

METAL REMOVAL FLUIDS

QUAKERCOOL® 3750 BFF METALWORKING WATER SOLUBLE COOLANT BORON FREE

APPLICATION SHEET

BENEFITS

- » Formaldehyde free
- » Boron free
- » Excellent wetting and onctuousity abilities giving high cutting performances
- » Ensures a good surface finish without leaving residues
- » Very low foaming and excellent deaeration abilities
- » Good corrosion protection when using the recommended concentration

APPLICATIONS

Water dliutable semi-synthetic fluid with a high mineral oil content, suitable for traditional machining and grinding operations on cast-iron and steel.

The technology combines exceptional detergency with high lubricating properties mainly due to a carefully selected base oil package.

Recommended for general machining and grinding operations on steel and cast iron.

Concentration range:
5 - 10 % depending on type of operation

Make up water hardness:
35 - 180 ppm (3 - 18 °TH, 1 - 10 °DH)

FLUID MAINTENANCE

Poor or incorrect emulsion preparation may lead to instability and could considerably shorten the life of the emulsion. Prior to making any fresh fill, we highly recommend full cleaning including the use of a compatible systems cleaner of all system components which will be in contact with the emulsion. A wide range of system cleaners* and disinfecting additives* are available from Quaker.

*Please consult a Quaker representative for any additional information.



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STORAGE/PACKAGING

Quaker Chemical can supply this quality product in drums, in containers and in bulk. Other packages can be made available by Quaker Chemical or by distributors upon request.

As with all metalworking products, QUAKERCOOL® 3750 BFF should be stored in dry conditions and protected from extreme temperatures: 4 - 35 °C is the recommended storage temperature.

QUAKERCOOL® 3750 BFF is unlikely to present any significant health or safety hazard when used as recommended by Quaker. Good standards of personal and industrial hygiene are to be maintained by the user (see Material Safety Data Sheets).

OPERATIONS

Turning	●
Milling	●
Drilling	●
Deep hole drilling	○
Tapping-Threading	●
Reaming	●
Broaching	○
Sawing	●
Grinding	●
Honing-Lapping	

MATERIALS

Cast-iron	●
Steel	●
High alloy steel	○
Stainless steel	○
Aluminium alloys	
Aero Aluminium alloys	
Copper alloys	○
Titanium	○
Carbide tool	

● Main application ○ Possible application

PROPERTIES

PROPERTY	TYPICAL VALUE	UNIT
Appearance / Colour	Clear Yellow	[-]
Viscosity	43	[mm ² /s @ 40 °C]
Density	985	[kg/m ³ @ 15 °C]
Pour point	<4	[°C]
Appearance diluted	Translucent	[-]
pH diluted	9.7	[-]
Corrosion threshold	3	[% DIN 51360 T2]
Alkalinity factor (pH=5)	2.9	[ml 0,1N/%/ 25 ml]
Acid split factor	0.56	[ml/%]
Refractometer factor	1.3	[%/° Brix]

These characteristics are typical of current production and can't be used as a specification.

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Prior to using this product, consult the Material Safety Data Sheet for instructions regarding safe handling and environmental issues.

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