

Metalworking fluid

ISO L-MAF

SOL[®] 100 R

SOL[®] 100 R is semisynthetic metalworking fluid based on the low content of mineral oil, emulsifier and suitable additives that provide excellent anticorrosion protection, washout and suitable biostability provides durability in application.

ADVANTAGES

- Excellent lubricating and anticorrosion properties,
- High precision and quality of treated surfaces,
- Long life,
- It easily emulsifies in water,
- Mild odour,
- High microbiological resistance,
- Excellent stability and anticorrosion protection in hard water,
- Low foaming in soft water,
- Economical,
- It does not irritate or dry out the skin.

QUALITY LEVEL

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

APPLICATION

SOL[®] 100 R is product intended for production operations of metal processing by chip removal, which is used for the machining of steel and gray iron. It is especially suitable for individual systems exposed to frequent pollution. Due to the bioresistance of the product, the requirements for emulsion maintenance are minimal.

Type of processing	Grey iron	Low-alloy steel	High-alloy steel	Al and alloys	Mg and alloys	Cu and alloys
Grinding	***	***	***	-	-	-
Milling Drilling Turning	***	***	***	-	-	-
Tapping	***	***	***	-	-	-
Cutting	***	***	***	-	-	-

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

RECOMMENDED APPLICATION CONCENTRATIONS

Grinding 2 - 3%
Milling, drilling, turning 4 - 5%
Tapping, reaming, cutting 4 - 6%

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ADDITIVE CONTENT

Oil type and content:	Mineral oil (max 12%)					
Additive content						
EP	AW	Boron	Amines	Chlorine	Esters	Nitrites
+	+	+	+	-	+	-
Stability in hard water	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	1,030
Kinematic viscosity at 40°C	ISO 3104	mm ² /s	140
EMULSION			
CHARACTERISTICS	METHOD	UNITS	VALUE
Appearance	visual	-	semi-transparent
pH value at 3,5% concentration	ISO 4316	-	9,3
Corrosion on grey iron (chips/paper) 3,5%	DIN 51361/2	degree	0/0
Factor for refractometer		1,15	

Friction coefficient in the cutting zone: $\mu = 0,08 - 0,10$

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.

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.