

Fire resistant: Plurasafe® HL-HFC 46 hydraulic oil

Traditional hydraulic oils are normally made from combustible mineral oils. In certain environments, however, hot surfaces or open flames create a particular fire hazard – be it in the forging presses, in the steel and foundry industry or in the coal mining industry. On red-hot steel, for example, a simple leak could cause the mineral oil to ignite. This hazard is eliminated by Plurasafe® HL-HFC 46: The high-performance and water-glycol-based hydraulic liquid is particularly fire-resistant thanks to its water content of 43 percent.



Anti-wear and anti-corrosion

“The water content forms a vapour phase above the flame when coming into contact with an ignition source. This prevents both a fire and a flash flame,” says Gabriele Möller, Business Manager Fuel & Lubricant Solutions. HFC-classified liquids generally offer better results in terms of fire-resistance when compared to aqueous, fire-resistant hydraulic oils, and are therefore required, for example, in underground mining operations. At the same time, Plurasafe® HL-HFC 46 is also characterized by excellent anti-wear, anti-corrosion and anti-bacterial properties. It goes without saying that the toxicological criteria for LOBA approval, which is decisive for use in underground mining, are also fulfilled.

Wide variety of applications

An additional advantage: Due to its high viscosity index and low pour point, the hydraulic fluid can also be used at ambient temperatures of - 20°C to + 65°C. The range of possible application areas is therefore particularly large. “However, the oil temperature should not exceed 50°C,” Möller adds: “Otherwise, high evaporation losses can occur which increases the viscosity.”

Additional Information

Plurasafe® HL-HFC 46 approvals:

- 7th Luxembourg report
- ISO 12922 HFC
- Factory Mutual (FM)

Our Expert

Gabriele Möller has been working in the chemicals industry for more than 35 years, during which time she has gathered experience in every central field, from purchasing to HR and sales. Personal experience makes her familiar with customers' needs and points of view: before joining BTC, Möller spent many years working for a retailer who was a BASF customer. Möller has officially been in the Fuel & Lubricant Solutions division for ten years, but it has actually been much longer. "I have always been very mobile," she says. She was one of the first young women of her generation to ride a motorcycle. Möller enjoys managing products that are easy for laypeople to understand, from coolants to brake fluids. At BTC, she is responsible for the entire strategic segment involving Fuel & Lubricant Solutions.



You can find additional information about Plurasafe® HL-HFC and contact your local BTC partner directly using the [Solution Finder](#).