

MAK SHEROL EP SS

Superior semi-synthetic soluble metalworking fluid with excellent Extreme Pressure property

MAK Sherol EP SS is a premium grade semi-synthetic soluble cutting oil blended with special extreme pressure additive to provide superior tool life and performance benefits. It has excellent emulsion stability and rust protection with hard water.

Applications:

MAK Sherol EP SS is developed with a high mineral oil content for a variety of operations on metal, oil resistant polymer and composites. This semi-synthetic soluble oil is designed for general machining like turning, drilling, milling and grinding of Aluminium alloys, ferrous and yellow metals.

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

√√ Main applications, √ Check with supplier

Performance/ Benefits:

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

High Lubricity – provides excellent lubricity and surface finish. Extends tool life.

High Emulsion Stability – readily emulsifies to form stable milky to semi-translucent emulsion (oil in water type, water hardness 400 ppm).

Low Foaming Tendency – allows high pump pressures and helps maintaining continuous oil film between moving parts. Compatible with soft water.

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

Anti-microbial Property – fortified with biocide to inhibit bacterial growth and odour.

Concentration:

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

Specification:

- IS 1115:1986 (Reaffirmed 2013)

Typical Physico-Chemical Data: MAK Sherol EP SS

Characteristics	Method	Value
Colour, Oil	Visual	Amber
Appearance, Oil	Visual	Clear
Colour, Emulsion	Visual	Milky to semi-translucent
Copper Corrosion, 100°C, 3 hrs.	ASTM D130	1a
Corrosion Test, % Break Point	IP 287	3
Defoam in water (50 ppm hardness)	--	Nil (30 seconds)
Emulsion Test, 5:1 & 20:1 ratio in water of 400 ppm hardness (as CaCO ₃)	IS 1448 P:68	No oil, no cream
Thermal Stability Test	IS 1448 P:100	Passes
Refractometer Factor		1.15
pH, at 5% in distilled water	--	9.1

Additive:

EP	Phenol	Sulphur	Amines	Ester	Biocide
√	--	--	√	√	√

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.