

Excelfluid RR

Semi synthetic biostable metalworking fluid

Product Description:

Excelfluid RR is a blue coloured, water miscible, semi synthetic biostable cutting and grinding fluid for both ferrous and non-ferrous materials.

Excelfluid RR contains a relatively high emulsifier to oil ratio which results in a highly stable micro emulsion being formed when the concentrate is added to water. This promotes improved wetting characteristics and allows for excellent workpiece visibility. The boron biostable performance additives offer excellent resistance to bacterial proliferation and improved hard water compatibility.

Features & Benefits:

- Cost effective
- Good levels of surface finish
- Permits higher cutting speeds
- Low foaming
- Chlorine free
- NP ethoxylates free
- Multi-functional
- Excellent residual corrosion protection
- Maintains machine cleanliness
- Good levels of boundary lubrication
- Excellent tramp oil rejection

Typical Test Data:

Appearance	Blue liquid - Green liquid
Emulsion Type	Transparent
Foaming Tendency	Nil foam after 5 seconds
5% emulsion in 50ppm water	0.995 typical
Specific Gravity at 20°C	9.3 typical
pH @ 5%	1.8
Refractometer Correction Factor	2.5
IP 287 Corrosion Break Point, %	0/0-0
IP 125 Corrosion at 2%	
Reichert Lubricity Characteristics at 10% dilution	
Noise Reduction (metres)	35
Load bearing capacity (Kg mm ²)	1.255
Oil Content	20%

Materials & Performance:

Material types	Performance Rating
Titanium	***
Aluminium	****
Aero aluminium alloys	****
High alloy/stainless steel	****
Cast Irons	*****
Ferrous Materials	****

Applications	Dilution
Tapping	8 – 10 %
Milling	5 – 7 %
Turning	5 – 7 %
Reaming	8 – 10 %
Sawing	5 – 7 %
Drilling	7 – 10 %
Grinding	4 – 6%

The above figures are given for guidance only.

When used in sawing applications this product has proven performance on:

Titanium
 Aluminium
 Aero aluminium alloys (including 2000, 4000, 7000 series)
 Stainless steel – 304, 316
 Inconel – 718 and 625

Product management:

The working concentration should be carefully controlled and monitored daily as higher and lower working concentrations have health and safety implications. Machines should be cleaned out regularly. Fluid and particulate contaminants should be kept to a minimum. This is important especially in terms of bacterial control and is in line with the latest advice from government and professional sources.