

Slow-burning hydraulic fluid

EMULKOP EKO

Emulsifying concentrate EMULKOP EKO (HFAE) is used for preparing slow-burning oil and water emulsions for power hydraulics.

EMULKOP EKO is formulated on the base of water, highly refined mineral oil and additives such as: corrosion inhibitors, emulsifiers and an antifoam attribute. Microemulsive emulsifying concentrate EMULKOP EKO is applied for preparing slow-burning oil and water emulsions whose recommended concentration is from 0.5 % to 1.0 % in water of 40 ° N hardness.

Mikroemulsions made from emulsifying concentrate Emulkop EKO are used as slow-burning hydraulic fluids of HFAE type, mainly in power hydraulics of underground mine headings and other applications.

Characteristic:

- good properties of operation as hydraulic fluid in static hydraulic systems such as hydraulic props, mechanized walling and others,
- good protective properties for hydraulic elements in contact with saline water,
- stable and strong working emulsions.

No	Requirements	Unit	Research Methods by	V a l u e
Concentrate				
1	Kinematic viscosity at 40 °C	mm ² /s	PN-EN ISO 3104	42.5-62
2	Pour point, °	°C	PN-83/C-04117	- 10÷-24
3	Flash point	°C	PN-82/C-04008	178-220

The above given data are the typical values for a production batch, they are not included in technical specification, and they are subject to change due to continual product research and development.

No	Requirements	Unit	Research Methods by	V a l u e
0.5% of oil and water emulsion made from Emulkop EKO				
1.	Microemulsion stability after 24 h at 60 °C		CBA/LB/9	stable
2.	Test of anticorrosion properties on steel and copper plates at 60 °C/24 h		CBA/LB/23	stable
3.	pH		PN-89/C-04963	7,4-7,8

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Application Recommendations:

- recommended working concentrations:

Type of work	Emulsion concentration %
As hydraulic fluid	0.5-1.0
Other applications as protective or lubricating emulsion.	5%

For appropriate application of emulsion made from Emulkol Eko it is recommended to:

- always add oil to water, and not the reverse, for proper mixing of the oil concentrate and water,
- check the concentrations periodically and verify their value, and also check bacterial contamination, which can be corrected by adding 0.15% of the preparation Grota WS Plus to emulsion,
- control the quality of water being used for making and diluting the emulsion,
- clean and disinfect the system periodically at the emulsion change.

Specifications, classifications:

ISO L-HFAE

Approvals:

approved by GIG- „B” Certificate

Storage:

The products should be stored under a roof. If they are stored in the open air where they can be exposed to atmospheric conditions – rains, they should be placed in a horizontal position in order to avoid inrush of water to a container and to prevent label damaging; they should be covered with tarpaulin. The products should not be stored at the temperature above 60°C and in the places where solar radiation is very strong or – temperatures very low. The expiry date is not less than 12 months if the storage conditions are satisfied.

Health, Industrial Safety and the Environment:

Information concerning safety is included in the product Safety Sheet. It contains detailed information on possible threats, warnings, first aid as well as the impact on the environment and ways of utilization of the used products. LOTOS Oil SA and the cooperating companies do not take responsibility for misuse of the product or – the use with the violation of the precautions given. Before using the product for other than recommended purposes, seek advice in the local LOTOS Oil SA office.

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