

ARE ALL HYDRAULIC FLUIDS THE SAME? WHEN TO CHOOSE FIRE-RESISTANT FLUIDS.

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Hydraulic fluids are tasked with many things, from protecting against wear to maintaining lubricity and decreasing corrosion. Many lubricants can withstand elevated temperatures, but when you exceed 200 degrees F, your options become limited. This is when a fire-resistance fluid may be used.

Fire-resistant hydraulic fluids (FRHF) truly make their mark when a leak occurs in a high-temperature area. Hydraulic hoses

and piping may fatigue and crack, allowing lubricant to spray out of them. This can cause a fire in a short amount of time.

If your business falls within the **die-casting, foundry, or metalworking industries**, then you are at an increased risk for fire ignition and should always be utilizing a fluid that does not ignite easily in the event of a leak.

IT'S MORE THAN JUST OIL. IT'S LIQUID ENGINEERING.®





SELECTING THE RIGHT FRHF

Selection is a trade-off between a fluid's ability to safeguard against fire, how well it protects against pump wear, and its maximum operating pressure. A final decision regarding what fluid to use rests on the risks associated with a particular plant operation.

As a general guide, if fire risk is moderate, a water glycol (HFC) product such as Castrol® Anvol® WG 46 should be considered. If the risk of fire is lower, a polyol ester (HFDU) product such as Castrol® Anvol® SWX would be more appropriate.

Castrol® Anvol® WG 46 is an HF-C type water-glycol fire resistant hydraulic fluid, containing anti-wear additives and corrosion inhibitors with Factory Mutual approval. It provides protection against rust and in hydraulic pump tests, Anvol® WG 46 has shown high levels of anti-wear performance. Its foam resistance, low temperature flow, emulsion stability and storage stability are also excellent according to laboratory testing and field reports from customers. Examples of applications include furnace doors, die-casting machines, forging machinery and mining equipment. It can be used in vane, gear or piston-type pumps with pressures up to 3000psi.

A fire can be devastating to a steel producer, and even more so in these difficult times.

Castrol® Anvol® SWX is a HFDU-type polyol ester fire-resistant hydraulic fluid with Factory Mutual approval. Formulated to work in high pressure hydraulic systems up to 7500psi, Anvol® SWX provides all types of hydraulic pumps with protection against wear equivalent to mineral oils. It provides high levels of corrosion protection for greater resistance to water and has a reduced tendency to form varnish or sludge in valves, pipes and reservoirs.

The high fire point and the low heat of combustion of Anvol® SWX make it a reliable choice for hot strip mills, coil handling facilities, pipe mills and continuous casters.

CHOOSING THE RIGHT FRHF WILL HELP YOU:

- Minimize the risk and consequences of a fire resulting from fluid escaping a hydraulic system
- Prolong the life of hydraulic systems
- Obtain optimum hydraulic system performance
- Extend maintenance intervals
- Boost productivity

SAFEGUARD YOUR OPERATION, PROTECT EQUIPMENT AND PERSONNEL

It is important to note that just because a lubricant can withstand elevated temperatures without igniting doesn't mean it will be able to survive for an indefinite period at those temperatures. Periodic maintenance and secure availability of fire-resistant hydraulic fluids has proven to be a critical decision in minimizing fire risks and avoiding catastrophic equipment failures.

A fire can be devastating to a steel producer, and even more so in these difficult times. Waiting until there is a fire to review fluid options is not a wise choice. And because the economics, regulations, and technologies related to fire-resistant hydraulic fluids are always changing, it's best to evaluate hydraulic fluids periodically, reviewing all the current issues to determine the fire-resistant fluid that gets the job done right.

WE UNDERSTAND THE IMPORTANCE OF SAFETY

If you have concerns about your current supplier's ability to deliver product, speak to Castrol® about our range of FR Hydraulic Fluids - we have bulk product ready and available to ship fast.

Contact your Castrol® representative at **888-Castrol** or visit our website, www.castrol.com/steel-us.