

Metalworking fluids

ISO L-MAB

FESOL[®] 05 S

FESOL[®] 05 S is mineral, water soluble metalworking fluid based on mineral oil, emulsifiers and suitable additives, which provide excellent anticorrosion protection, reduced friction and biostability ensures long-lasting application.

ADVANTAGES

- Excellent lubricating and anticorrosion properties,
- High precision and quality of treated surfaces,
- Long life,
- Mild odour,
- High microbiological resistance,
- Excellent stability and protection against corrosion in hard water,
- Low foam in soft water,
- Economical,
- It does not irritate nor dry out the skin.

QUALITY LEVEL

ISO 6743-7, L-MAB,
ISO/TS 12927

APPLICATION

FESOL[®] 05 S is recommended for the processing of steel, gray iron, non-ferrous and light metals and its alloys, in medium and heavy duty operating modes. It is especially recommended for cold rolling of copper strips, and can also be used as a hydraulic medium.

Type of processing	Grey iron	Low-alloy steels	High-alloy steels	Al and alloys	Mg and alloys	Cu and alloys
Grinding	*	*	*	-	-	-
Milling Turning	***	**	**	**	-	***
Sheet rolling	-	-	-	-	-	***
Drilling	***	**	**	-	-	***
Threading	***	**	*	**	-	***

*** the best, ** acceptable, * satisfactory, - not satisfactory

RECOMMENDED APPLICATION CONCENTRATIONS

Grinding	3%
Sheet rolling	4 - 7%
Milling, drilling, turning	5 - 6%
Hydraulic medium	5 - 6%
Tapping, reaming, cutting	10%

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ADDITIVE CONTENT

Type of oil and content:	Mineral oil (max 70%)					
Additive content						
EP	AW	Boron	Amines	Chlorine	Esters	Nitrites
-	+	-	+	-	+	-
Stability in hard waters	20°dH (360 ppm CaCO ₃)					

TYPICAL CHARACTERISTICS

CONCENTRATE			
CHARACTERISTICS	METHOD	UNITS	VALUE
Appearance	visual	-	clear
Density at 20°C	EN ISO 3675	g/ml	0,910
Kinematic viscosity at 40°C	ISO 3104	mm ² /s	30
EMULSION			
CHARACTERISTICS	METHOD	UNITS	VALUE
Appearance	visual	-	milky
pH value at 5% concentration	ISO 4316	-	9,4
Corrosion on grey iron (chips/paper) 5%	DIN 51361/2	degree	0/0
Cu corrosion (3h, 50°C) 5%	EN ISO 2160	-	1a
Factor for refractometer		1,08	

Friction coefficient in the cutting zone: $\mu = 0,085 - 0,120$

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 and tin drums of 180 kg.

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