



Tractor Hydraulic Fluid: Exposing the Myths of the “Yellow Bucket”

Low-Priced “Yellow Bucket” Fluid

We’ve all seen them, and perhaps some of us have even purchased the product in the “Yellow Bucket” over the years! We are talking about the low-price, universal Tractor Hydraulic Fluid (THF) being sold in various farm supply stores across the Midwest.

What Makes this Product Different?

In some cases, “Yellow Bucket” THF does not meet the requirements of today’s high tech tractors. The use of phrases such as “may be used,” “recommended for,” and “can be used” are used to describe the performance characteristics of the product found in the “Yellow Bucket.” While including several well-known Original Equipment Manufacturers (OEM) specifications on the bucket, most of which are outdated, the phrases above usually precede the specification.

One product that was recently tested in a laboratory was found to have a viscosity index (VI) of 50. Viscosity index is a measure of a fluid’s viscosity change relative to temperature. The higher the viscosity index, the less a fluid’s viscosity changes. A high viscosity index lubricant will not thin out as readily at high temperatures and will not thicken as readily at low temperatures. High viscosity index oils are also much better at controlling high temperature oxidation. The viscosity index rating of higher quality THF is typically above 130.

So what Happens with “Yellow Bucket” THF in Extreme Temperatures?

So what happens if you use “Yellow Bucket” THF with a VI of 50 when it gets extremely cold? Thick, viscous oil will not flow to critical system components and excessive wear will occur. What happens during extreme heat in the summer months? Again, excessive wear will be experienced due to the lubricant being so thin that it does not provide a sufficient surface film to prevent friction between moving metal parts.

More laboratory testing determined the amount of additives in the “Yellow Bucket” fluid contained approximately 1/3 the additives needed in modern tractor transmission/hydraulic systems! Just like in engine oils, additives in THF protect against the effects of wear, oxidation and moisture.

Low Price = Lower Quality

The popularity of “Yellow Bucket” THF is typically based on price. It can be blended at a much lower cost because of a lower quantity of additives and less expensive base oils. Some suppliers may use cheaper naphthenic base oils or “line flush” in their formulation all to make it more attractive to price shoppers.

Protect Your Investments

The “you get what you pay for” expression applies to the “Yellow Bucket.” For long-term dependability and profitability, it pays to protect your investments by consulting with your local FS Energy Specialist. In the meantime, review information on [FS Power Fluid](#).

See for Yourself:

