

Metalworking fluid

ISO L-MAH

BIOSINT[®] 050

BIOSINT[®] 050 is watersoluble synthetic metalworking fluid based on high molecular organic compounds that provide excellent anticorrosion protection, enduring high pressures and friction reduction and appropriate biostability ensures durability in application.

ADVANTAGES

- Excellent lubricating and anticorrosion properties,
- It does not mix with other used oils,
- Low foaming,
- Excellent stability in hard waters,
- Rinses well the place of treatment,
- Long life,
- Mild odour,
- Excellent processing quality,
- High microbiological resistance,
- It does not irritate or dry out the skin.

QUALITY LEVEL

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

APPLICATION

BIOSINT[®] 050 is synthetic concentrate for the processing of all types of metals in very difficult processing modes.

Type of processing	Grey iron	Low alloy steel	High alloy steel	Al and alloys	Cu and alloys
Turning	***	***	**	**	**
Milling	***	***	**	**	**
Planing	***	***	-	**	**
Drilling	***	***	-	**	**
Tapping and threading	**	*	-	**	**
Grinding	***	***	**	-	-
Processing on CNC machines	***	***	*	**	**

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

RECOMMENDED CONCENTRATIONS FOR APPLICATION

Grinding	3%
Milling, drilling, turning	5%
Tapping	6 - 7%

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ADDITIVE CONTENT

EP	AW	Boron	Amines	Chlorine	Esters	Nitrites	DEA
+	+	-	+	-	+	-	-
Stability in hard water		20°dH (360 ppm CaCO ₃)					

TYPICAL CHARACTERISTICS

CONCENTRATE			
CHARACTERISTICS	METHOD	UNITS	VALUE
Appearance	visual	-	yellow green liquid
Density at 20°C	EN ISO 3675	g/ml	1,060
Kinematic viscosity at 40°C	ISO 3104	mm ² /s	5
SOLUTION			
CHARACTERISTICS	METHOD	UNITS	VALUE
Appearance	visual	-	transparent
pH value at 5% concentration	ISO 4316	-	8,3
Corrosion on grey iron (chips/paper) 5%	DIN 51360/2	degree	0/0
Factor for refractometer		2,0	

Friction coefficient in the cutting zone: $\mu = 0,85 - 0,90$

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 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 containers 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.