

# MACHINING & GRINDING FLUID SEMI-SYNTHETIC

## QUAKERCOOL 3750

### APPLICATIONS

QUAKERCOOL 3750 is a water emulsifiable machining and grinding fluid used at concentrations between 4 and 6%. The fluid is based on state of the art lubrication technology and found suitable for a wide range of moderate to heavy machining operations such as:

- Centerless Grinding
- Reaming
- Drilling
- Tapping
- Milling
- Turning

Due to its very low foaming characteristics, it is also very suitable for usage in soft water. Furthermore, it can be used on a wide variety of metals such as Aluminium, brass and bronze.

### BENEFITS

- Through incorporation of the well-known Quaker biostatic technology a sump life of 12 months is easily achieved in well-maintained systems.
- The emulsion is extremely low foaming reducing air entrapment. This decreases the risk of cavitation at the discharge site of the pump and thus of reduced cooling. Cavitation causes excessive pump wear whereas optimal cooling ensures good workpiece quality at high production rates.
- Machines are kept cleaner due to the excellent detergency of the product. It does not produce sticky residues ensuring good fines handling properties. Both properties result in better visibility of the workpieces and better working conditions.
- This product is Chlorine, phenol, nitrite and di-ethanol-amine (DEA) free reducing environmental hazards while increasing worker safety. In fact it does not contain any components that require naming in the hazards identification paragraph in the Material Safety Data Sheet (MSDS).

### CUSTOMER REFERENCES

Rolls Royce Aerospace Approved Category 3 (subcontract work)	Case - New Holland
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Engine Manufacturers BMW	Ford	Volkswagen
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Sub contractors Atlas Copco	MAN
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APPLICATION

### FLUID MAINTENANCE

QUAKERCOOL 3750 is delivered as a concentrate to form an emulsion when it is diluted with water. The product is ideally suited for water with a hardness range of 40 - 270 ppm Ca as CaCO<sub>3</sub>. In order to assure a long sump life the concentration should be checked regularly by refractometer or alternatively by checking the alkalinity of the emulsion. Contamination with solids should be reduced by filtration and tramp oil should be skimmed off as often as possible.

### PACKAGING

QUAKERCOOL 3750 is available in drums containing 25 or 195 kg net.

### STORAGE

If the following criteria are adhered to, the product can be stored for at least six months. Recommended long-term storage temperature: 4 - 35° C.  
Keep drums tightly closed when not in use.  
Store drums in a dry and well-ventilated area.

### PROPERTIES CONCENTRATE

<i>Property</i>	<i>Typical</i>	<i>Unit</i>
Appearance	Slight hazy, yellow liquid	
Active content (oil / ester)	45	%
Density at 15° C	993	kg/m <sup>3</sup>
Kinematic viscosity at 40° C	68	mm <sup>2</sup> /s
Total alkalinity	106	mg KOH/g

### PROPERTIES EMULSION

<i>Property</i>	<i>Typical</i>	<i>Unit</i>
Appearance	Off white liquid	
pH, 5% in test water	9.4	
Refraction index factor	0.90	°Brix/%

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### AUTHORIZED RESELLER