



Mobilcut™ 141

Mobil Industrial , 中国

Aqueous Metal Working Fluids

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, additives, and emulsifiers, the Mobilcut series of non-chlorinated products provides dependable performance in a wide array of metal removal processes. The products are 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 components. Low 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. Mobilcut 141 is free of formaldehyde release agents (FAD).

Mobilcut 141 is a long life water soluble fluid making it an ideal choice for moderate duty machining applications 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. Mobilcut 141 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 forms a stable emulsion which is suitable for hard and soft water in the range from 50 ppm to 500 ppm.

Features and Benefits

The Mobilcut 141 is 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

Applications

Mobilcut 141: Machining of industrial grade aluminum and high machinability steels in moderate duty operations such as milling, turning, sawing, boring, drilling and reaming where the lubricity of a soluble oil is desired.

Fluid type is micro emulsion. Mineral oil content is typically 35%. Water hardness range is from 50 to 500 ppm. Its refractometer factor is 1.3.

- Recommended concentrations for typical operations:
- Low alloy steels - milling, turning: 5-8%
 - Carbon alloy steels, difficult machining: 6-10%
 - Industrial grade Aluminum machining: 6-10%
 - Cylindrical & Surface grinding: 5-7%

Properties and Specifications

Property	
Appearance (concentrate), -, AA.Lab.101	yellow, slightly turbid, liquid
Density 15 C (concentrate), kg/m3, DIN 51757	991
Refractive Index 20 C (concentrate), -, ASTM D1218	1.4531
Kinematic viscosity 20 C (concentrate), mm2/s, DIN EN ISO 3104	140
pH (emulsion) (5% in 360 ppm hardness water), -, DIN 51369	9.1
Anti-corrosion properties (emulsion) (5% in 360 ppm hardness water), -, DIN 51360-2	0/0
Emulsion stability (5% in 360 ppm hardness water), -, AA.Lab.102	translucent, no cream, no oil
Foaming behavior (5% in 360 ppm hardness water), sec/ml, AA.Lab.103	7/0
Refractive index factor (5% in 360 ppm hardness water), %, AA.Lab.105	1.3

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.aspx>

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ExxonMobil (China) Investment Co. Ltd
17th Floor, Metro Tower
30 Tian Yao Qiao Road
Shanghai 2000030
China

+86 21 24076000
<http://www.exxonmobil.com>

Typical Properties are typical of those obtained with normal production tolerance and do not constitute a specification. Variations that do not affect product performance are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice. All products may not be available locally. For more information, contact your local ExxonMobil contact or visit www.exxonmobil.com

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