Gazpromneft Hydraulic HFC-46

 Hydraulic systems

 Fire safety

 Optimal anti-wear properties

 Oxidation stability

 Excellent viscosity-temperature properties

Gazpromneft Hydraulic HFC-46 is a fire-resistant water-glycol hydraulic fluid designed for use in hydraulic systems operating in areas with a high risk of fire.
Gazpromneft Hydraulic HFC-46 is flame retardant and guarantees maximum safety due to its high water content. It replaces mineral-based hydraulic oils in uses with a high risk of fire. It has excellent viscosity and temperature properties, which allow high pump performance in a wide temperature range. The fluid maintains lubricating properties over the entire temperature range of application, with protection against wear. It also resists oxidation and protects hydraulic components against corrosion.

Advantages

- High fire resistance → operability even near an open flame and in contact with hot surfaces due to the inclusion of water → safety and health of workers in production.
- Excellent viscosity and temperature properties → the liquid maintains a stable oil film over a wide range of temperature changes → high pump performance.
- Optimal anti-wear properties → effective equipment protection throughout the entire drain interval → long equipment life guarantee.
- Oxidation stability → maintenance of performance properties throughout the entire oil application interval → reduced maintenance costs due to the long service life of the oil.
- Corrosion protection → elements of the hydraulic system are protected from corrosive effects → reduction in maintenance service costs.

Application

- Steel production, rolling mills for forging production, coke production, mining.
- Injection molding plants, molding machine hydraulic systems, forging hammers and presses.
- Mine support hydraulic systems, road headers, auxiliary equipment (loading machines, drilling rigs, mine hoists).
- Medium-loaded hydraulic systems (150-250 atm.), operated near an open flame and with a significant risk of fire.
- Operating temperature range is in accordance with ISO 7745.
- The temperature in the oil volume should not exceed 60 °C to prevent water evaporation. At higher temperatures, it is recommended to use HFDU fluids.
- It is recommended to control losses from water evaporation and top up with distilled water.
- It does not miscible with standard mineral based hydraulic oils (HLP, HVLP).

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The above data are typical for the products currently available. Due to ongoing research and development, the information contained in the document is subject to change. Information on the safe use of the product is contained in the Safety Data Sheet. More detailed information can be obtained from the company's technical specialists. E-mail: 365@gazpromneft-sm.ru. 05/2026

Specifications	Gazpromneft Hydraulic HFC-46
ISO 6743/4 HFC	✓

Typical physical and chemical characteristics

Parameters	Method	Gazpromneft Hydraulic HFC-46
Kinematic viscosity at 40°C, mm^2/s	GOST 33	45.7
Kinematic viscosity at 100°C, mm^2/s	GOST 33	10.55
Kinematic viscosity at minus 20°C, mm^2/s	GOST 33	956
Viscosity index	GOST 25371	230
pH at 25°C	GOST 22567.5	9.5
Pour point, °C	GOST 20287 (method B)	minus 34
Tribological properties at 20±5 °C on four-ball machine: welding load (P_w), N wear diameter (Dw), mm	GOST 9490	1470 0.65
Density at 20 °C, kg/m^3	ASTM D4052	1078

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

ISO 9001 ISO 14001 ISO 45001

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