# Clearedge 880

High performance semi-synthetic metalworking fluid

## Description

Castrol Clearedge<sup>TM</sup> 880 is a high performance chlorinated semi synthetic metalworking fluid. It contains a unique blend of extreme pressure additives and corrosion inhibitors, which work in synergy to enhance machining performance and surface finish, provide excellent product stability, improve bio-resistance properties and lower the overall operation costs. Clearedge 880 is suitable for large central systems and single sump machines.

## Application

Clearedge 880 is recommended for use on most general purpose machining applications including milling, drilling, tapping, and reaming. It is a versatile product that can be used for machining of cast iron, low-medium alloyed steel, high alloy-stainless steel and aluminium alloys.

|  | Cast Iron | Low-medium alloyed steel | High alloyed -stainless steel | Aluminium alloys | Magnesium alloys | Yellow metals |
|---|---|---|---|---|---|---|
| Grinding | ○ ○ ○ | ○ ○ ○ | ○ ○ ○ | ○ ○ |  | ○ |
| Milling, Turning (general machining) | ○ ○ ○ | ○ ○ ○ | ○ ○ ○ | ○ ○ |  | ○ |
| Drilling | ○ ○ ○ | ○ ○ | ○ | ○ |  | ○ |
| Reaming, Tapping | ○ ○ ○ | ○ ○ | ○ |  |  | ○ |
| Broaching | ○ ○ | ○ |  |  |  | ○ |

## Advantages

• Phenol and nitrite free to fulfil your local legislation, waste treatment and environmental requirements
• Resists fungal and bacterial attack to extend fluid life and reduce maintenance and machine downtime
• Excellent anti-corrosion properties to protect machine tools and parts
• Advanced extreme pressure additives to ensure improved tool life and part quality
• Excellent wetting properties reduce coolant drag out and deliver clean machine tools and components
• Can be used on a wide range of metals and operations – an ideal candidate for product rationalization on the shop floor

## Typical Characteristics

| Name | Method | Units | Value |
|---|---|---|---|
| Concentrate | | | |
| Appearance | Visual | | Amber |
| Mineral oil content | Calculated | Wt% | 20 |
| Emulsion | | | |
| Appearance | Visual | | Translucent |
| pH (5%) | DIN 51369<br>ASTM E 70-97 | | 9.2 |
| Refractometer Factor | | | 1.5 |

## Recommended Concentrations

| | |
|---|---|
| Grinding | 3-5% |
| General Machining | 5-7% |
| Drilling | 6-10% |
| Reaming and Tapping | 6-12% |
| Broaching | 7-12% |
| | |
| Water range | 50-400 ppm $CaCO_3$ |

## Additional Information

| | Boron | Formaldehyde releasing agent | EP (S/P) - Ester | Amines | Chlorine |
|---|---|---|---|---|---|
| Additives | ن | ن | - | ن | ن |