MAK SHEROL BS

Superior multipurpose semi-synthetic metalworking fluid for a wide range of metals

MAK Sherol BS is a soluble metal working fluid. Extreme Pressure additive along with lubricity agents provides superior tool life and surface finish. It has an excellent compatibility with extremely hard water.

Applications:
MAK Sherol BS is specially formulated for cast iron materials and the alloys of steel. This low oil content high performance oil is developed for a variety of general machining like turning, milling, drilling etc. and grinding in automatic lathes HMCs, VMCs.

Recommended Use	Cast Iron	Alloy Steel	Carbon Steel	Al. Alloy	Yellow Metals
Grinding	√√	--	--	--	--
General Machining	√√	√√	√√	--	√√
Drilling	√√	√√	√√	--	√√

√√ Main applications, √ Check with supplier

Performance/ Benefits:

High Emulsion Stability – readily emulsifies to form stable milky emulsion (oil in water type) in hard water (up to 1000 ppm).

Good Rust Protection – for both machine tools and work pieces. Reduces rejection.

Good EP Property – provides excellent load bearing capability and protection to tools along with superior surface finish.

Light Colour – translucent emulsion ensures good visibility during operation.

High Lubricity – provides excellent lubricity to reduce friction and improve surface finish.

Low Foaming Tendency – exhibits low foaming characteristics even with low water hardness. Maintains oil film between moving parts. Extends tool life.

Anti-microbial Property – resists bacterial growth and does not decompose easily. Ensures longer sump life and reduces cost of operation.

Concentration:

Grinding:	3 – 5%
General Machining:	5 – 7%
Difficult Operations:	7 – 10%

Specification:

- Proprietary Grade

Typical Physico-Chemical Data: MAK Sherol BS

Characteristics	Method	Value
Colour, Oil	Visual	Brown
Appearance, Oil	Visual	Clear
Colour, Emulsion (5%)	Visual	Translucent
Copper Corrosion, 100^{O}C, 3 hrs.	ASTM D130	1a
Emulsion Test, 5:1 & 20:1 ratio in water of 400 ppm hardness (as $CaCO_3$)	IS 1448 P:68	No oil, no cream
Frothing Test, 5:1 & 20:1 ratio in water of 200 ppm hardness (as $CaCO_3$)	IS 1448 P:99	NIL (no froth) in 30 sec
Corrosion Test, % Break Point	IP 287	3
Cast Iron Corrosion Test 20:1 ratio emulsion with 400 ppm hardness (as $CaCO_3$)	IS 1448 Appendix A	0/0-0 (no corrosion) Passes
Refractometer Factor (5%)	--	1.6
pH, at 5% in distilled water	--	9.2

Additive:

Ester	Phenol	Sulphur	Biocides	EP	Nitrites
√	--	--	√	√	--

Storage & Handling:
The product should be stored inside. Keep it properly sealed to avoid contamination. Avoid freezing. Shelf life is 2 yrs. under protected storage conditions.

Health & Safety:
It is unlikely to be hazardous when properly used in recommended applications. Contamination of the coolant from other oils, greases, chemicals, dirty water etc. can occur during the use. It should be avoided. Regular monitoring of the in-use product is recommended.

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