

Q8 Brunel XF 376

Extreme performing water soluble cutting fluid for heavy duty machining

Description

Q8 Brunel XF 376 is an exceptional performing water-soluble cutting fluid with excellent physical-chemical and biological stability, minimal tendency to foam formation, excellent detergency and compatibility with both hard and soft water. The very advanced lubricity additive allows to obtain cutting performance even higher than products with standard EP components. The exceptional lubricating power of the advanced lubricity additive in combination with high mineral oil content guarantees excellent surface finishes and an increase in the useful life of the tools.

Applications

Q8 Brunel XF 376 has been designed to minimize the risk of staining of even the most sensitive aluminum alloys including aerospace applications. It is recommended for highly demanding cutting operations on all aluminum alloys, titanium, inconel, high alloy steels and stainless steel. The use can be extended to copper alloys.

User instructions

1. The correct mixing procedure is to add Q8 Brunel XF 376 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 (5-40 °C) protected from frost and direct sunlight.
3. Recommended concentrations are listed below.

| | |
|-------------------|----------|
| General machining | 4 – 6 % |
| Severe operations | 8 – 12 % |

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

Environment, Health and Safety

Q8 Brunel XF 376 has a high safety profile as it is free from boron, formaldehyde donors, skin sensitizing biocides, nitrites, phenols, chlorine and secondary amines. It is compliant with TRGS 611, and the water hazard class according to German legislation is WGK 1. Please consult the Material Safety Data Sheet for instructions regarding safe handling and environmental issues.

Properties

| | Method | Unit | Typical |
|---|--------|--------------------|---------|
| Appearance (Emulsion) | Visual | - | Milky |
| Density, 20 °C | D 4052 | g/ml | 0.933 |
| Mineral oil content | - | % | 51 |
| Kinematic Viscosity, 40 °C | D 445 | mm ² /s | 113 |
| pH@3% in 400 ppm CaCO ₃ water | D 1287 | pH | 9.5 |
| Determination of rust prevention characteristics of water-mix metalworking fluids | IP 287 | % | 4 |
| Corrosion characteristics of water-mix metalworking fluids | IP 125 | % | 2 |
| Refractometer Factor | - | - | 0.9 |

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