LUBRICANTS

POWER TO PERFORM

ENKLO FRDU 68

FIRE RESISTANT HYDRAULIC FLUID

SPECIAL FEATURES

ENKLO FRDU grades are fire resistant hydraulic fluids based on organic ester. These fluids meet the HFDU classification system as per European Mines Safety Commision. These fluids can replace phosphate esters in high temperature applications and are recommended as control governor fluids for steam and gas turbine. They do not have any seal compatibility issues which are inherent in phosphate ester fluids. The same seals used with mineral oils can be used with ENKLO FRDU 68. These fluids not only provide improved safety as compared to mineral oil but offer superior lubricity and antiwear properties as compared to invert emulsion (FRIE) fluids and also mineral oil based hydraulic fluids. While changing over from invert emulsion to FRDU based fluids care must be taken that there is no residual fluid or moisture present in the system. If necessary the line may be flushed with mineral oil to ensure that no traces of invert emulsion fluid remains in the system. ENKLO FRDU 68 is also approved by Director General Of Mines and Safety Dhanbad on a permanent basis. The product is also bio degradable.

PHYSICO-CHEMICAL PROPERTIES

Kinematic Viscosity @ 40°C, cSt	67.07
Kinematic Viscosity @ 100°C, cSt	12.36
Viscosity Index	185
Flash Point, COC, °C	322
Fire Point, °C	352
Auto-ignition temperature, °C,	504
Relative Density, 15 °C, g/cc	0.9267
Pour point, °C	-30
Total acidity, mg KOH/g	1.04
Rust prevention Characteristics (A&B)	Passes
Four ball test, 20 kg, 1800 rpm, 55±2°C for 1 hr, Scar dia, mm	0.29
Corrosion Cu strip @ 100°C, 3 hrs, max	1A
Temperature for viscosity of 1500 cSt	-18
Oxidation test Oxidation and thermal TOP, % Sludge, % of TOP	 0.30 0
Demulsibility, ASTM D 1401, 25 mins	40-37-3
Air release value, mins	5.2
Foam tendency/Stability	30/nil 30/nil 30/nil
Particle Count	NAS 1638 Class 6
Four Ball Weld Load	210 kg
FZG A/8.3/90	Passes Stage 12
Mineral Oil Content by FTIR %	Nil