

## Quenching oils ISO L-UH

# FAMKAL<sup>®</sup> 22, 32, 46, 68, 100, 150

FAMKAL<sup>®</sup> 22, 32, 46, 68, 100, 150 are products manufactured from refined base oils of primarily paraffin base and additives for preventing oxidation and aging of oil at high operating temperatures.

### ADVANTAGES

- Maximum chemical and oxidation stability,
- High thermal stability,
- Low volatility,
- Excellent anticorrosion properties,
- High flash point,
- Absence of moisture and mechanical impurities,
- Low tendency towards the formation of coke deposits.

### QUALITY LEVEL

ISO 6743-14, L-UH,  
ISO/TS 12927

### APPLICATION

FAMKAL<sup>®</sup> 22 and 32 have very wide application area, therefore they are used for quenching tools and constructive parts of plain steel and low-alloy steels as well for quenching after cementation. Optimum quenching results are obtained within temperature range of 30-50°C, and can be used in inert, alkaline and neutral salt baths, without fear of sediment creation.

FAMKAL<sup>®</sup> 46 is applied for quenching parts and tools made of alloy steels, which are quenched at high temperatures and are heated in furnaces with oxidation or neutral atmosphere. Optimum results of quenching are obtained in temperature range of 40 – 100°C.

FAMKAL<sup>®</sup> 68 is applied for quenching of alloyed steels and high-alloy steels which are quenched at high temperatures. Optimum quenching results are obtained in temperature range of 60 - 110°C.

FAMKAL<sup>®</sup> 100 and 150 are applied for quenching of alloy steels and high-alloy steels which are quenched at high temperatures. Optimum quenching results are obtained in temperature range of 80-160°C.

### TYPICAL CHARACTERISTICS

CHARACTERISTICS	UNITS	22	32	46	68	100	150	METHODS
Appearance	-	clear						visual
Density at 15°C	g/ml	0,860	0,865	0,870	0,880	0,890	0,900	EN ISO 3675
Kinematic viscosity at 40°C	mm <sup>2</sup> /s	22	32	46	68	100	150	ISO 3104
Kinematic viscosity at 100°C	mm <sup>2</sup> /s	4,3	5,4	6,7	8,6	11	14,3	ISO 3104
Viscosity index	-	101	102	97	97	94	92	ISO 2909
Flash point	°C	min 210			min 220			EN ISO 2592

July, 2018



Neutralization number	mgKOH/g	max 0,15	ISO 6618
Carbon residue	%	max 0,30	ISO 6615

#### STORAGE

Store in covered area. If stored outdoors, it is necessary to place the drums in a horizontal position to prevent the accumulation of water on the surface of the drum. Do not store at elevated temperatures or in locations exposed to direct sunlight, nor at the temperatures below 0°C.

All necessary instructions can be found in the product SDS. It contains the details of possible hazards, warnings and first aid measures, as well as the impact on the environment and the necessary measures for the storage and handling.

#### PACKING

Plastic pails of 20 L, tin drums of 180 kg and plastic container of 850 kg.

---

Data are orientational, manufacturer reserves the right to make changes in order to improve product quality.



July, 2018

FABRIKA MAZIVA FAM • Jug Bogdanova 42 • 37000 Kruševac • Serbia

Tel. ++381 37 422078; 423261 • Fax. ++ 381 37 426241; 424008

[www.fam.rs](http://www.fam.rs)