

## Q8 Brunel XF 450

Advanced performance ester based water soluble cutting fluid for heavy duty ferrous machining

### Description

Q8 Brunel XF 450 is an advanced ester based water soluble cutting and grinding fluid for heavy duty ferrous machining. It forms a semi-translucent emulsion when mixed with water and it is very low foaming and tramp oil rejecting. Q8 Brunel XF 450 has an excellent chemical- and biological stability and offers a high detergency and advanced cleanliness. Its high ester content makes the fluid highly polar to surfaces, providing a very high lubricity that substantially increases tool life and surface finish.

### Applications

Q8 Brunel XF 450 is recommended for all heavy duty machining and grinding applications on cast iron, steel alloys, stainless steel, titanium, Inconel and high silicon alloys. The Product can also be used for occasional aluminium machining. It is not recommended for aerospace aluminium 7000 series.

### User instructions

1. The correct mixing procedure is to add Q8 Brunel XF 450 to water and stir. For this operation we recommend positive displacement (Dosatron type) mixing units.
2. In order to preserve the integrity of this product drums should be stored inside a building protected from frost and direct sunlight.
3. Recommended concentrations are listed below.

High performance machining and tapping	6 – 10 %
Severe machining	10 – 12 %

Note: In some circumstances and applications, it is beneficial to exceed the recommendations shown above.

### Environment, Health and Safety

Q8 Brunel XF 450 is free of added formaldehyde, chlorine, boron, boric acid and secondary amines. It is compliant with the TRGS 611 specification. This ensures environmental safety & operator health. Please consult the Material Safety Data Sheet for instructions regarding safe handling and environmental issues.

### Properties

	Method	Unit	Typical
Mineral oil content	-	%	<1
Density, 20 °C	D 4052	kg/l	1.000
Kinematic Viscosity, 40 °C	D 445	mm <sup>2</sup> /s	53
Appearance (Emulsion)	Visual	-	Traslucida
pH@5% in 400 ppm CaCO <sub>3</sub> water	E 70	-	9.3
Determination of rust prevention characteristics of water-mix metalworking fluids	IP 287	%	4
Corrosion characteristics of water-mix metalworking fluids	IP 125	%	3
Refractometer Factor	-	-	1.8

The figures above are not a specification. They are typical figures obtained within production tolerances.

### Remarks

Please contact your Q8Oils representative for further advice and support on your specific application and equipment.