



# SHIELD - SOLUBLE CUTTING OIL CRB20

DESCRIPTION

Shield's Soluble Cutting Oil is superior quality oil that forms a milky emulsion when mixed with water. It is formulated using premium virgin base oils and special additive packages that protect against rust, oxidation and also contains biocide, which prevents bacterial growth in the emulsion. This oil has great cooling and lubricating properties which produce excellent surface finishes and minimizes wear.



## RECOMMENDED OIL:WATER RATIOS

| OPERATION                             | DILUTION      |
|---------------------------------------|---------------|
| • Grinding                            | • 1:40 -1:60  |
| • Light Cutting                       | • 1:30 - 1:40 |
| • Drilling, Milling & Screw machining | • 1:20        |
| • Broaching, Threading & Gear cutting | • 1:10        |

### APPLICATIONS:

The Soluble Cutting Oil CRB20 is suitable for light machining, grinding and milling. It is normally used in a concentration of 5%. For stable emulsion, oil should always be added to the water and not vice versa whilst continuously stirring the mixture. Make sure the water used is of moderate to medium hardness, measured as 61-120 ppm of Calcium Carbonate (CaCO<sub>3</sub>).

## TYPICAL PHYSICAL PROPERTIES

| SL# | Characteristics Unit            | Test Method | Grades    |
|-----|---------------------------------|-------------|-----------|
|     |                                 |             | CRB-20    |
| 1   | Kinematic Viscosity @ 40°C, cSt | ASTM D 445  | 36        |
| 2   | Flash Point COC, °C             | ASTM D 92   | 190       |
| 3   | Low Temperature Stability Test  | -           | Pass      |
| 4   | pH (5% Emulsion)                | -           | 8.5 - 9.0 |
| 5   | Chlorine Content                | -           | NIL       |

\* Exact specifications may slightly vary from the above, but within the international standards