



## MOBILCUT 140 BF

Mobil Industrial , Libya

Boron Free Aqueous Metal Working Fluid

### Product Description

Mobilcut is the trademark for Mobil Industrial lubricants line of high performance water miscible metal removal fluids. Formulated with leading edge base oils, add and emulsifiers, the Mobilcut series of non-chlorinated products provides dependable performance in a wide array of metal removal processes. The product is designed to work in a variety of hard and soft water qualities and offer low foam potential and long-term corrosion protection for machine and component maintenance and inherently stable, Mobilcut products are designed for the modern machine shop where long service life, excellent machining performance, health and environmental concerns are important factors for increased productivity. These products are supplied in concentrated form and require mixing with water at the point of use. All Mobilcut products are free of formaldehyde release agents (FAD).

Mobilcut 140 BF is a long life, boron free, water soluble fluid making it an ideal choice for grinding and general machining application in the modern machine shop. It is formulated to provide long service life, good emulsion stability and durability while helping to increase tool life and surface finish, even in difficult machining operations. Mobilcut 140 BF is an ideal choice where excellent machining performance is required for a wide variety of materials and applications, while being easy to monitor and maintain. It can work well with very soft water ( 5 °dH) and the emulsion is stable in use in very hard water (up to 60 °dH).

### Features and Benefits

The Mobilcut series are designed to help increase the productivity of modern machine shops by providing high performance features.

Features	Advantages and Potential Benefits
Form stable emulsions and solutions	Ease of use and maintenance
Long term inherent stability	Increases batch life and reduces unpleasant odors
Low foaming potential	Improved performance even in high pressure systems
Resists formation of sticky residues	Improves machine cleanliness
High degree of corrosion protection	Reduces machine maintenance and rework of materials
Good separability from fines	Improves filterability and surface finish
Wide Range of applicability	Potential to consolidate products and reduce inventories
Compatible with high performance Mobil Vactra Oil No slideway lubricants	Easy separation and removal of tramp oil
Neutral Odor	Enhances the workplace environment
Boron free	For Regulatory compliance

### Applications

Mobilcut 140 BF: Grinding and machining of cast iron and for a wide variety of materials in moderate to heavy duty operations such as milling, turning, sawing, tapping, drilling and reaming where the lubricity of a soluble oil is desired.

Fluid type is micro emulsion. Mineral oil content is typically 30%. Water hardness range is from 5 to 30 °dH. Its typical refractometer factor is 1.3, due to product tolerances this value might vary slightly.

Recommended concentrations for typical operations:

Cylindrical & Surface grinding: 5-7%

Low alloy steels - milling, turning: 6-8%

Carbon alloy steels, difficult machining: 8-12%

Aluminum machining: 8-10%

#### Properties and Specifications

Property	
Kinematic Viscosity 20 C, mm <sup>2</sup> /S, ASTM D7042	120
pH-Value 5.0% in 20 deg dH Water, DIN 51369	10.1
Density 15 C, kg/m <sup>3</sup> , DIN EN ISO12185	986
Appearance, AA.Lab.101	yellow, turbid
Appearance, 5.0% in 20 deg dH Water, AA.Lab.101	translucent

#### Health and safety

Health and Safety recommendations for this product can be found on the Material Safety Data Sheet (MSDS) @ <http://www.msds.exxonmobil.com/psims/psims.as>  
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