

MAK SHEROL EP-SS

Description

MAK SHEROL EP-SS is high performance water miscible semi synthetic soluble cutting oil with a unique blend of extreme pressure additives, synthetic lubricity esters and corrosion inhibitors. Its balanced formulation provides excellent surface finish, emulsion stability and effective bio-resistance properties. It is designed as a general purpose coolant providing superior corrosion inhibition on all ferrous and nonferrous metals. It produces a translucent emulsion, low in odour and mist thus making operator friendly product.

Application

MAK SHEROL EP-SS is recommended for use on wide range of machining applications such as sawing, turning, milling, drilling etc. It is suitable for machining of ferrous and non-ferrous materials, including copper, aluminum and its alloys.

Operations type	Suggested concentrations %
Difficult operations of materials	7-10
General machining	5-7
Grinding	3-5

Benefits

- Excellent cutting performance with EP additives ensuring improved tool life.
- It possesses superior hard water tolerance, and the emulsion is stable even above 400 ppm hard water, providing excellent corrosion protection.
- Readily forms a translucent stable emulsion in a wide variety of water qualities. Avoid water with high chloride content (above 100 parts per million)
- Protects machine tools and components.
- Long sump life and low coolant consumption thus reduces the cost for user.
- Low odor and mist provides a good working environment.
- Excellent antibacterial performance prolongs coolant sump life efficiently.

Performance Level

- IS 1115: 1986 [Reaffirmed March, 2002]

Technical Specifications

Characteristics	Test method	MAK SHEROL EP-SS
Appearance	Visual	Clear & Bright
Colour	Visual	Brown
Density @29.5°C, Kg/m ³	ASTM D1298	0.958
Copper corrosion test, 3hrs, 100°C	ASTM D 130	1a
Emulsion test 5:1 & 20:1 ration emulsion with 400 ppm hardness (CaCO ₃)	IS 1448 : P 98	0 ml & 0 ml
5% Emulsion appearance	--	Translucent
pH of 5% emulsion	--	9.6
Corrosion test, Break point, %	IP 287	3
Cast Iron corrosion test 20:1 ration emulsion with 400 ppm hardness (CaCO ₃)	IS 1115 Appendix-A	0/0-0
Frothing test 5:1 & 20:1 ratio in 200ppm hardness (CaCO ₃), ml	IS 1448 : P 99	Nil in 30 Secs

All the mentioned values are typical which may vary from batch to batch.

Storage and Handling

- Indoor Storage is always preferable
- Barrels should be kept horizontally with bunk position at 3 O'clock 9 O'clock position
- Barrels should be kept away from dusty or heated areas.
- During handling any contact with dust must be avoided.

Health and Safety

These oils are not hazardous under normal conditions of use. For further guidance appropriate Material Safety Data Sheet (MSDS) may be referred.

Advice

For any further advice on applications or otherwise please contact the nearest Bharat Petroleum Territory Office or Technical Services Department at the address given below.

Bharat Petroleum Corporation Ltd.

Product and Application Development Dept.
BPCL 'A' Installation, Sewree Fort Road, Sewree (East)
Mumbai -400015
E-mail: MAKcustomercare2@bharatpetroleum.in
Tel No.: 022-24176351