

## POWEROIL SYNTHCUT 25S

### SEMI SYNTHETIC CUTTING FLUID

**POWEROIL SYNTHCUT 25S** is a semi synthetic, environment friendly cutting fluid developed for use in light to heavy duty machining of ferrous & metal alloys. It is also suitable for general purpose grinding. It contains special lubricity & E.P additives and rust inhibitor, which protects ferrous components during machining operation. This product is specially designed to offer extended sump life with better tool life

CHARACTERISTICS	POWEROIL SYNTHCUT 25S
Appearance-Concentrate	Clear Amber fluid
Density @ 29.5 °C, gm/cc	0.978
Emulsion –Appearance	Translucent to off white with pleasant odour
Thermal Stability Test	Passes
Cast iron corrosion Test @ 3%, 200 ppm(IP 287)	No Rust
PH 5% dilution in Distilled water	9.4
Refractometer Reading multiplication Factor	1.35

The above properties are typical values and do not constitute specification of the product

#### APPLICATION:

- Recommended for a wide range of metal working operations.
- Suitable for metal cutting & grinding of ferrous & its alloys
- Material Compatibility
  - ✓ Cast Iron
  - ✓ Ferrous Alloys
  - ✓ Stainless Steels

RECOMMENED CONCENTRATION	
Application	Concentration %
Grinding	2 – 3
General Machining	5 – 6
Lapping	6 – 8
Deep Hole Drilling & Boring	6 – 8
Reaming	8 - 10

## MIXING INSTRUCTIONS:

- While mixing always add oil to water and not the reverse.
- Use good quality water. D.I water gives extended sump life as Hardness and chlorides reduce the product life and corrosion inhibition properties.
- Use clean and sterilized sump before every fresh charge.

Concentration, %	4%	5%	6%	7%	8%	9%	10%
Ratio	1:2	1:20	1:17	1:14	1:12	1:11	1:10
Refractometer(+/-0.2)	2.8	3.4	4.2	4.8	5.5	6.1	6.8

Refractometer factor : 1.47 ( Factor x Refractometer reading = Actual concentration)

## PERFORMANCE BENEFITS:

- Excellent cooling and lubricating properties
- Pleasant odour of the emulsions, user friendly
- High resistance to bacterial attack and hence reduced odour and higher coolant life.
- Stable emulsion even in hard water
- Offers excellent rust protection of ferrous components.
- Reduces machine down time
- Nitrite & Chlorine free hence environmentally safe.

## ADDITIONAL INFORMATION: CONCENTRATION MONITORING

CONCENTRATION N%	RI READING
0	0
2	1.6
4	3
6	4.3
8	5.6
10	7.2

