Water Soluble

### **AVAILABILITY :**

25 Kg. Net in bags, 5 ply with P/E liner.

**LOW TEMPERATURE CEMENT RETARDER**  
**RET - 105**

**PRODUCT USE :**

RET 105 is a lignosulphonate cement retarder for oil field primary and squeeze cementing jobs where bottom hole circulating temperature (BHCT) does not exceed 115°C.

**APPLICATION :**

RET 105 is applicable for primary and secondary cementing jobs and compatible with all API – Oil well cements including class G neat and blended with silica flour. RET 105 is applicable in gelled lead slurries and tall slurries where the mixing water ranges from fresh to salt or salt saturated water. It reduces the slurry viscosities both at down hole temperatures and during surface mixing, where high pumping rates can be achieved without gelation or false – setting effects. It is compatible with other cement additives and mud products of most mud systems.

**HANDLING :**

Avoid unnecessary dusting. Airborne dust may result in explosion hazard. Wear approved dust mask when emptying bags. Sweep up spillages immediately, wet spillages can be slippery.

**PHYSICAL DATA :**

Appearance:	Dark Brown Powder
Bulk Density:	630 – 680 KG/M <sup>3</sup>
Moisture:	10% max.
Temp. Stability:	115°C (BHCT)
Solubility:	Water Soluble

**AVAILABILITY :**

25 Kg. Net in bags, 5 ply with P/E liner.