LUBRICANTS

YOUR ADVANTAGE IN AN INDUSTRIAL WORLD

FIRE RESISTANT HYDRAULIC FLUIDS
THE EXPERTS IN HYDRAULIC FLUID TECHNOLOGY

CASTROL OFFERS YOU A COMPREHENSIVE RANGE OF WORLD-CLASS FIRE-RESISTANT HYDRAULIC FLUIDS (FRHF) AND PRODUCT SUPPORT SERVICES THAT WILL HELP YOU TO:

> Minimise 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
> Lower maintenance costs

We can bring you these powerful benefits by utilising our global process and applications expertise through our network of engineering and research professionals. It’s then delivered directly to you by our knowledgeable local sales and support teams. Our ultimate goal is to help you achieve optimum performance in your manufacturing environment.

The Castrol FRHF range has been formulated using the latest thinking in raw materials and then rigorously tested in both laboratory and manufacturing conditions, in close collaboration with leading hydraulic and machinery manufacturers. You can trust Castrol to provide the right product for the job, across all your operations.

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. The final decision regarding what fluid to use rests on the risk 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 FM would be more appropriate.

THE COMPLETE RANGE OF FIRE RESISTANT HYDRAULIC FLUID SOLUTIONS

A CHOICE TO SUIT YOUR NEEDS
Castrol Anvol WG 46

This water glycol fire-resistant hydraulic fluid (ISO 6743-4 HFC type) is designed for systems with pressures up to 3,000 psi, with good anti-wear performance demonstrated by low pump wear rates compared with other similar products. It meets the fire resistance performance requirements of 7th Luxembourg Report and FM Global 6930.

**Key Benefits:**
- Excellent fire resistance properties
- Good anti-wear and load-carrying performance
- Good corrosion protection in both the liquid and vapour phase
- Good filterability and material compatibility
- Low foaming and air entrainment

Castrol Anvol SWX FM range

This range of polyol ester fire-resistant hydraulic fluids (ISO 6743-4 HFDU type) are ideal for applications requiring a high degree of lubricity and fire resistance. Castrol Anvol SWX FM are FM Global 6930-approved (FM Standard 6930 Jan 2002 Group 1) products and are outstanding in their category in providing a safe working environment and improved system reliability.

Formulated to work in high-pressure hydraulic systems up to 7,500 psi, Castrol Anvol SWX FM provides all types of hydraulic pumps with protection against wear equivalent to that of mineral oils.

**Key Benefits:**
- High fire point provides superior fire resistance characteristics
- Shear stable so viscosity and fire resistant properties are maintained during use
- Advanced corrosion inhibition protects ferrous components from residual water and leads to extended equipment life and reduced downtime
- Excellent resistance to oxidation and thermal degradation reduces sludges, varnish and prevents valve sticking
- Excellent wear protection helps reduce downtime from unscheduled maintenance

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**Quality and Reliability from Start to Finish**

Some HFDU fluids contain polymeric materials to enhance fire-resistant properties. These polymeric materials can rapidly shear in service and this leads to a loss of fire resistant performance and also to a significant reduction in viscosity. The above test result shows the shearing of the polymer indicated by viscosity change after just 20 hours, thus indicating a reduction in performance.