

Gazpromneft Hydraulic HFDU-46, 68



Hydraulic systems



Fire safety



Excellent anti-wear properties



High oxidation stability



Excellent viscosity-temperature properties



Synthetic oil

Gazpromneft Hydraulic HFDU-46 and 68 is a fire resistant hydraulic fluid series based on synthetic esters with the addition of a multifunctional additive package that enhances its operational performance. It is especially designed for hydraulic equipment, where special fluid is required to reduce the risk of fire upon contact with an open flame or hot surfaces. Standard (mineral) hydrocarbon hydraulic fluids do not provide the required safety level.

Gazpromneft Hydraulic HFDU-46 and 68 have excellent viscosity-temperature properties, which ensures efficient performance of hydraulic pumps in a wide temperature range. Special additives enhance oxidation stability of the fluid, as well as protection of hydraulic system elements against corrosion. The fluid has improved anti-wear properties to extend the service life of hydraulic pumps.

Advantages and Potential benefits

- High flash point and auto-ignition values → possibility of fluid application near open fire sources and hot surfaces → safety and health of workers in workshops.
- Excellent anti-wear properties (FZG test) → effective protection of hydraulic pumps over the entire replacement interval → reduced costs for unscheduled equipment downtimes.
- Stable viscosity-temperature characteristics → efficient performance of the hydraulic pump in a wide temperature range over the entire replacement interval → increased equipment productivity.
- High oxidation stability → retention of operational characteristics of the fluid over an extended replacement interval compared to hydrocarbon hydraulic (mineral) fluids → reduced maintenance costs.
- Corrosion protection → effective protection of the working components of the equipment against corrosion → reduced costs of unscheduled repairs.

Application

- Metallurgical, glass, ore mining industries.
- Steel casting, rolling and coke plants.
- Continuous casting and die-casting plants, conveyors, punching and forging machines, blast furnaces, etc.
- Medium load (150-250 atm.) and heavy load (250-350 atm.) hydraulic systems.
- Operating temperature range from -20 to +70-80 °C according to ISO 12922. Before application at higher operating temperatures, a consultation is required.
- Hydraulic equipment operated in a close area to open flame and with a significant risk of fire.
- In the equipment instead of hydrocarbon oils of (HLP) class acc. to DIN 51524 Part 2, where there is a risk of fire.

Specifications	Gazpromneft Hydraulic HFDU 46	Gazpromneft Hydraulic HFDU 68
ISO 6743/4 HFDU	✓	✓
DIN 51502 HFDU	✓	✓

Typical characteristics

Parameters	Method	Gazpromneft Hydraulic HFDU 46	Gazpromneft Hydraulic HFDU 68
Kinematic viscosity at 40 °C, mm ² /s	ASTM D445	46	68
Viscosity index	GOST 25371	190	180
Open cup flash point, °C	GOST 4333	300	290
Autoignition temperature, °C	GOST 12.1.044	>400	>470
Pour point, °C	GOST 20287 Method B	Минус 50	Минус 50
Copper corrosion test with M1 and M2 copper grades according to GOST 859	GOST 2917	Макс. 1b	Макс. 1b
Four ball wearing machine (196 N, 60 min), Wear scar, mm	GOST 9490	0,36	0,29
Density at 20 °C, kg/m ³	GOST 3900	913	926

The company's management system is certified in accordance with the international standard

ISO 9001



ISO 14001



ISO 45001

