Fire Resistance Hydraulic Oil Based on Modified High Oleic Vegetable Oil with Selected Additives

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Fire Resistance Hydraulic oils according to DIN 51502 Standard are classified into HFA, HFB, HFC and HFD types. In three first categories water is one of component which makes some difficulties such as rust, corrosion for hydraulic equipment during using. HFD Type is water free & new generation of Fire Resistance Hydraulic oils based on synthetic ester oil. HFD oil can be based on Polyol Ester or phosphate Ester named as HFD-U and HFD-R. Due to Environmental Concern, HFDR is no Longer used in many Countries, but HFDU oil is currently used in many Industries such as Steel, Power, and Copper Plants for their Hydraulic System. This experiment is based on new formulation of Fire Resistance Hydraulic Oil from High Oleic vegetable oil with selected additives to find out some advantages in comparison with Normal HFD-U. Acid Number, water separation, Flash Point & fire Point are some of important Characteristics in these types of oils which investigated in our experience.

KEY WORDS: HFDU, Fire Resistance Oil, High Oleic vegetable oil

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