Mobilcut™ 100 Page 1 of 2



Mobilcut™ 100

Mobil Industrial,中国

Aqueous Metal Working Fluid

Product Description

Mobilcut is the trademark for Mobil Industrial lubricants line of high performance water miscible metal removal fluids. Mobilcut 100 is a non-chlorinated product providing 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 components. Low maintenance and inherently stable, Mobilcut 100 can be used in 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 100 is a conventional milky soluble oil that readily mixes with different waters to form stable emulsions. It shows good pH stability and especially suitable for harder water. Its versatile performance makes it suitable for a general machining of machine steels and copper alloys in light to moderate duty metalworking operations such as milling, turning, sawing, boring, drilling and reaming.

Features and Benefits

Features	Advantages and Potential Benefits
Form stable emulsions and solutions	Ease of use and maintenance
Resistant to biological growth	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
Low Mist	Enhances the workplace environment and safety

Applications

Mobilcut 100: General machining of easy to machine steels and copper alloys in light to moderate duty machining operations such as milling, turning, sawing, boring, drilling and reaming. Fluid type is milky emulsion. Water hardness range is from 50 ppm to 500 ppm, and can go up to 900 ppm for the make-up water emulsion in use. Its refractometer factor is 1.1

The recommended concentration depends on the application and the materials to be machined:

Light duty machining: 5 - 8%

Medium duty machining: 8 - 12 %

Mobilcut™ 100 Page 2 of 2

Properties and Specifications

Property	
Kinematic viscosity 20 C (concentrate), mm2/s, DIN EN ISO 3104	190
pH (emulsion) (5% in 360 ppm hardness water), -, DIN 51369	8.9
Emulsion stability (5% in 360 ppm hardness water), -, AA.Lab.102	milky emulsion, no separation
Foaming behavior (5% in 360 ppm hardness water), sec/ml, AA.Lab.103	10/0
Density 15 C (concentrate), kg/m3, DIN 51757	892
Appearance (concentrate), -, AA.Lab.101	yellow, clear, liquid

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

All trademarks used herein are trademarks or registered trademarks of Exxon Mobil Corporation or one of its subsidiaries unless indicated otherwise.

09-2023

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

ExxonMobil is comprised of numerous affiliates and subsidiaries, many with names that include Esso, Mobil, or ExxonMobil. Nothing in this document is intended to override or supersede the corporate separateness of local entities. Responsibility for local action and accountability remains with the local ExxonMobil-affiliate entities.

