

## Q8 Brunel XF 355

High performance semi-synthetic water soluble cutting fluid for ferrous- and aluminium alloys

### Description

Q8 Brunel XF 355 is a high mineral oil content semi-synthetic fluid for heavy duty machining applications on ferrous and non-ferrous metals. It forms a high quality stable semi-translucent emulsion when mixed with water, resulting in extended fluid life and reduced fluid costs. The excellent lubricity additives provide a high quality surface finish to the machined pieces. It is suitable for use in soft and hard water areas.

### Applications

Q8 Brunel XF 355 is designed for heavy duty machining applications on ferrous and non-ferrous metals, it being a multi-material application product. It is especially developed for high pressure feed and speed machining on modern CNC machinery due to its low foaming capability. It is also suitable for aluminium machining including tapping application.

### User instructions

1. The correct mixing procedure is to add Q8 Brunel XF 355 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.

|                        | Copper | Steel | Cast iron | Aluminium |
|------------------------|--------|-------|-----------|-----------|
| General machining      | 5%     | 5%    | 5%        | 5%        |
| Medium/Heavy machining | 8%     | 10%   | 5%        | 9%        |
| Tapping                |        |       |           | 10%       |

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

### Environment, Health and Safety

Q8 Brunel XF 355 is free of 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   | -      | %                  | 40               |
| Density, 20 °C  | D 4052 | g/ml               | 0.971            |
| Kinematic Viscosity, 40 °C  | D 445  | mm <sup>2</sup> /s | 88               |
| Appearance (Emulsion)   | Visual | -                  | Semi-translucent |
| pH@3% in 400 ppm CaCO <sub>3</sub> water  | D 1287 | pH                 | 9.5              |
| Determination of rust prevention characteristics of water-mix metalworking fluids | IP 287 | %                  | 3                |
| Corrosion characteristics of water-mix metalworking fluids                        | IP 125 | %                  | 2                |
| Refractometer Factor  | -      | -                  | 1.1              |

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.